CALLEGUAS MUNICIPAL WATER DISTRICT
2100 Olsen Road, Thousand Oaks, California 91360
www.calleguas.com

BOARD OF DIRECTORS MEETING
August 03, 2022, 5:00 p.m.

AGENDA

Written communications from the public must be received by 8:30 am on the Thursday preceding a regular Board meeting in order to be included on the agenda and considered by the Board at that meeting. Government Code Section 54954.2 prohibits the Board from taking action on items not posted on the agenda except as provided in Subsection 54954.2(b).

A. CALL TO ORDER, PLEDGE OF ALLEGIANCE, AND ROLL CALL

BOARD OF DIRECTORS

Steve Blois, President
Andres Santamaria, Vice President
Scott H. Quady, Treasurer
Raul Avila, Secretary
Andy Waters, Director

B. MINUTES

Action: It is recommended that the Board approve the July 20, 2022 minutes.

C. WRITTEN COMMUNICATION

1. Pre-appeal Letters of Emergency Water Conservation Program Path 1 Non-Compliance for Solano Verde MWC and Camrosa Water District

2. Coalition Letter regarding SB 222 (Dodd): Water Rate Assistance Program

3. Letter of Support for the City of Camarillo AMI Water Use Efficiency Project

D. PUBLIC FORUM/ORAL COMMUNICATION

This portion of the agenda may be utilized by any member of the public to address the Board of Directors on any matter within the jurisdiction of the Board that does not appear on the agenda. Depending on the subject matter, the Board of Directors may be unable to respond at this time, or until the specific topic is placed on the agenda at a future CMWD Board Meeting, in accordance with the Ralph M. Brown Act. Please limit remarks to three minutes.

To participate:
https://us06web.zoom.us/j/86320297528?pwd=TEpmRGdsTk4xbG5FMkpuc0MwNTZxdz09
Phone # +1 (720) 707-2699 *825427# (Denver)

Meeting ID: 863 2029 7528
Password: 825427

E. GENERAL MANAGER

1. General Manager's Report

2. July 2022 Monthly Status Report

F. ADMINISTRATIVE SERVICES

G. HUMAN RESOURCES

H. OPERATIONS AND MAINTENANCE

I. RESOURCES AND PUBLIC AFFAIRS

1. Discussion regarding Resolution No. 2052, Adopting the Final Mitigated Negative Declaration (MND) and Initial Study (IS) and the Mitigation Monitoring and Reporting Program (MMRP) for the Lindero Pump Station Rehabilitation (Project No. 592)
   Action: It is recommended that the Board adopt Resolution No. 2052.

2. Status of Emergency Water Conservation Program (EWCP) Performance and Compliance

J. ENGINEERING AND CONSTRUCTION

1. Discussion regarding Lake Sherwood Feeder emergency repair work
   Action: It is recommended that the Board make a determination pursuant to Public Contract Code Section 22050 that the repair of Lake Sherwood Feeder has been completed and the emergency action can be terminated.

2. Discussion regarding approval of a capital project budget allocation in the amount of $124,000 for the Salinity Management Pipeline, Phase 3 (Project No. 536)
   Action: It is recommended that the Board approve the budget allocation.

3. Discussion regarding approval of a capital project budget allocation in the amount of $124,000 for the Salinity Management Pipeline, Phase 4 (Project No. 561)
   Action: It is recommended that the Board approve the budget allocation.

4. Discussion regarding approval of professional services by Rincon Consultants to prepare CEQA documentation for the Salinity Management Pipeline, Phases 3 and 4 (Project Nos. 536 and 561), for an amount not-to-exceed $190,454
   Action: It is recommended that the Board approve the professional services.

K. WATER POLICY AND STRATEGY

L. DISTRICT COUNSEL

M. BOARD OF DIRECTORS

1. Oral report on meetings attended by Board members

2. Discussion regarding upcoming meetings to be attended by Board members

3. Metropolitan update

4. Discussion regarding an extension of Resolution No. 2031, continuing the proclamation of a local emergency, continuing the ratification of the proclamation of a State of Emergency by executive order, and authorizing remote teleconference meetings of the legislative bodies of Calleguas Municipal Water District pursuant to Brown Act provisions
   Action: It is recommended that the Board extend Resolution No. 2031 authorizing remote teleconference meetings of the legislative bodies of the District.

N. CLOSED SESSION

O. OTHER BUSINESS

P. FUTURE AGENDA ITEMS

Q. ADJOURNMENT to Special Board Meeting August 17, 2022 at 4:00 p.m.

Note: Calleguas Municipal Water District has resumed in-person meetings in accordance with the Brown Act. In accordance with the State of Emergency declaration issued on March 4, 2020 by the Governor of the State of California in response to COVID-19 , Ventura County Health Officer Orders, and Government Code 54953(e), the District has also established alternative methods of participation which permit members of the public to observe and address public meetings telephonically and/or electronically. These methods of participation can be accessed through the internet link provided at the top of this agenda.

In addition to the above referenced methods of participation, members of the public may also participate by submitting comments by email to info@calleguas.com by 5:00 p.m. on the calendar day prior to the public meeting. Email headers should refer to the Board meeting for which comments are offered. Comments received will be placed into the record and distributed appropriately.

Agendas, agenda packets, and additional materials related to an item on this agenda submitted to the Board after distribution of the agenda packet are available on the District website at www.calleguas.com

Pursuant to Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and applicable federal rules and regulations, requests for disability-related modification or accommodation, including auxiliary aids or services, in order to attend or participate in a meeting, should be made to the Secretary to the Board in advance of the meeting to ensure the availability of the requested service or accommodation. Notices, agendas, and public documents related to the Board meetings can be made available in appropriate alternative format upon request.

** An asterisk indicates that additional paperwork is provided in the packet or will be sent out later to supplement the packet as noted.*

C. WRITTEN COMMUNICATION

1. Pre-appeal Letters of Emergency Water Conservation Program Path 1 Non-Compliance for Solano Verde MWC and Camrosa Water District**

Metropolitan sent a letter to Calleguas, dated June 27, 2022, regarding Emergency Water Conservation Program (EWCP) determinations of non-compliance. The letter notes that documentation submitted on behalf of Solano Verde MWC (SVMWC) and Camrosa Water District (Camrosa) did not meet the criteria for Path 1 compliance, the ability to implement a 1-day-per-week watering restriction, for the month of June. Therefore, based on this determination, SVMWC and Camrosa would be defaulted to Path 2, a volumetric limit of imported water supplies, and both purveyors are currently at risk for penalty surcharges on the volume of water above their calculated volumetric limits for the month of June.

Through these two letters, Calleguas requested that that Solano Verde MWC and Camrosa Water District not be subjected to volumetric limits and penalty surcharges for the month of June.

2. Coalition Letter regarding SB 222 (Dodd): Water Rate Assistance Program*

Through this letter, Calleguas expressed an "oppose-unless-amended" position on SB 222. Existing law requires the State Water Resources Control Board (State Board), by January 1, 2018, to develop a plan for the funding and implementing the Low-Income Water Rate Assistance Program.

This bill would create a Water Rate Assistance Program to provide water affordability assistance for both drinking water and wastewater services to low-income residential ratepayers. The bill raises significant concerns, including: lacking crucial details, presenting income privacy issues, and giving undefined authority to the State Board.

3. Letter of Support for the City of Camarillo AMI Water Use Efficiency Project*

Calleguas submitted a letter in support of the City of Camarillo AMI Water Use Efficiency Project grant application to the United States Bureau of Reclamation's FY2023 Water and

Energy Efficiency Grant Program. The proposed Camarillo AMI Water Use Efficiency Project will increase water use efficiency within the Camarillo service area through high accuracy meter installation and real-time water consumption data compilation to facilitate leak detection.

E. GENERAL MANAGER

1. General Manager's Report

2. July 2022 Monthly Status Report*

F. ADMINISTRATIVE SERVICES

G. HUMAN RESOURCES

H. OPERATIONS AND MAINTENANCE

I. RESOURCES AND PUBLIC AFFAIRS

1. Discussion regarding Resolution No. 2052, Adopting the Final Mitigated Negative Declaration (MND) and Initial Study (IS) and the Mitigation Monitoring and Reporting Program (MMRP) for the Lindero Pump Station Rehabilitation (Project No. 592)*****
Action: It is recommended that the Board adopt Resolution No. 2052.

This resolution adopts the Final MND, IS, and MMRP for the Lindero Pump Station Rehabilitation, Project No. 592. The Draft MND and IS were circulated for public review pursuant to California Environmental Quality Act (CEQA) requirements on May 23, 2022 until June 21, 2022. The CEQA document was filed with the Governor's Office of Planning and Research on May 23, 2022 and was assigned State Clearinghouse Number 2022050473. Two comment letters were received during the public review period, from the California Department of Transportation, and the Ventura County Air Pollution Control District. District responses to the comments and minor revisions made to the IS are incorporated into the Final MND in the Responses to Comments and Errata documents, respectively.

CEQA requires a reporting or monitoring program be adopted for the conditions of project approval necessary to mitigate or avoid significant effects on the environment (Public Resources Code 21081.6). The MMRP for the Lindero Pump Station Rehabilitation has been prepared to satisfy that requirement, and to facilitate compliance with adopted mitigation measures during project implementation. For each mitigation measure recommended in the CEQA document for the project, the MMRP provides specifications that identify the actions required, the monitoring that must occur, and the agency or department responsible for oversight. Together, the Final MND, Responses to Comments, IS (and Errata), and MMRP comprise the required CEQA documentation for the proposed project.

2. Status of Emergency Water Conservation Program (EWCP) Performance and Compliance**
Information only

The Emergency Water Conservation Program (EWCP) mandates a 1-day-per-week watering restriction (or equivalent) and includes an alternative path for compliance, which is a volumetric delivery limit of imported water supplies based on gallons per capita per day (GPCD). The EWCP period is: June 1, 2022 – December 31, 2022.

Enclosed in the agenda packet is the most recent weekly water conservation tracking report from Metropolitan, and a tracking report that shows the Calleguas purveyors. The Manager of Resources will provide an update on the status of EWCP performance and compliance.

J. ENGINEERING AND CONSTRUCTION

1. Discussion regarding Lake Sherwood Feeder emergency repair work
Action: It is recommended that the Board make a determination pursuant to Public Contract Code Section 22050 that the repair of Lake Sherwood Feeder has been completed and the emergency action can be terminated.

Public Contract Code Section 22050 requires that the Board review the emergency action at its next regularly scheduled meeting (and at every regularly scheduled meeting thereafter) until the action is terminated. All repair work for the Lake Sherwood Feeder has been completed. The Manager of Engineering will provide an update on the repair.

2. Discussion regarding approval of a capital project budget allocation in the amount of $124,000 for the Salinity Management Pipeline, Phase 3 (Project No. 536)**
Action: It is recommended that the Board approve the budget allocation.

Preliminary design of Salinity Management Pipeline (SMP), Phases 3 and 4 has been completed. Phase 3 would be composed of 18- and 24-inch diameter pipe approximately 5.1 miles long, extending the SMP from Camarillo beginning near the intersection of Somis Road and Upland Road into the Santa Rosa Valley, terminating near the intersection of Santa Rosa Road and Hill Canyon Road. An exhibit showing the general alignment of Phases 3 and 4 is provided.

The Las Virgenes Municipal Water District-Triunfo Water and Sanitation District Joint Powers Authority (JPA) has begun coordinating with the District to become a future discharger to the SMP. The JPA plans to build an advanced water treatment plant as part of the Pure Water Project that will treat recycled water from the Tapia Wastewater Treatment Plant for potable reuse and generate brine that will be discharged to the SMP. Although the alignment for the brine discharge pipeline from the Pure Water Project has not been finalized, the connection to the SMP is anticipated to be near Santa Rosa Road

and Hill Canyon Road where Phase 3 would end and Phase 4 would begin. The JPA has completed a demonstration facility of the Pure Water Project. Design of the facility is anticipated to begin in 2023 and construction to start in 2025.

The Santa Rosa Valley Desalter, which has been identified as one of the "leading contenders", from the Water Supply Alternatives Study would also require the discharge of brine to Phase 3.

Staff recommends preparing the necessary California Environmental Quality Act (CEQA) documentation for Phase 3 to be ready to initiate design and construction in time to serve the JPA and other potential future dischargers. For efficiency and cost effectiveness, staff recommends preparing CEQA documentation that covers both Phases 3 and 4.

The previous budget covered preliminary design. Additional budget needs to be allocated to prepare the CEQA documentation. More detail is provided in the attached Capital Project Information and Evaluation Sheets.

3. Discussion regarding approval of a capital project budget allocation in the amount of $124,000 for the Salinity Management Pipeline, Phase 4 (Project No. 561)*
Action: It is recommended that the Board approve the budget allocation.

Phase 4 would be composed of 12- and 24-inch diameter pipe approximately 9.3 miles long, extending the SMP from the end of Phase 3 in the Santa Rosa Valley eastward, terminating in Simi Valley approximately near the intersection of Tierra Rejada Road and Madera Road.

The previous budget covered preliminary design. Additional budget needs to be allocated to prepare the CEQA documentation. More detail is provided in the attached Capital Project Information and Evaluation Sheets.

4. Discussion regarding approval of professional services by Rincon Consultants to prepare CEQA documentation for the Salinity Management Pipeline, Phases 3 and 4 (Project Nos. 536 and 561), for an amount not-to-exceed $190,454
Action: It is recommended that the Board approve the professional services.

As discussed above, preliminary design of SMP Phases 3 and 4 has been completed and staff recommends preparing the CEQA documentation. For efficiency and cost effectiveness, the proposed approach is to optimize reliance on the previously prepared CEQA documentation by preparing a Subsequent Environmental Impact Report (EIR) which tiers off the 2002 Program EIR and incorporates by reference that document and other documents prepared for previous portions of the SMP.

The services include:

- Preparation of a Notice of Preparation and an initial study to notify the public of the project and the intended pathway to CEQA compliance.
- Facilitating a public scoping meeting to solicit public comments and concerns on the proposed projects for consideration in the CEQA analysis.
- Preparation of technical reports for air quality and greenhouse gas emissions and biological and cultural resources.
- Preparation of a Subsequent EIR in accordance with CEQA Guidelines.
- Assistance with conducting consultation with Native American Tribes in compliance with Assembly Bill 52.

Rincon Consultants has relevant experience and expertise in preparing CEQA documents and recently completed the Initial Study/Mitigated Negative Declaration for Lindero Pump Station Rehabilitation. Rincon's work on other projects has been of good quality and the cost for professional services is reasonable for the work required.

K. WATER POLICY AND STRATEGY

L. DISTRICT COUNSEL

M. BOARD OF DIRECTORS

1. Oral report on meetings attended by Board members

Pursuant to Government Code Section 53232.3(d), Board members will provide oral reports on meetings attended at the expense of the District.

2. Discussion regarding upcoming meetings to be attended by Board members*

The table of upcoming meetings is provided as a packet insert.

3. Metropolitan update

Director Blois will provide an update on the most recent Metropolitan Board and committee meetings.

4. Discussion regarding an extension of Resolution No. 2031, continuing the proclamation of a local emergency, continuing the ratification of the proclamation of a State of Emergency by executive order, and authorizing remote teleconference meetings of the legislative bodies of Calleguas Municipal Water District pursuant to Brown Act provisions

Action: It is recommended that the Board extend Resolution No. 2031 authorizing remote teleconference meetings of the legislative bodies of the District.

On October 6, 2021 the Board passed Resolution 2031 authorizing remote teleconference meetings pursuant to AB 361. AB 361 modifies the Brown Act and

authorizes teleconference meetings when a State of Emergency has been proclaimed by the Governor, and meeting in person presents imminent risk to the health and safety of attendees. [Government Code §54953(e)(1)]

In order to continue teleconference meetings, AB 361 requires reconsideration of findings every 30 days. [Government Code §54953(e)(3)]. Since the passage of AB 361, the Governor's March 4, 2020 Proclamation of Emergency due to COVID-19 remains in effect, and conditions set forth in Resolution 2031 have not changed with respect to the risks to the health and safety of attendees. Staff will continue to monitor the status of the Governor's order, and prevailing conditions, and inform the Board.

Staff recommends that, based on reconsideration of the above referenced conditions, Resolution 2031 be extended for an additional 30 days. Such extension shall take effect immediately and will be effective until September 02, 2022 or until such earlier time that the Board takes additional action by resolution or motion in accordance with Water Code §71276 and Government Code §54953(e) to extend the time during which the legislative bodies of Calleguas Municipal Water District may continue to teleconference without compliance with standard Brown Act requirements.

CALLEGUAS MUNICIPAL WATER DISTRICT
BOARD OF DIRECTORS MEETING
July 20, 2022

MINUTES

The meeting of the Board of Directors of Calleguas Municipal Water District was held in-person at 2100 E. Olsen Road, Thousand Oaks CA 91360 and telephonically and via videoconference in accordance with the State of Emergency Declaration issued on March 4, 2020 by the Governor of the State of California, Government Code §54953(e), and Calleguas Resolution No. 2031.

The meeting was called to order by Andres Santamaria, Vice-President of the Board, at 5:06 p.m.

A. CALL TO ORDER, PLEDGE OF ALLEGIANCE, AND ROLL CALL

Directors at District Headquarters and Participating via Videoconference:	Raul Avila, Secretary Andy Waters, Director
Directors Present via Videoconference:	Andres Santamaria, Vice President
Staff Present at District Headquarters and Participating via Videoconference:	Anthony Goff, General Manager Dan Drugan, Manager of Resources Henry Graumlich, Associate General Manager Jennifer Lancaster, Principal Resource Specialist Kristine McCaffrey, Manager of Engineering Rob Peters, Manager of Operations and Maintenance Steve Sabbe, IT Coordinator Kara Wade, Clerk of the Board
Staff Present via Videoconference:	Grant Burton, Manager of Human Resources Susan Molen, Administrative Assistant Dan Smith, Manager of Administrative Services Sue Taylor, Finance Supervisor
Legal Counsel Present at District Headquarters and Participating via Videoconference:	Robert Cohen, Cohen & Burge, LLP, District Counsel

B. MINUTES

On a motion by Director Avila, seconded by Director Waters, the Board of Directors voted 3-0-2 to approve the July 06, 2022 minutes.

AYES: Directors Waters, Avila, Santamaria
NOES: None
ABSENT: Directors Blois, Quady

C. WRITTEN COMMUNICATION

None

D. PUBLIC FORUM/ORAL COMMUNICATION

None

E. GENERAL MANAGER

1. General Manager's Report

The General Manager deferred his report to a future meeting. No action was taken.

2. Discussion regarding Resolution No. 2050, Notice of Intention to Amend a Conflict of Interest Code

CALLEGUAS MUNICIPAL WATER DISTRICT
NOTICE OF INTENTION TO AMEND A CONFLICT-OF-INTEREST CODE

The General Manager said that, under the Political Reform Act, all public agencies are required to adopt a Conflict of Interest Code designating positions required to file Statements of Economic Interests (Form 700) and assigning disclosure categories that specify the types of interests to be reported. Calleguas' Conflict of Interest Code needs to be amended to add the position of Manager of Human Resources.

The process for amending the Conflict of Interest Code requires adoption of a Notice of Intent to adopt an amendment, a 45-day public comment period, and a public hearing to adopt the amended code. A public notice will be posted on the Calleguas website, on the Calleguas notice boards, and in the Ventura County Star in accordance with previous practice.

On a motion by Director Avila, seconded by Director Waters, the Board of Directors voted 3-0-2 to adopt Resolution No. 2050. Resolution No. 2050 is attached and made part of these minutes.

AYES: Directors Waters, Avila, Santamaria
NOES: None
ABSENT: Directors Blois, Quady

F. ADMINISTRATIVE SERVICES

1. June 2022 Water Use and Sales, May 2022 Power Generation, and June 2022 Investment Summary Reports

The Board of Directors reviewed the subject reports. No action was taken.

2. Disbursements for the District's monthly activities for June 2022

Director Avila presented the disbursement report. The Board asked questions, which the managers answered.

On a motion by Director Avila, seconded by Director Waters, the Board of Directors voted 3-0-2 to approve the outstanding bills for payment.

AYES: Directors Waters, Avila, Santamaria
NOES: None
ABSENT: Directors Blois, Quady

3. Adoption of the District's Investment Policy

The Manager of Administrative Services said that the Board reviews and approves the District's Investment Policy on an annual basis. The changes are consistent with California Government Code requirements regarding investments and are recommended by the District's Investment Manager, Chandler Asset Investment.

There are several language additions/changes to improve the policy and protect the District. The first is to hold the trustee, Chandler Asset Management/US Bank, to the prudent investor standard, which is a legal guideline for trustees of investment portfolios. It requires a fiduciary to act in the best interest of the trust's beneficiaries and outlines standards for legally controlling investment portfolios. The changes to the authorized investments are as follows:

- Local Agency Investment Fund (LAIF): Increase the maximum LAIF limit to $75 million. This is the new limit as established by LAIF.
- Certificates of Deposit: Add a maximum of no more than 20% of the portfolio.
- Federal Agency: Add a maximum percent of callable securities to 20% of the portfolio.
- Commercial Paper: Under a provision sunsetting on January 1, 2026, no more than 40% of the portfolio may be invested in Commercial Paper if the

investment assets under management are greater than $100 million.
- Collateralized Bank Deposits: New category for holding funds in banks over the Federal Deposit Insurance Corporation insurance limit.

The Board retains the option to make changes to the policy at any time.

On a motion by Director Waters, seconded by Director Avila, the Board of Directors voted 3-0-2 to adopt the District's Investment Policy.

AYES: Directors Waters, Avila, Santamaria
NOES: None
ABSENT: Directors Blois, Quady

4. Discussion regarding approval of professional services by AllConnected to perform the District's annual information technology support services, cyber security monitoring, and Disaster Recovery Services for fiscal year 2022-23 in an amount not to exceed $157,350

The Manager of Administrative Services said that the services provided by AllConnected for information technology assistance are broken down into two separate contracts.

In the support contract, AllConnected monitors all of the servers, workstations, and laptops owned by the District. This includes updating all systems with required security patches, maintaining the anti-virus software, running the spam reducing software, monitoring for cybersecurity threats, and responding to any cybersecurity threats. The District has significantly increased the amount of cybersecurity monitoring that AllConnected will be providing in the new fiscal year and those amounts were reflected in the adopted budget. The amount of this contract is $106,674.

The second contract is for the Disaster Recovery Plan. AllConnected maintains a second system available to the District that can have the District's information uploaded and working in hours at an offsite location in case of any type of disaster or emergency. The total amount of this contract is $50,676. This item was also included in the adopted annual budget.

On a motion by Director Avila, seconded by Director Waters, the Board of Directors voted 3-0-2 to approve the professional services.

AYES: Directors Waters, Avila, Santamaria
NOES: None
ABSENT: Directors Blois, Quady

G. HUMAN RESOURCES

The Manager of Human Resources said that there was to have been an All-Employee Meeting on July 12, 2022, but it was canceled due to the Lake Sherwood Feeder emergency repair work. No action was taken.

H. OPERATIONS AND MAINTENANCE

1. Discussion regarding an award of contract to California Fuels for provision of gasoline pursuant to a California Department of General Services Fuel Contract

The Manager of Operations and Maintenance said the action is to award a contract to California Fuels for provision of gasoline for an amount not to exceed $135,000 for the period of July 1, 2022 through June 30, 2023. The procurement would be pursuant to a State procurement contract.

The price for gasoline purchased under this contract is tied to a standard rate which varies according to specified industry benchmarks. The price under the same contract in 2021 averaged $4.03 per gallon.

On a motion by Director Avila, seconded by Director Waters, the Board of Directors voted 3-0-2 to authorize the General Manager to enter into the contract.

AYES: Directors Waters, Avila, Santamaria
NOES: None
ABSENT: Directors Blois, Quady

2. Discussion regarding Resolution No. 2051 Approving and Adopting the 2022 Ventura County Multi-Jurisdictional Hazard Mitigation Plan

A RESOLUTION OF THE BOARD OF DIRECTORS
OF CALLEGUAS MUNICIPAL WATER DISTRICT
APPROVING & ADOPTING THE
2022 VENTURA COUNTY MULTI-JURISDICTIONAL
HAZARD MITIGATION PLAN

The Manager of Operations and Maintenance said the Disaster Mitigation Act of 2000 (DMA) requires that states, with support from local governmental agencies, develop hazard mitigation plans to prepare for and reduce the potential impacts of natural hazards. In accordance with the DMA, Hazard Mitigation Plans must be completed, approved, and adopted every five years in order for public agencies to be eligible for the suite of grant programs under the Federal Emergency Management Agency's (FEMA's) Hazard Mitigation Assistance (HMA) program.

In 2010 and 2015, the District participated as a coalition partner with other public agencies in Ventura County in a planning process to prepare for and lessen the impacts of natural hazards. The coalition was formed to pool resources and create a uniform hazard mitigation strategy that could be consistently applied to the planning area. The Ventura County Multi-Jurisdictional Hazard Mitigation Plan was adopted in both 2010 and 2015.

In May 2021, the coalition embarked on a similar planning process to prepare the 2022 Ventura County Multi-Jurisdictional Hazard Mitigation Plan. The 2022 Plan has been approved by the California Governor's Office of Emergency Services and FEMA and must be adopted by all of the coalition partners in order for all members to be individually and collectively eligible to apply for grant funding under the HMA program. Adoption of the Plan is the final step in the process.

The 2022 Plan was adopted by the County of Ventura Board of Supervisors at a public meeting on July 12, 2022. Approval and adoption of the 2022 Plan by the Calleguas Board ensures the District remains eligible for HMA program funding during the five year lifecycle of the Plan.

On a motion by Director Waters, seconded by Director Avila, the Board of Directors voted 3-0-2 to adopt Resolution No. 2051. Resolution No. 2051 is attached and made part of these minutes.

AYES: Directors Waters, Avila, Santamaria
NOES: None
ABSENT: Directors Blois, Quady

I. RESOURCES AND PUBLIC AFFAIRS

1. Discussion regarding Resolution No. 2049, Calleguas Municipal Water District Annexation – Rio Urbana (Calleguas Annexation No. 104)

RESOLUTION OF THE BOARD OF DIRECTORS
OF CALLEGUAS MUNICIPAL WATER DISTRICT
APPROVING THE CONCURRENT ANNEXATION OF
TERRITORY WITHIN THE COUNTY OF VENTURA TO
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
AND TO THE CALLEGUAS MUNICIPAL WATER DISTRICT

Calleguas Municipal Water District Annexation – Rio Urbana
(Calleguas Annexation No. 104)

The Manager of Resources said that this resolution grants final approval of Calleguas Annexation No. 104, located at 2714 East Vineyard Avenue in the City of Oxnard's

Sphere of Influence. This annexation totals 10.48 acres net of public right of way. The owner, 2714 E Vineyard Avenue, LLC, an Idaho limited liability company, plans to utilize the land for an affordable housing development.

The Ventura Local Agency Formation Commission approved the annexation with Resolution 21-05 on December 15, 2021. Metropolitan Water District of Southern California (Metropolitan) approved the annexation with Resolution No. 9310 on June 14, 2022. On July 1, 2022, the applicant delivered payment that includes the Calleguas and Metropolitan Annexation Fees of $37,811.84 and $74,220.40 respectively.

On a motion by Director Avila, seconded by Director Waters, the Board of Directors voted 3-0-2 to adopt Resolution No. 2049. Resolution No. 2049 is attached and made part of these minutes.

AYES: Directors Waters, Avila, Santamaria
NOES: None
ABSENT: Directors Blois, Quady

2. FY 2021-2022 Water Use Efficiency Program Summary

The Principal Resource Specialist provided a presentation on the District's Water Use Efficiency Program and accomplishments for Fiscal Year 2021-2022. A summary of the Turf Replacement Program activity, including the status of the Calleguas supplemental funding, was included in the Board Packet. This update was for information only. No action was taken.

Due to technical difficulties, only the remaining agenda items requiring action were presented to the Board.

J. ENGINEERING AND CONSTRUCTION

1. Change Order Report for Q2 2022

Change Order summaries are provided for the following projects:

- Oxnard-Santa Rosa Feeder, Las Posas Feeder, and Miscellaneous Valve Improvements (Project No. 442)
- Calleguas-LVMWD Interconnection (Project No. 450)
- Lindero Pump Station No. 2 (Toe of Dam or TOD) Rehabilitation (Project No. 590)
- Lake Sherwood Pump Station Rehabilitation (Project No. 591)

There are no change orders to date on East Portal Isolation Enhancements (Project No. 601). This item was deferred to a future board meeting due to technical difficulties.

2. Discussion regarding Lake Sherwood Feeder emergency repair work

The Manager of Engineering said that, on July 12, Calleguas crews en route to the Lake Sherwood Pump Station observed water surfacing above the 24-inch Lake Sherwood Feeder on Moorpark Road between Rolling Oaks Drive and Los Padres Drive, south of the 101 Freeway, in Thousand Oaks. This pipeline delivers water to Ventura County Waterworks District No. 38 (VCWWD 38), which serves the community of Lake Sherwood, and is the only source of potable water to this area.

In accordance with his authority under the Calleguas Administrative Code and Ordinance No. 18, the General Manager authorized both MMC, Inc. (contractor for Lake Sherwood Pump Station Rehabilitation [Project No. 591]) and Blois Construction, Inc. (contractor for East Portal Isolation Enhancements [Project No. 601]) to begin work to identify the source of the leak and make any necessary repairs, in accordance with the emergency provisions of the General Conditions for their respective contracts. The work is being performed under separate purchase orders tied to their respective construction contracts. (Due to shutdown work commitments for other agencies, the As-Needed Pipeline Services Contractor, Lash Construction, was unable to respond within the timeframe required.)

If the cost of the work is equal to or greater than $35,000, the Public Contract Code requires a formal bid procedure which would take several months and is infeasible as VCWWD38 would run out of potable water within just a few days. Thus the situation constitutes an emergency. Calleguas Administrative Code 10.1.3(d) states that competitive solicitation is not required when materials or services are necessary to respond to an emergency.

The capital improvement program budget includes funds to cover repairs for emergency repairs. The update was deferred to a future board meeting due to technical difficulties.

On a motion by Director Avila, seconded by Director Waters, the Board of Directors voted 3-0-2 to make a determination pursuant to Public Contract Code Section 22050 that the repair of Lake Sherwood Feeder does not permit a delay resulting from competitive solicitation for bids, and that certain repair work was and/or is necessary to respond to the emergency.

AYES: Directors Waters, Avila, Santamaria
NOES: None
ABSENT: Directors Blois, Quady

K. WATER POLICY AND STRATEGY

None

L. DISTRICT COUNSEL

None

M. BOARD OF DIRECTORS

1. Oral reports on meetings attended by Board members

None

2. Discussion regarding upcoming meetings to be attended by Board members

None

3. Metropolitan update

None

N. CLOSED SESSION

None

O. OTHER BUSINESS

None

P. FUTURE AGENDA ITEMS

None

Q. ADJOURNMENT

Director Santamaria declared the meeting adjourned at 6:11 p.m.

Respectfully submitted,

_____

Raul Avila, Board Secretary

CALLEGUAS MUNICIPAL WATER DISTRICT

web site: www.calleguas.com

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July 28, 2022

Brad Coffey
Group Manager, Water Resource Management
Metropolitan Water District of Southern California
700 N. Alameda Street
Los Angeles, CA 90012

RE: EMERGENCY WATER CONSERVATION PROGRAM – PRE-APPEAL OF PATH 1 NON-COMPLIANCE FOR SOLANO VERDE MUTUAL WATER COMPANY (JUNE 2022)

Dear Mr. Coffey:

Thank you for your letter dated June 27, 2022 on determinations of compliance, with regards to the Emergency Water Conservation Program (EWCP), for the Calleguas Municipal Water District (Calleguas) purveyors.

The letter notes that documentation submitted on behalf of Solano Verde Mutual Water Company (SVMWC) did not meet the criteria for Path 1 compliance, or the ability to implement a 1-day-per-week watering restriction, for the month of June. Therefore, based on this determination, SVMWC would be defaulted to Path 2, or a volumetric limit of imported water supplies, and is currently at risk for penalty surcharges on the volume of water above its calculated volumetric limit for the month of June.

SVMWC is a small mutual water company that serves a population of 100 residents in an agricultural development located in the Las Posas Valley of Ventura County. SVMWC utilizes 300 acre-feet of water per year and is entirely dependent on imported water for its water needs, primarily the needs of 159.9 acres of irrigated orchard. Compliance Path 2 of the EWCP provides for volumetric limits that prioritize available State Water Project (SWP) supplies for population served and to meet critical human health and safety needs. Path 2 does not provide imported supply for irrigated commercial crops. Due to this issue, Calleguas is undertaking a consumptive use agricultural analysis for the SVMWC service area that may inform future emergency allocations of water.

On April 26, 2022, Metropolitan authorized its General Manger to finalize and implement an EWCP requiring agencies dependent on SWP deliveries to immediately cut water use by implementing one-day-a-week watering restrictions, or the equivalent, by June 1. This action specified that the General Manager shall finalize the EWCP within 30 days of Board adoption.

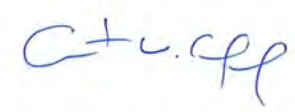
On May 25, 2022, Metropolitan staff submitted the final EWCP Handbook to Calleguas, only 5 days prior to the beginning of the EWCP compliance period: June 1 – December 30.

On May 27, 2022, SVMWC submitted a letter to Calleguas that contained inaccurate information and demonstrated general confusion about the EWCP. Due to the timing of EWCP implementation, Calleguas staff forwarded the letter to Metropolitan and continued to work with SVMWC to achieve compliance with the EWCP.

On June 6, 2022, SVMWC issued a notice of emergency water restrictions to its shareholders. On June 14, 2022, SVMWC finalized and adopted its EWCP compliance and enforcement procedures. Calleguas staff submitted these materials to Metropolitan and, as stated in your letter, they were determined to be sufficient for SVMWC to meet the criteria for Path 1 compliance beginning July 1, 2022.

The EWCP penalty surcharges act as an incentive for coming into compliance and staying in compliance with the program. SVMWC misconceived the purpose of the EWCP, attributed to the rapid pace of adoption and implementation of emergency conservation restrictions. Ultimately, SVMWC moved to meet the requirements of Path 1 criteria in the month of June. Calleguas respectfully requests that SVMWC not be subjected to Path 2 criteria and penalty surcharges for the month of June because it moved quickly and made a good-faith effort to comply with Path 1 of the EWCP once it understood its obligations under the EWCP.

Sincerely,



Anthony Goff
General Manager
Calleguas Municipal Water District

web site: www.calleguas.com

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July 28, 2022

Brad Coffey
Group Manager, Water Resource Management
Metropolitan Water District of Southern California
700 N. Alameda Street
Los Angeles, CA 90012

RE: EMERGENCY WATER CONSERVATION PROGRAM – PRE-APPEAL OF PATH 1 NON-COMPLIANCE FOR CAMROSA WATER DISTRICT (JUNE 2022)

Dear Mr. Coffey:

Thank you for your letter dated June 27, 2022 on determinations of compliance, with regards to the Emergency Water Conservation Program (EWCP), for the Calleguas Municipal Water District (Calleguas) purveyors.

The letter notes that documentation submitted on behalf of Camrosa Water District (Camrosa) did not meet the criteria for Path 1 compliance, or the ability to implement a 1-day-per-week watering restriction, for the month of June. Therefore, based on this determination, Camrosa would be defaulted to Path 2, or a volumetric limit of imported water supplies, and is currently at risk for penalty surcharges on the volume of water above its calculated volumetric limit for the month of June.

We respectfully request your consideration to waive any potential penalties given the totality of the circumstances and Camrosa's diligent response to Metropolitan's clarifications on EWCP criteria for Path 1 compliance. The sequence of events described in this letter provides the context of Camrosa's good faith efforts to comply with the EWCP given the information available and the timing of Metropolitan's compliance schedule.

On April 26, 2022, the Metropolitan Board adopted a resolution declaring a Water Shortage Emergency Condition, adopting the framework of an Emergency Water Conservation Program, and authorizing the General Manager to finalize the program consistent with the framework within 30 days of the Board resolution. The EWCP was to conform to the framework outlined in the Metropolitan Board letter accompanying the resolution. The EWCP was to be finalized within 30 days of the adoption of the authorizing resolution.

On April 27, 2022, the Calleguas Board adopted a parallel resolution incorporating Metropolitan's EWCP as it was available at the time and as it may be further modified under Metropolitan Board's resolution.

On April 28, 2022, Calleguas staff briefed its retail purveyors on the requirements for the EWCP as they were then known, including the requirement that retail actions needed to be in place and effective June 1, 2022.

Throughout the month of May, Calleguas' retail purveyors adopted emergency conservation programs corresponding to the information as it was available to them. Camrosa chose a Path 1 compliance path of one-day a week landscape irrigation restriction with enforcement. The necessity to meet Government Code noticing requirements for these actions meant that Camrosa, in addition to others in the Calleguas service area, had to adopt corresponding regulations without the benefit of the finalized details of the EWCP.

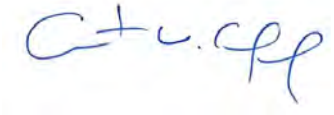
On May 25, 2022, Metropolitan distributed its "Emergency Water Conservation Program Handbook, Calendar Year 2022, Version 1.0" providing additional details on what would constitute compliance with the broad program framework outlined in the original Board letter. These additional details included particular standards consistent with the Board letter, but not explicitly described in the original Board action.

On May 26, 2022, Camrosa responded to the Metropolitan program by adopting its Stage Two Water Shortage consistent with its State-approved Water Shortage Contingency Plan. Camrosa's action was transmitted to Calleguas and subsequently transmitted to Metropolitan in compliance with Metropolitan's June 1, 2022 deadline. Given the noticing requirements for Camrosa's Board action, the information released by Metropolitan the day before was not timely to inform Camrosa's compliance.

On June 23, 2022, Camrosa adopted additional measures that further conformed Camrosa's action of May 26, 2022 with the detailed EWCP as provided in Metropolitan's May 25 handbook. We appreciated consultations with Metropolitan staff to identify and rectify the necessary corrections. These additional actions by Camrosa were forwarded to Metropolitan and provide the basis for your determination in your letter of June 27 2022 that Camrosa is currently in compliance with Path 1 of the EWCP for July 2022.

The EWCP penalty surcharges act as an incentive for coming into compliance and staying in compliance with the program. Camrosa took action to come into compliance with the EWCP before Metropolitan provided detailed guidelines on its program. Upon that detailed information becoming available, and in consultation with Metropolitan, Camrosa expeditiously took action to come into compliance with the program as detailed in Metropolitan's EWCP Handbook. Given the totality of the circumstances, we believe penalties for June 2022 are inappropriate in this case. Thank you for your consideration.

Sincerely,



Anthony Goff
General Manager
Calleguas Municipal Water District

July 25, 2022

The Honorable Bill Dodd
California State Senate
1021 O St., Suite 6620
Sacramento, CA 95814

RE: **SB 222 (Dodd) – Water Rate Assistance Program**
Position: **OPPOSE UNLESS AMENDED**

Dear Senator Dodd:

The undersigned organizations (the Coalition) believe that there can be a workable and efficient State water and wastewater low-income rate assistance program in California. In 2021, the Association of California Water Agencies (ACWA) worked extensively with you, your staff, the bill sponsors, four policy committees, and both the Senate and Assembly Appropriations Committees to address the Coalition's concerns with SB 222. We greatly appreciated the amendments that you made in 2021 that allowed the Coalition in August of 2021 to move from an "Oppose-Unless-Amended" position to a

"Watch" position. Unfortunately, the June 23, 2022 amendments to SB 222 raise significant concerns, and the Coalition now has an "Oppose-Unless-Amended" position on SB 222. **Attached is a mockup of amendments that, if incorporated, would allow the Coalition to remove its opposition.** Following is an overview of the concerns.

1) **<u>System Role / Proposition 218</u> - SB 222 would require each Community Water System and Sewer System to create and implement its own water rate assistance program – as opposed to playing an administrative (pass through) role in implementing a State Water Rate Assistance Program. The bill's approach would now run afoul of Proposition 218.**

The new version of SB 222 would require each eligible system to offer water rate assistance. [See Page 11, Line 36.] Water systems are prohibited under the State Constitution (Proposition 218) from providing low-income rate assistance using rate revenues from other customers. SB 222 needs to propose a **State assistance program**: a) funded with funding from the proposed State Water Rate Assistance Fund (Fund); and b) in which eligible systems play an administrative (pass through) role by receiving funding from the Fund and applying it to the accounts of low income households that the State has enrolled in the program and administrative costs.

2) **<u>Efficiency / Implementing Agency / Key Program Components</u> – Building administrative efficiency into this State program will allow for more assistance to go to low-income households. The State should handle enrollment and utilize a third-party fund administrator.**

The introduced (January 14, 2021) version of SB 222 proposed the State Water Resources Control Board (State Water Board) as the implementing agency. The Coalition and other organizations urged that the California Department of Community Services and Development (CSD) be the implementing agency. You made that change in the April 5, 2021 version. The June 23, 2022 version proposes to go back to the initial proposal to have the State Water Board implement the program.

Efficiency in the State's administration of the State's water rate assistance program will allow for more assistance to go to low-income households. ACWA and others suggested that CSD implement the program because this is what CSD does – CSD implements low-income assistance programs. CSD already contracts with a third-party fund disbursement entity and works with local service providers around the State to enroll low-income households. State management of enrollment is important because most public water agencies do not have income information for their customers since they cannot use rate revenue to subsidize low-income rates under Proposition 218.

The Coalition urges you and the Newsom Administration to take a hard look at the issue of does it make sense to reinvent the wheel at the State Water Board and end up spending more money for administration than is needed. The Coalition's strong preference is for this program to be placed at CSD. If the program is placed at the State

Water Board, **it is critical that State handle customer enrollment – as CSD does, and that the State contracts with a third party fund administrator – as CSD does.**

3) **<u>System Administrative Costs</u> - The proposed funding for system administrative costs is not adequate.** [Page 4, Line 13 and Page 5, Line 18]

The new version of the bill would add a new proposed requirement that the State Water Board "provide funds to eligible systems for administration of the program, not to exceed the greater of **3 percent** of the total subsidy or two thousand dollars." While this is a positive addition in the sense that it would be required, the 3 percent number would not cover reasonable administrative expenses. The Coalition suggests increasing this number to 5 percent.

4) **<u>Frequency of Funding Distribution</u>** – **The bill does not address the timing of distribution of the funding.**

The attached mockup suggests that systems, after the State adopts emergency regulations and enrolls participants, need to receive the funding from the Fund annually in advance, and then the systems should be required to apply funding within two months to each enrolled customer's bill installment thereafter for the annual period.

5) **<u>Additional Action Authority</u>** – **This proposed authority is overly broad.** [Page 4, Line 30]

The bill would now authorize the State Water Board to "take additional action as may be appropriate for adequate administration and operation of the fund and provision of direct water bill assistance." This overly broad proposal should be deleted.

6) **<u>Audit of Systems Receiving Program Funding</u> – This proposal should be clarified.** [Page 7, Line 1]

Under the new version of the bill, the State Water Board would be required to include in guidelines a provision regarding the audit of eligible systems receiving funds under the chapter. The scope of this audit should instead be limited to the system's local administrative role in the State's water rate assistance program (i.e., not just anything to do with the system).

7) **<u>Affordability Evaluation</u> - This proposal is overly broad.** [Page 7, Line 25]

The affordability evaluation language should be narrowed to propose evaluation of remaining **water** affordability issues and relevant (as opposed to available) information.

8) **<u>Administrative Procedure Act (APA)</u> – The rules of the road for this program should be developed through emergency regulations.** [Page 10, Lines 4 and 10]

The prior version of the bill proposed the development of guidelines but also would have authorized the adoption of emergency regulations. The new version would exempt this program from the APA altogether and delete the proposed emergency regulation authority. It would rely solely on the adoption of guidelines by the State Water Board. This is a major program with little public process proposed for its development. The

Coalition suggests that the implementing agency be required to develop and approve emergency regulations.

9) <u>Affordability Pilot Projects</u> – This bill should not propose to use water rate assistance funding for pilot projects. [Page 10, Line 28]

The affordability pilot projects proposal should be deleted. This bill should be focused on water rate assistance. Assistance for water use efficiency projects can be funded with climate/drought resilience state budget funding separate from this program.

10) <u>Discontinuation of Service</u> – Part of this proposal is workable. [Page 12, Line 1]

The enactment of SB 998 (Dodd) in 2018 set requirements on the discontinuation of service by public water systems that supply water to **more than 200 connections**. For example:

> (a)(1)(A) An urban and community water system shall not discontinue residential service for nonpayment until a payment by a customer has been delinquent for at least 60 days. No less than **seven business days** before discontinuation of residential service for nonpayment, an urban and community water system shall **contact** the customer named (…) on the account by telephone or written notice. (….) [Ca. Health and Safety Code Section 116909, emphasis added.]

Under existing law, that contact must include an offer to discuss options, including an alternative payment schedule. SB 222 now proposes for **all sizes of systems** that a **30-day** notice of the ability to enroll in a payment plan would be required before disconnection could occur. Expanding the SB 998 requirements to cover systems of 200 or fewer connections is not an issue. However, the timing on the notice provision should remain at seven business days consistent with SB 998.

11) <u>Enforcement</u> – The brand new proposed enforcement provisions at Page 12 do not fit with a low-income assistance program and should be deleted and replaced.

The June 23 version adds proposed enforcement provisions to SB 222 for the first time – even though the bill went through four policy committees in 2021.

- **A) Attorney General** - The first proposal is that the Attorney General be authorized to take an action. The Coalition suggests that enforcement by the implementing state agency should be sufficient for a financial assistance program.
- **B) At-Risk Systems –** The bill proposes to have a system that did not establish or maintain a compliant water rate assistance program be deemed an at-risk system for purposes of the mandatory consolidation authority in existing law. As noted above in the discussion about Proposition 218 and the need for a State program, the system should be helping to administer the State's program – not creating a local water rate assistance program. Further, consolidation of a sustainable system that is providing safe drinking water is not an appropriate remedy for noncompliance with a State water rate assistance program.

C) **Qualified Finance –** The bill proposes to have the State agency qualify awards of financial assistance on the establishment of a low-income assistance program. This language is unclear and ties again to the problematic proposed creation of assistance programs at the local level – instead of on a program at the State level with a local pass through of money from the Fund.

ACWA will suggest an amendment on this new issue.

For these reasons, the Coalition has an Oppose-Unless-Amended position on SB 222. We appreciate your consideration of these concerns. If you would like to discuss the suggestions, please contact ACWA Deputy Executive Director for Government Relations at CindyT@acwa.com.

Sincerely,

Cindy Tuck
Deputy Executive Director for
Government Relations
Association of California Water Agencies

David Coxey
General Manager
Bella Vista Water District

Anthony Goff
General Manager
Calleguas Municipal Water District

Krista Bernasconi
Mayor
City of Roseville

Jessaca Lugo
City Manager
City of Shasta Lake

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Cucamonga Valley Water District

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General Manager
Elsinore Valley Municipal Water District

Hannah Davidson
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Irvine Ranch Water District

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Three Valleys Municipal Water District

Edwin R. Pattison
General Manager
Tuolumne Utilities District

Gary Arant
General Manager
Valley Center Municipal Water District

Brett Hodgkiss
General Manager
Vista Irrigation District

Erik Hitchman
General Manager
Walnut Valley Water District

Anjanette Shadley
Assistant General Manager
Western Canal Water District

Attachment

cc: Mr. Les Spahn, Legislative Director, Office of Senator Bill Dodd

web site: www.calleguas.com

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July 22, 2022

Bureau of Reclamation
Financial Assistance Operations Section
WaterSMART Grants Program Coordinator
Attn: Mr. Josh German
Mail Code: 84-27133
P.O. Box 25007
Denver, CO 80225

Subject: Support for the City of Camarillo AMI Water Use Efficiency Project

Dear Mr. German:

On behalf of the Calleguas Municipal Water District (Calleguas), I would like to express our strong support for the City of Camarillo (Camarillo) AMI Water Use Efficiency Project, and the application for funding through the Bureau of Reclamation's FY203 Water and Energy Efficiency Grant Program R23AS00008.

Calleguas is a wholesale water provider that delivers drinking water to 19 retail water purveyors within southeast Ventura County, including Camarillo. Under normal operating conditions, Calleguas meets its potable water demands primarily through imported State Water Project (SWP) water via Metropolitan Water District of Southern California. However, in recent years SWP water supplies have become increasingly strained, particularly due to stringent environmental regulations in the Delta and increased hydrologic variability.

To ensure reliable supplies, Calleguas has focused its planning efforts on water use efficiency and maximizing use of local water resources, as outlined in its 2020 Urban Water Management Plan. In addition, Calleguas' 2016 Strategic Plan includes promoting and facilitating implementation of water use efficiency measures among its targeted strategies to improve long-term water supply reliability.

The implementation of the proposed Camarillo AMI Water Use Efficiency Project will increase water use efficiency within the Camarillo service area by installing high accuracy meters and obtaining real-time water consumption data to facilitate leak detection. With

its water savings benefits, the project is in line with Calleguas' strategies for improved long-term water supply reliability.

Efforts to implement water use efficiency measures, such as this Camarillo project, are highly encouraged and we thank you for the opportunity to express our strong support for the Camarillo AMI Water Use Efficiency Project.

We strongly urge your thoughtful consideration of the Project.

Sincerely,

Anthony Goff
General Manager
Calleguas Municipal Water District

CALLEGUAS MUNICIPAL WATER DISTRICT

E-2 GENERAL MANAGER

General Manager's Monthly Status Report to the Board of Directors

Report for July 2022 Activities

Engineering

Construction

1. Oxnard-Santa Rosa Feeder, Las Posas Feeder, and Miscellaneous Valve Improvements (442) – The contractor, Lash Construction (Lash), completed start-up and testing at the Springville Hydroelectric Generator and a walkthrough was performed to generate a punchlist of outstanding items. *(CIP Priority: Medium*)

2. Calleguas-Las Virgenes Municipal Water District (LVMWD) Interconnection (450) – The contractor, Kiewit Infrastructure West Co. (Kiewit), installed additional underground drainage piping, electrical conduits, and placed concrete for the first section of the two-foot-thick concrete mat foundation for the underground pump station and pressure regulating station (PS/PRS). Kiewit also installed rebar and forms for the first section of the two-foot-thick exterior concrete wall for the PS/PRS. Kiewit excavated for, placed shoring, installed, and backfilled an additional 640 feet of 30-inch diameter welded steel pipeline within Lindero Canyon Road. Kiewit deployed additional temporary concrete K-rail barricades within Lindero Canyon Road, extending the work area northward across the Symphony Lane intersection. Although this modified traffic control approach temporarily restricts left hand turns into/out of Symphony Lane, it will allow for the pipeline to be installed across the intersection during the day instead of the previously planned night work, as well as provide for more efficient work (no need to set up and take down traffic control daily) and a safer work area. Kiewit and staff performed extensive coordination with Triunfo Water and Sanitation District (TWSD) and City of Thousand Oaks staff to schedule and facilitate a TWSD sewer repair within Kiewit's work area at Lindero Canyon Road. Northern Digital, Inc. continued fabrication of the PS/PRS control panels and the TWSD Meter Station control panel. Fabrication and factory testing continued on the welded steel pipe. Staff continued to coordinate with the Cities of Thousand Oaks and Westlake Village regarding encroachment permit requirements and modified traffic control plans. Project details and updates be found at http://www.cmwd-lvmwdinterconnection.com/ *(CIP Priority: High)*

3. TOD Pump Station Rehabilitation (590) – The contractor, Environmental Construction, Inc., received 8-inch welded steel pipe for the blow-off in the discharge isolation valve vault and continued fitting up the pipe. The electrical subcontractor, Taft Electric Co., worked on installation of conduits and wiring for the temporary power and controls to maintain operation of the pump station during construction; they also worked on installation of conduits and wiring for the permanent facilities. Mechanical and electrical work continued to be slowed due to the impact of supply chain issues affecting the availability of equipment, including butterfly valves, motor control centers, and electrical switchgear. *(CIP Priority: High*)

4. Lake Sherwood Pump Station Rehabilitation (591) – The contractor, MMC, Inc., received the motor and installed it on the new pump. They worked on installation of the air piping

for the new suction surge tank. The electrical subcontractor, Leed Electric, completed installation of conduit and wiring for the uninterruptible power supply bypass switch and load center. Mechanical and electrical work continued to be slowed due to the impact of supply chain issues affecting the availability of equipment, including butterfly valves, motor control centers, and electrical switchgear. *(CIP Priority: High*)

5. East Portal Isolation Enhancements (601) – Blois Construction, Inc. continues to prepare material submittals. (No change.) *(CIP Priority: High*).

6. Lake Sherwood Feeder Emergency Repair at Sta. 27+00 (608) – **This is a new project on this report.** On the morning of Tuesday, July 12, Calleguas crews en route to the Lake Sherwood Pump Station observed water surfacing above the Lake Sherwood Feeder on Moorpark Road between Rolling Oaks Drive and Los Padres Drive, south of the 101 Freeway, in Thousand Oaks. This pipeline delivers water to Ventura County Waterworks District No. 38 (VCWWD 38), which serves the community of Lake Sherwood, and is the only source of potable water to this area.

   Due to shutdown work commitments for other agencies, the As-Needed Pipeline Services Contractor, Lash, was unable to respond within the timeframe required. Instead, both MMC, Inc. (contractor for Lake Sherwood Pump Station Rehabilitation [Project No. 591]) and Blois Construction, Inc. (contractor for East Portal Isolation Enhancements [Project No. 601]) began work to identify the source of the leak and make any necessary repairs, in accordance with the emergency provisions of the General Conditions for their respective contracts.

   The area was excavated and the source of the leak was identified to be a welded joint near where the pipeline transitions from 24 to 16 inches. The leaking joint was cut out and a 16-inch buttstrap from the Emergency Pipe Storage yard in Wellfield No. 1 was welded on. Additional welding repairs were also made at a nearby joint. The pipeline was recharged and service to VCWWD38 was restored by 9 p.m. Wednesday. The excavation was backfilled and a section of the roadway was repaved. All work was completed on Friday, just 4 days after the leak was identified.

Design

7. Conejo Pump Station Rehabilitation (480) – Staff returned comments on Kennedy Jenks Consultants' (KJ) administrative draft technical memorandum regarding paving rehabilitation. KJ submitted administrative drafts of the seismic analyses for the Chlorine and Chemical Buildings, which are under review by staff. Staff collected data from several upper zone purveyor systems about their facilities downstream of their turnouts and provided it to KJ's surge subconsultant, Northwest Hydraulic Consultants, for use in developing the surge model. *(CIP Priority: High)*

8. Monitoring Wells (527) – The District's groundwater consultant is investigating the feasibility of using existing wells owned by Ventura County Waterworks District (VCWWD) No. 1 for monitoring purposes. (No change.) (*CIP Priority: Medium*)

9. Salinity Management Pipeline (SMP), Phase 3 (536)/Phase 4 (561) – The Board will consider authorizing preparation of California Environmental Quality Act (CEQA) documentation for Phases 3 and 4 at the August 3 Board meeting. (*CIP Priority: Low*)

10. Calleguas-Ventura Interconnection (562) – Perliter & Ingalsbe (P&I) revised the draft Preliminary Design Report (PDR); they also submitted revised alternative concepts for connecting the interconnection pipeline to Springville Reservoir. Staff and P&I met with the City of Ventura and their engineering consultant to review the results of the City's hydraulic analysis. The Manager of Engineering met with City and Casitas Municipal Water District staff to discuss the draft wheeling agreement with Metropolitan Water District of Southern California (Metropolitan). (*CIP Priority: High*)

11. Simi Valley Reservoir (569) – Staff continues to review a revised draft of the Site Selection and PDR. (*CIP Priority: High*)

12. Oxnard-Santa Rosa Feeder and Santa Rosa Hydro Improvements (582) – Engineering and O&M staff reviewed shutdown requirements and developed an approach that will simplify construction sequencing. Staff continues review of the revised 90 percent instrumentation plans and specifications. *(CIP Priority: Medium*)

13. Lake Bard Pump Station, Lake Bard Water Filtration Plant (LBWFP) Flowmeter, and Lake Bard Outlet Tower Improvements (587) – KJ continues to prepare the 90 percent plans and specifications. *(CIP Priority: High*)

14. Fairview Well Rehabilitation (589) – MKN & Associates submitted a draft outline for a technical memorandum to evaluate requirements and options for the disinfection system necessary for delivering groundwater into the distribution system. They continued revising the PDR. *(CIP Priority: High*)

15. Lindero Pump Station Rehabilitation (592) – KJ worked on the 100 percent plans and specifications. Staff coordinated right-of-way and access to the north side of the pump station with the City of Thousand Oaks, which is planning to construct a large battery storage system adjacent to their pump station nearby. Rincon prepared the Final Initial Study-Mitigated Negative Declaration, including Errata, Responses to Comments, and the Mitigation Monitoring and Reporting Program. *(CIP Priority: High*)

16. Calleguas Conduit North Branch (CCNB) Broken Back Rehabilitation, Phase 4 (598) – The hatch for the pre-cast structure was delivered to the pre-cast concrete manufacturer and the structure was placed in the manufacturing queue. *(CIP Priority: High*)

17. Crew Building Improvements and Networking Center Relocation (603) – KJ continues preparation of the 50 percent plans and specifications. *(CIP Priority: High*)

Studies & Planning

18. Water Supply Alternatives Study (WSAS) – The General Manager, Manager of Engineering, Associate General Manager, and Manager of Resources identified and pursued next steps for the leading contenders in the WSAS.

19. Seismic Analysis of Wood Ranch Dam and Dikes – A kick off meeting and site visit was held with Leighton Consulting, Inc.

20. Pipeline Condition Assessment Program – A kick-off meeting was held with V&A.

21. Solar Photovoltaic and Battery Storage Feasibility Analysis – TerraVerde Energy, the Association of California Water Agencies' preferred provider for renewable energy services, prepared a final scope of work for a feasibility assessment for the two locations identified as being most promising for solar and battery storage systems: Lake Bard and the Las Posas Aquifer Storage and Recovery (ASR) Wellfield.

Grants & Funding Opportunities

22. Potential Funding Opportunities – The Manager of Engineering attended an American Public Works Association webinar on Water Infrastructure Funding in the Bipartisan Infrastructure Law.

23. Proposition 1 Integrated Regional Water Management Plan Implementation Grant Funding – DWR continues to review the third and fourth invoices and progress reports. (*No change*.)

Miscellaneous Engineering Activities

24. Training – The Senior Project Manager presented to Engineering staff on the surge analysis for Lake Bard Pump Station. Two Construction Inspectors presented on hydroseeding and flange faces and gaskets. The Manager of Engineering attended the third multi-day virtual session as part of Cohort 5 of the Water Solutions Network (WSN). The WSN is a group of leaders committed to solving California's most pressing land and water challenges and involves a yearlong immersive, collaborative learning experience comprised of multiple camping trips and virtual sessions.

25. Crestview Well No. 8 Agreement – Crestview continues to pursue the permits needed for the well. (No change.)

26. Fleet Electrification – Southern California Edison (SCE) staff are reviewing the Charge Ready application the District submitted for electric vehicle chargers. (No change.)

27. Fairview Pump Station Battery Storage System – Ventura Energy continues to procure the necessary materials and equipment.

Water Policy and Strategy

28. Coordination on Water Shortage Emergency —In July, District staff have continued to participate in multiple efforts to identify longer-term reliability solutions for the State Water Project Dependent (SWP-D) area. These efforts include:

    - *Metropolitan Member Agency Facilitated Solutions Process:* There is an intensive process open to all Metropolitan member agencies to participate with Metropolitan's engineering staff to identify and analyze a broad range of potential solutions to improve the SWP-D area's reliability. The process is being facilitated by a team of consultants and is highly structured to identify a comprehensive range of potential projects, including elements of infrastructure, supply, storage, and programs; develop numerical ratings along multiple criteria scales; evaluate projects; and assemble portfolios of projects to address the problem. The process is currently in the criteria development and rating phase. Portfolios are expected to be completed for the Metropolitan Board's review in September.

    - *Principals' Working Group:* In addition to the facilitated process involving all member agencies, Metropolitan is also hosting a smaller group process limited to the SWP-D member agencies and Metropolitan's executive managers. That group has been primarily focused on the actions at the Metropolitan Board level that will define the problem, articulate a policy response, and demonstrate Metropolitan's commitment to addressing the problem through a time-certain schedule with project identification and financial commitments. The near-term goal is to cooperate in developing the Board action for Metropolitan's August 16 Board meeting.

    - *SWP-D Coordination Meetings:* Metropolitan staff hosts a weekly coordination meeting among the SWP-D member agency managers for general information, conservation performance tracking, problem resolution, and planning.

    - *Supplemental Water Supply Discussions:* The General Manager and Associate General Manager are pursuing multiple options to develop supplemental water supplies pursuant to the Board's authorization of July 6. The primary focus is on the interagency coordination necessary to make project and policy concepts work. These discussions are ongoing and include: potential groundwater storage programs, pumping of the ASR Wellfield, coordination with the FCGMA, Ventura

County State Water Project (SWP) interests, models for water transfers and co-investment, recycled water optimization, and seawater desalination.

29. Metropolitan Water District — In July, the Metropolitan Board of Directors consolidated all committee and Board meetings into one day, July 12. The meetings addressed the following areas of interest to the District:

    - *Update on Emergency Water Conservation Program:* The Water Planning and Stewardship Committee received an update on the Emergency Water Conservation Program performance. Overall, the six SWP dependent member agencies under mandated conservation are performing well. For the period ending in June, the member agencies were 4% below the 2022 target. If these compliance trends persist into August, Metropolitan may remain on the one-day-a-week option and continue to track demands and supplies.

    - *Colorado River Demand Reductions:* The Water Planning and Stewardship Committee heard an update on the Colorado River supply. The Bureau of Reclamation has identified the need for Colorado River users to reduce their demand by 2-4 million acre-feet (MAF) starting in 2023. The reductions are necessary to protect critical infrastructure threatened by the dropping elevations of Lakes Powell and Mead. The reduction will be shared by both the upper and lower basin states. The lower basin states of California, Nevada, and Arizona will be asked to reduce demand by 2 MAF. The Bureau of Reclamation has given the basin states until mid-August to propose a plan to reduce the demands among themselves. If the basin states cannot develop a viable plan, the Bureau of Reclamation will proceed with a federal plan to allocate the demand reduction. Given the complexity of the priorities among the states as well as the mix of urban and agricultural uses served by California's share of the Colorado, the negotiations among the basin states and among California's users are fraught with strategic compromises. Metropolitan will be scheduling a special Board meeting in August to brief the Board on negotiations and terms for any proposed allocation among the lower basin states and California interests.

    - *Chair's Committee Assignments:* After months of impasse from the Board Executive Committee and Board in opposing Board Chair Gray's naming of committee members and chairs for new Board committees, the Board of Directors voted to waive the applicable provisions of Metropolitan's administrative code to allow the Chair, without approval from the Board, to appoint members, chairs, and vice-chairs to fill current vacancies on committee and to stand up the Underserved Communities, Diversity, Equity, and Inclusion and Imported Water Committees established by Board approval on November 23, 2021. The Board continues to struggle to find consensus on leadership and critical issues.

- *Shaw Law Group Investigative Reports:* The Board voted not to release specific case investigations related to the Shaw Law Group's Independent Investigation of Workplace Concerns. The Shaw Law Group investigated both general workplace concerns and specific instances of alleged discrimination. The general report was released. The specific case investigations have been available to the Board but have remained confidential on advice of outside counsel. Some members of the Board and public have called for the investigation files to be made public. After multiple hours of closed session deliberations, the Board voted not to release the investigation reports and to provide the rationale for keeping them confidential to Metropolitan staff, the public, and the press.

Water Resources

Drought Response

30. Drought Response Task Force – The District hosted its third Drought Response Task Force meeting on July 27 and discussed coordination with Metropolitan and upcoming Metropolitan Board actions in response to issues raised in the City of Camarillo's letters to Metropolitan, an update on conservation performance, and recent actions regarding supplemental emergency water supplies. Task Force meetings occur monthly and are geared toward meeting the information and coordination needs of the retail purveyors' elected officials and executive management.

31. Drought Communications Campaign – Calleguas is working with JPW Communications to develop a drought communications campaign that will be implemented throughout the service area. On July 26, the District hosted a kick-off meeting with the purveyors to obtain their input for the development of a campaign.

32. The internal Calleguas Drought Response Team met biweekly in the District's Emergency Operations Center. The Team is an interdisciplinary group of Calleguas employees who have been assigned short-term drought-related response activities.

33. On July 6, the Principal Resource Specialist, along with staff from Metropolitan and California-American Water, provided a drought and emergency water conservation briefing to the Senior Leadership Team at Takeda Pharmaceutical Company in Thousand Oaks. They also provided a separate water conservation presentation and Q&A session for Takeda staff.

34. On July 9, Calleguas staff participated in the "911 in the 805" emergency preparedness community event held in Thousand Oaks. The Manager of Resources was a panelist for the drought and emergency water conservation workshop and the Principal Resource Specialist was a panelist for the UC Master Gardeners landscape care during drought workshop.

35. On July 20, Resources staff attended the City of Thousand Oaks' monthly water conservation group meeting. Discussion focused on purveyors' conservation activities and ongoing drought emergency actions.

Public Affairs & Water Use Efficiency

36. Calleguas held a Purveyor Managers Meeting on July 28. Topics discussed included drought response updates, Emergency Water Conservation Program compliance, a 2022 legislation tracking report, status of Las Posas ASR operations, a presentation by Metropolitan's Chief Engineer on current efforts to identify and implement reliability solutions for the SWP-D areas, and a purveyor roundtable.

37. On July 9 and 13, the UC Master Gardeners of Ventura County hosted outdoor hands-on drip irrigation workshops at Calleguas headquarters, where attendees learned a variety of installation options for residential yards and gardens. There were 8 attendees at the July 9 Saturday morning workshop and 7 attendees at the July 13 Wednesday evening workshop. These workshops are scheduled to be held the second Saturday of the month through November, with an evening workshop also scheduled for Wednesday, August 17.

38. On July 19, the Manager of Resources provided a presentation titled "Emergency Water Restrictions: Prioritizing Water for People over Ornamental Landscaping" for the Association of Water Agencies of Ventura County (AWA) Water Issues Committee meeting.

39. On July 21, Resources staff attended Metropolitan's monthly Water Use Efficiency meeting. Topics included an External Affairs update, a water supply update for the Colorado River, current conservation program activity, a presentation on Western Municipal Water District's device giveaway program, Metropolitan drought planning updates, and other Metropolitan program updates, as well as a member agency roundtable to discuss drought response actions.

40. In July 2022, there are 383 applications in good standing under the Turf Replacement Program for a total reserved amount of $1,893,629 in Metropolitan funding and $654,367 in Calleguas supplemental funding.

    For Fiscal Year (FY) 2022-23, under the Device Program, there are currently 147 applications in good standing (i.e., rebate applications that have not been denied or expired due to inactivity) totaling $12,635 in reserved Metropolitan funding.

    Due to the beginning of the fiscal year and associated programming implementation, no turf or device rebates have been reported paid in July 2022.

Development & Planning

41. Annexation No. 104 – Rio Urbana – The Board provided final approval of this annexation on July 20, and the Local Agency Formation Commission provided the Certificate of Completion on July 25. Final payment was also issued to Metropolitan on July 25. This annexation case is now complete.

42. Annexation No. 106 – Cypress Place at Garden City/Garden City Acres Park – Metropolitan's Board reviewed and approved this annexation request on June 14. Calleguas has invoiced the applicants for the final annexation fees for both Calleguas and Metropolitan. Once payments are received, staff will present the annexation to the Board for consideration of final approval.

Groundwater Resources

43. Aquifer Storage and Recovery (ASR) – Preparations were made for increased groundwater level monitoring during emergency operation of the ASR wellfield.

44. Fox Canyon Groundwater Management Agency (FCGMA) – The FCGMA Board of Directors met on July 20. During this meeting, the FCGMA Board received an update from Calleguas' General Manager concerning emergency operation of the ASR Wellfield and approved a contract for grant management services.

45. Groundwater storage totals through the end of June include 0 AF of well production and 0 AF of well injection.

    Groundwater storage totals through June are as follows:

East Las Posas Wellfield Injection	21,791 acre-feet
East Las Posas Wellfield Allocation	0 acre-feet
East Las Posas In Lieu	6,348 acre-feet
West Las Posas In Lieu	25,192 acre-feet
Conejo Creek Project	23,453 acre-feet
United Storage	10,482 acre-feet
Oxnard In Lieu	18,060 acre-feet

Miscellaneous Water Resources Activities

46. Future Supply Actions Program Administration – Staff continues to coordinate with VCWWD No. 1 and Metropolitan on the Arroyo Las Posas Stormwater Diversion Feasibility Study and Percolation Test. The County's consultant, Lawrence Berkeley National Laboratory, is finalizing the project report and preparing the final invoices.

47. Calleguas–LVMWD Interconnection Public Outreach – Staff continues to work with Arellano Associates on public outreach and engagement.

48. The District measured 0 inches of rainfall from July 1 to 26 at the Lake Bard site. Measurable rainfall for the current water year, beginning October 1, is 10.67 inches.

Operations and Maintenance

System Operations

49. Camrosa Water District's (Camrosa) Round Mountain Water Treatment Plant is currently in service and discharging brine into the SMP. Port Hueneme Water Agency's water treatment plant is also in service and discharging brine to the SMP, downstream of the pressure regulating valves.

50. Control Systems staff coordinated with outside contractors to begin replacing the pad and conduits at Calle Yucca Turnout, which needs significant repairs due to damage from a car accident. In addition, they spent time preparing the ASR Wellfield for operation. Most of their efforts were centered on the primary ultrasonic flow meter located in the valve yard. This meter provides critical flow information for chemical application and operational data. During routine testing, the meter displayed inconsistent flow readings and Control Room operators dispatched staff to investigate. Staff worked with the manufacturer's representatives to troubleshoot, clean, calibrate, and confirm accuracy of the unit. They also responded to multiple SCE power outages that required them to reset facilities and equipment throughout the service area. Staff worked closely with SCE field crews to provide access and support at the District's headquarters to ensure power disruptions were addressed quickly while confirming operations of the District's standby power generators.

51. Control Systems staff performed preventative maintenance and routine inspection on:
    - LBWFP
    - Lake Bard
    - Santa Rosa Hydroelectric Generator
    - Springville Hydroelectric Generator
    - Conejo Pump Station
    - Grandsen Pump Station
    - Lake Sherwood Pump Station
    - Lindero Pump Station
    - Grimes Canyon Reservoir
    - SMP Control Tank
    - Conejo Standby Power Generators
    - California Water Service Co. Turnouts

- Camrosa Turnouts
- Golden State Water Co. Turnouts
- VCWWD Turnouts
- Well Nos. 1, 7, 9, 14-17, and Monitoring Wells
- Las Posas ASR Wellfield
- Grimes Canyon Disinfection Facility

52. Distribution System staff continued to support the work at Springville Hydroelectric Generator to install new actuators as part of the Oxnard-Santa Rosa Feeder, Las Posas Feeder, and Miscellaneous Valve Improvements (Project No. 442). This included limit adjustments and testing of the new equipment. They also supported the Lake Sherwood Feeder Emergency Repair at Sta. 27+00 (Project No. 608). Crews isolated Lake Sherwood Pump Station and relief valve while working closely with System Maintenance crews to verify pressures and confirm the leak was on the Calleguas' system. Lastly, to prepare for ASR Wellfield operation, staff configured each of the target wells to injection mode. They tested various wells, confirmed lubrication of equipment, prepared multiple wells for production, and closely coordinated start up with Operations staff. They will provide daily inspections of each of the operating wells to monitor and gather operational data for future review.

53. Distribution System staff performed preventative maintenance and routine inspection on:
    - East Portal Hydroelectric Generator
    - Santa Rosa Hydroelectric Generator
    - Springville Hydroelectric Generator
    - Conejo Pump Station
    - Fairview Pump Station
    - Grandsen Pump Station
    - Lake Sherwood Pump Station
    - Lindero Pump Station
    - Pressure Regulating Station Nos. 4, 6, 8 and 9
    - Mesa Relief
    - Westlake Reservoir
    - Conejo Standby Power Generator
    - LBWFP
    - California American Turnouts
    - Well Nos. 1, 5, 15, 17, and 18
    - Wellfield - Site

54. System Maintenance responded to the Lake Sherwood Feeder leak and provided critical support to enable its timely repair. They worked closely with California-American staff initially to determine which pipeline was leaking, then isolated and drained the District's pipeline to prepare for excavation. Throughout the work, they maintained traffic control

and operationally "floated" VCWWD's pipeline using Lake Sherwood Reservoir, then returned the line to service. Staff continued to perform pipeline maintenance in the City of Camarillo. To prepare for ASR Wellfield operation, multiple staff members were trained to assist the Regulatory Compliance and Control Systems Divisions in gathering daily operational information and logging efficiency data.

55. System Maintenance staff performed preventative maintenance and routine inspection on:
    - District Headquarters
    - Springville Hydroelectric Generator
    - Lake Bard
    - LBWFP
    - Lake Sherwood Feeder Nos. 1 and 2
    - Las Posas Feeder Nos. 1, 2, and 4
    - Conejo Pump Station
    - Grandsen Pump Station
    - Conejo Reservoir
    - Lake Sherwood Reservoir
    - Newbury Park Reservoir
    - SMP Control Tank
    - Springville Reservoir
    - Wellfield Lab
    - Wellfield Site

56. Water quality met all SWRCB Division of Drinking Water standards for the month of July.

57. The East Portal, Conejo, Grandsen, Santa Rosa, and Springville Hydroelectric Generators are currently available for operation and on-line as flow conditions permit.

Emergency Response & Safety

58. On July 9, the Emergency Response Coordinator joined Resources staff at the"911 in the 805" emergency preparedness community event held in Thousand Oaks. The Emergency Response Coordinator staffed the District's booth at the event and responded to public inquiries about local water conservation efforts, water use efficiency rebates, and other drought related subjects.

59. On July 12, the Manager of Operations & Maintenance and Emergency Response Coordinator attended an Active Shooter Preparedness training conducted by the Ventura County Sheriff's Office and hosted by the West Ventura County Business Alliance. The training focused on ways that businesses and organizations can prevent, prepare for, and respond to active shooter situations.

60. On July 28, the Emergency Response Coordinator led a meeting of the AWA Disaster Preparedness Subcommittee focused on cybersecurity for water agencies. In partnership with staff from United Water Conservation District, the Emergency Response Coordinator provided an overview of federal and state resources and services water agencies can leverage to enhance their cybersecurity programs. As co-chair of the AWA Disaster Preparedness Subcommittee, the Emergency Response Coordinator regularly collaborates with committee members and organizes committee meetings on a quarterly basis.

61. The Emergency Response Coordinator has contributed to the District's ongoing drought response activities, including participation in regular meetings with internal staff, representing the District at external events, and coordinating Drought Task Force meetings.

62. The Emergency Response Coordinator continues to coordinate the District's response to the COVID-19 pandemic. Updates to workplace safety regulations and guidelines are relayed to management and staff and incorporated into the District's response accordingly.

63. The Safety Officer provided the following training sessions to Engineering and O&M staff:
    - First Aid Kit Overview
    - Hazard Communication Program
    - Hazwoper Awareness

Miscellaneous Operations and Maintenance Activities

64. Operations and Maintenance staff provided design review to the Engineering Department on various projects, including:

    - Oxnard-Santa Rosa Feeder, Las Posas Feeder, and Miscellaneous Valve Improvements (Project No. 442)
    - LVMWD-CMWD Interconnection (Project No. 450)
    - Conejo Pump Station Rehabilitation (Project No. 480)
    - Oxnard-Santa Rosa Feeder and Santa Rosa Hydro Improvements (Project No. 582)
    - Lake Sherwood Pump Station Rehabilitation (Project No. 590)
    - Lindero No. 2 (TOD) Pump Station Rehabilitation (Project No. 591)
    - Crew Building Improvements & Networking Center Relocation (Project No. 603)

Human Resources

Recruitment/Selection

65. HR staff assisted in filling the Engineering Administrative Assistant position; Megan Neilson started on July 18.

66. Interviews were held for the Laboratory Coordinator position in the Operations and Maintenance Department.

67. Advertisements via the NEOGOV system are ongoing for the IT Specialist and Water Treatment Operator positions. Interest in these positions is more than adequate, especially given the tight labor market. These recruitments are scheduled to close on August 5.

Third Party Program Participation

68. The 2022 Census of Governments Survey of Public Employment and Payroll was completed. By participating in the census, the data compiled will be made available to the District.

69. The HR Department registered to participate in the California Department of Motor Vehicles' Pull Notice Program. The Program, which is free to California public agencies, enables employers to monitor the driving records of employees who drive for them and is now offered electronically.

Employee Hotline

70. There was no activity on the confidential employee hotline in the last quarter.

Administrative Services

Finance

71. Finance staff prepared Resolutions establishing rules, rates and regulations for water service, SMP rates, and annexation fees for the District. The public hearing was held and the resolutions were approved at the July 6 Board meeting.

72. At the July 20 Board meeting, the Board approved an updated Investment policy. This information has been passed on to the District's investment manager at Chandler Asset Investment.

73. Finance staff has begun the interim audit.

74. Approximately 328 invoices were processed and paid, totaling approximately $20.6 million.

75. Finance Staff prepared purveyor invoices for water sales in June totaling $11,626,907.34. Metropolitan invoiced the District for the same period a total of $8,402,934.58.

76. The Metropolitan invoice for water purchased in May and paid in July is $8,915,334.41.

77. The balance in the LAIF account as of June 30, was $3,561,684.19. The monthly effective yield is at 0.861 for June.

78. The Los Angeles-Long Beach-Anaheim Consumer Price Index for June was up 1.1% over the past month and up 8.6% from a year ago.

79. Finance staff is working on implementing new timesheet software, Executime, which is linked directly with the District's payroll system. Staff continues to meet with the implementation team to set up the new software.

80. Finance staff is working with Bartel and Associates to prepare the annual actuarial valuation for the District's retiree healthcare (other post-employment benefits) analysis.

81. Finance staff is working with Willdan Financial Services to update the Standby Charge Report.

Information Technology

82. The IT Coordinator continues to work with the Laserfiche consultant to address retention schedule issues.

83. The IT Coordinator attended a Webinar "Tales from the Trenches" that discussed how agencies in South Carolina developed a "Whole of State" approach to cybersecurity where over 300 agencies worked together to address cybersecurity issues.

84. Penetration testing continued, including testing of the network externally and internally on both the Administrative and SCADA networks, as well as WiFi access at headquarters and remote sites.

RESOLUTION NO. 2052

RESOLUTION OF THE BOARD OF DIRECTORS
OF CALLEGUAS MUNICIPAL WATER DISTRICT
ADOPTING THE FINAL MITIGATED NEGATIVE DECLARATION AND INITIAL STUDY
AND THE MITIGATION MONITORING AND REPORTING PROGRAM
FOR THE LINDERO PUMP STATION REHABILITATION

WHEREAS, in accordance with the California Environmental Quality Act, a Draft Mitigated Negative Declaration (MND) and Initial Study (IS) was prepared to assess the potential environmental impacts of the proposed project; and

WHEREAS, on May 23, 2022, the Draft MND and IS for the proposed project was filed by the District with the Governor's Office of Planning and Research and circulated for public review; and

WHEREAS, subsequent to the closing of the public review period on June 21, 2022, public comments received, together with District responses and associated minor revisions to the document, were incorporated in the Final MND and IS; and

WHEREAS, the Board of Directors reviewed and considered the information contained within said Final MND and IS; and

WHEREAS, the Board of Directors reviewed and considered the Mitigation Monitoring and Reporting Program (MMRP) providing for the implementation of mitigation measures identified in the Final MND and IS designed to avoid or reduce potentially significant impacts to the environment to a less-than-significant level; and

WHEREAS, documents which constitute the record of proceedings upon which the following decisions are based are maintained by the District at its Administrative Office located at 2100 Olsen Road, Thousand Oaks, California.

NOW, THEREFORE, THE BOARD OF DIRECTORS OF CALLEGUAS MUNICIPAL WATER DISTRICT RESOLVES AS FOLLOWS:

1. On the basis of the whole record provided, there is no substantial evidence that the proposed project will have a significant effect on the environment.
2. The Final MND and IS, dated July 2022, is hereby approved and adopted.
3. The elements of the MMRP, having been reviewed, are found to provide mitigation measures which are feasible and will reduce the potentially

significant impacts to the environment related to the Project to a less-than-significant level, and is hereby approved and adopted.

4. The Final MND, IS, and MMRP reflect the lead agency's independent judgment and analysis.

ADOPTED, SIGNED AND APPROVED this 3rd day of August, 2022.

Steve Blois
President of the Board of Directors

ATTEST:

Raul Avila
Secretary of the Board of Directors

STATE OF CALIFORNIA)
) ss
COUNTY OF VENTURA)

I, Raul Avila, Secretary of the Board of Directors of Calleguas Municipal Water District, DO HEREBY CERTIFY that the foregoing Resolution was duly adopted by the Board of Directors of said District at the regular meeting of said Board held on the 3rd day of August, 2022.

_____
Raul Avila
Secretary of the Board of Directors

Lindero Pump Station Rehabilitation (Project No. 592)

Initial Study – Mitigated Negative Declaration

prepared by

Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, California 91360
Contact: Jennifer Lancaster, Principal Resource Specialist

prepared with the assistance of

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

May 2022

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
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Initial Study

1. Project Title

Lindero Pump Station Rehabilitation

2. Lead Agency Name and Address

Calleguas Municipal Water District
2100 East Olsen Road
Thousand Oaks, California 91360

3. Contact Person and Phone Number

Jennifer Lancaster
Principal Resource Specialist
805-579-7194

4. Project Location

The project site is identified by Assessor's Parcel Number (APN) 569-0-320-035, located on Erbes Road at East Avenida De Las Flores in Thousand Oaks, California. Please see Figure 1.

5. Project Sponsor's Name and Address

Calleguas Municipal Water District
2100 East Olsen Road
Thousand Oaks, California 91360

6. General Plan Designation

The City of Thousand Oaks General Plan land use designation for the project site is "Existing Park, Golf, Open Space" (City of Thousand Oaks 2015).

7. Zoning

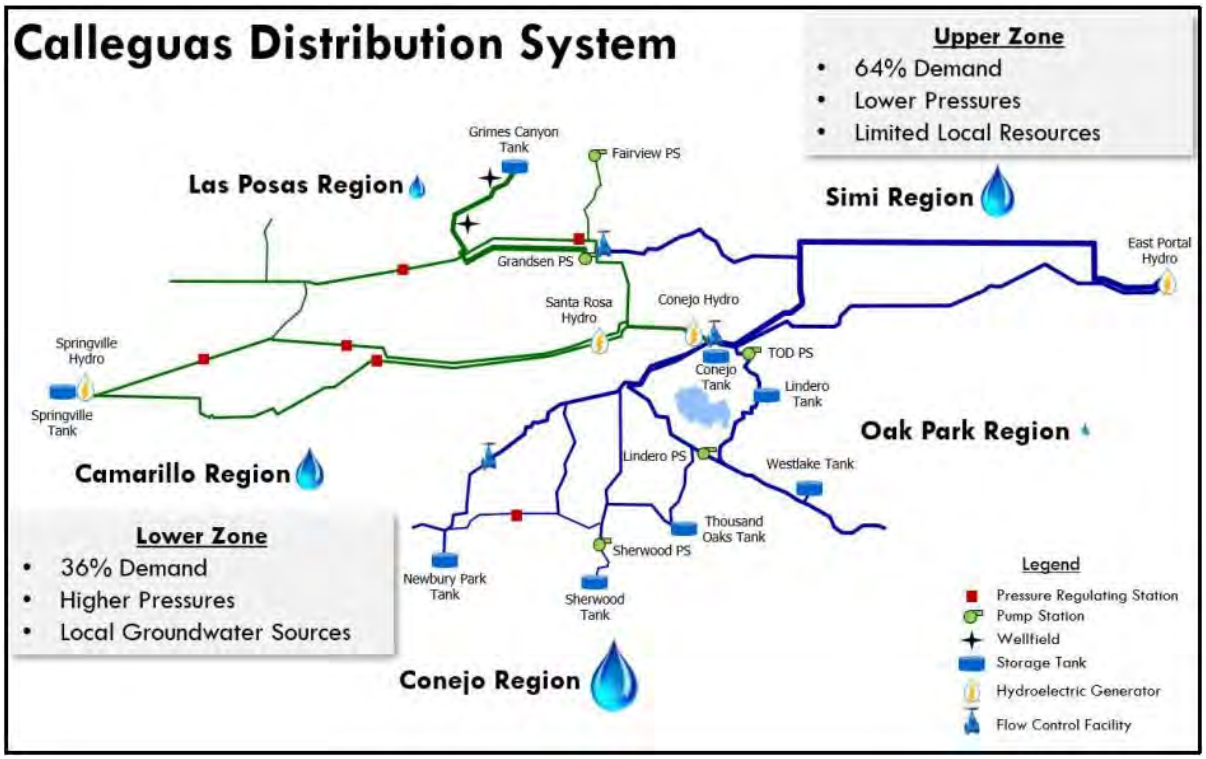
The project site is zoned P-L (Public, Quasi-Public, Institutional). Permitted uses include Public Utility Facilities with the issuance of a Development Permit by the Planning Commission or the Community Development Director per City of Thousand Oaks Municipal Code Section 9-4.2804(a)(1). The proposed project is consistent with site zoning. Per California Government Code 53091, building and zoning ordinances of a county or city do not apply to the location or construction of facilities for the production, storage, or transmission of water, wastewater, or electrical energy by a local agency. The project site is an existing facility for the transmission of water and the project is also consistent with that use, and therefore exempt from City of Thousand Oaks building and zoning codes.

Figure 1 Project Location

8. Project Description

The Lindero Pump Station Rehabilitation ("proposed project") is proposed by Calleguas Municipal Water District ("Calleguas") to provide necessary repairs and improvements to the existing Lindero Pump Station in Thousand Oaks. Lindero Pump Station is a critical component of Calleguas' water infrastructure system and Calleguas' reliable conveyance of potable water supply to the Oak Park Region, which includes the unincorporated community of Oak Park as well as the North Ranch area of Thousand Oaks. Lindero Pump Station works in conjunction with Lindero Pump Station No. 2 (better known as "Toe of Dam" or "TOD Pump Station") to convey water from the Conejo Region, which is served by Conejo Reservoir and Thousand Oaks Reservoir, to the Oak Park Region, which is served by Westlake Reservoir. Please see Figure 2 for a portrayal of Calleguas' service regions and major facilities, including Lindero Pump Station and TOD Pump Station.

Figure 2 Calleguas MWD Service Regions and Infrastructure



Source: Calleguas MWD 2021

TOD Pump Station has higher efficiency than the existing Lindero Pump Station and access to backup power; therefore, TOD Pump Station serves as the primary pump station for the Oak Park Region, which relies entirely upon imported water. If Lindero Pump Station and TOD Pump Station were both to fail, the Oak Park Region would not have access to potable water supply. The proposed improvements to Lindero Pump Station are critical to Calleguas' ability to continue providing a reliable water supply to the Oak Park Region.

Background

Lindero Pump Station was originally constructed in 1969 and has not been significantly modified since its original construction. As a result, various components of the pump station infrastructure

and facilities are beyond their useful life and need to be replaced. In addition, some of the parts required for existing pump station components are no longer produced by the manufacturers, such that there is limited availability for replacement parts, and replacement parts already are or will eventually become unavailable. Key components of the Southern California Edison (SCE) electrical service equipment are also outdated. As a result, the pump station runs on a non-standard voltage, which requires custom motor control centers and transformers. Further, Lindero Pump Station does not currently have backup power, which has resulted in an inability to operate during numerous public safety power shutoffs over the past several years. The current lack of backup power at Lindero Pump Station could also result in the inability of the pump station to operate after an earthquake or during a wildfire if utility power were lost.

Proposed Project Features

Under the proposed project, a series of improvements and repairs would be implemented at Lindero Pump Station; see the site plan provided below in Figure 3. The improvements assessed herein have been identified as necessary to facilitate the dependable operation of Lindero Pump Station and continued reliability of water supply to the Oak Park Region, which includes the unincorporated community of Oak Park, as well as the North Ranch area of Thousand Oaks.

Pump Station Facilities

Lindero Pump Station has horizontal split case pumps which are situated aboveground and are original to the pump station's construction in 1969. Under the proposed project, the horizontal split case pumps would be replaced with vertical turbine pumps. The replacement pumps would primarily be situated belowground, which would require excavation during construction, discussed below. In addition, modifications to the existing piping system would be performed, and the existing control valves would be replaced. The existing surge tank air compressors would also be replaced. Finally, a removable protective canopy would be installed over the pumps to protect the motors from over-heating. The interior and exterior of most surfaces would be painted, including the building, surge tanks, and perimeter wall.

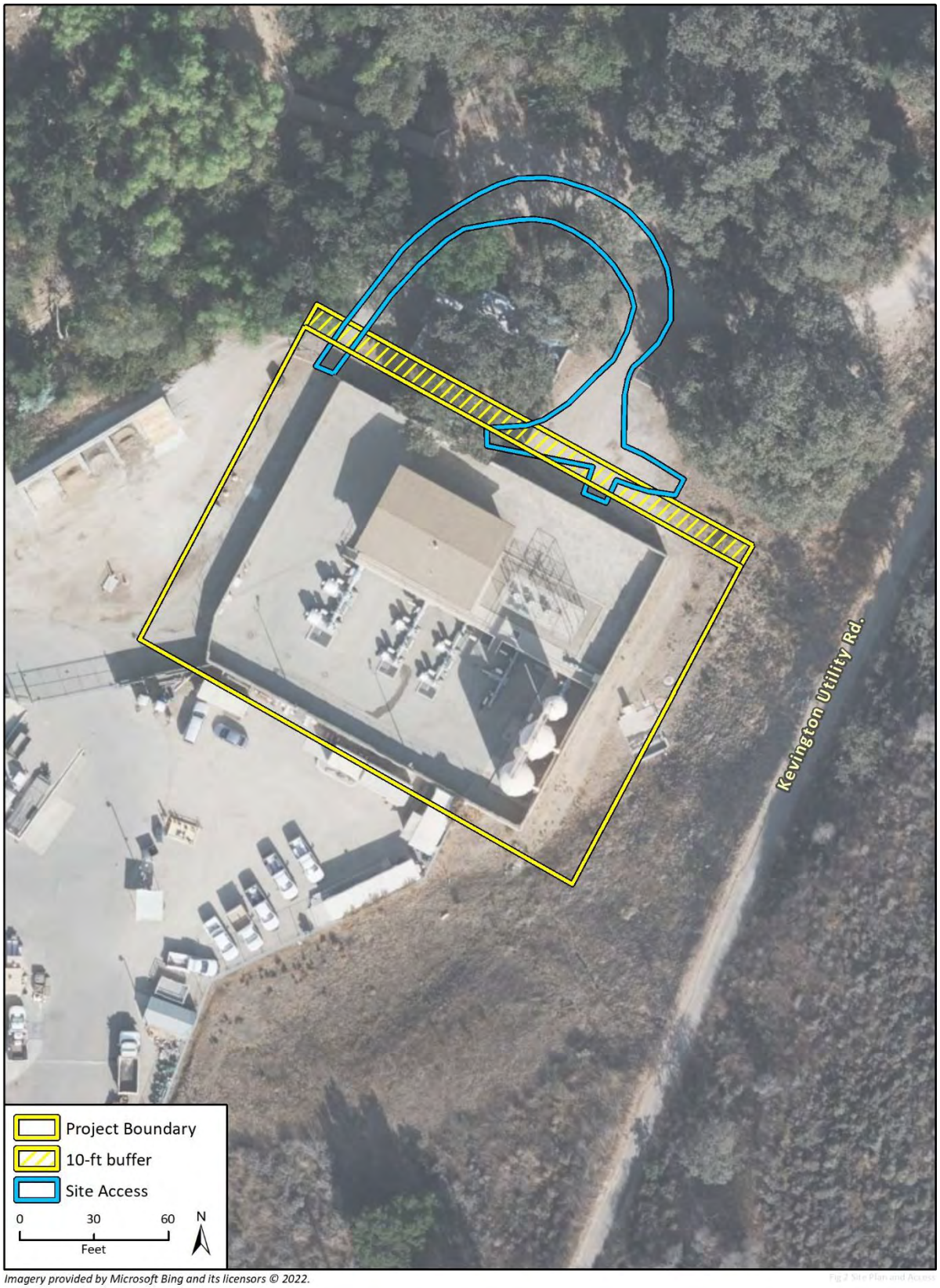
Electrical System

The existing SCE electrical system would be replaced under the proposed project. Electrical and controls equipment would be replaced with new equipment that runs on a standard voltage. This includes the main transformer, motor control center, and uninterruptible power supply. The existing electrical and control conduits would also be replaced.

Backup Power Generator

A stationary diesel backup generator would be installed at the pump station and would be subject to Ventura County Air Pollution Control District (APCD) permitting. The generator would provide reliable power even when utility power is lost. The backup generator would be run for approximately 20 minutes every other week, to ensure the equipment remains in good condition to be reliable when scheduled or unscheduled backup power is needed.

Figure 3 Proposed Project Site Plan and Access within Lindero Pump Station



Imagery provided by Microsoft Bing and its licensors © 2022.

Building Structure Improvements

Due to the age of the existing pump station building, improvements are necessary to improve the building's resilience to seismic events. These improvements would include replacement of the building roof and replacement of the main entrance door and adjacent glass sidelights with a double door. Interior and exterior lighting and ventilation fans would also be replaced.

Construction

Construction of the proposed project would require sequencing and phased shutdowns to facilitate certain activities, and construction is anticipated to occur over approximately a one-year period. The pump station would be temporarily shut down at times during the construction period. Construction activities would include demolition and removal of the existing above-ground horizontal split case pumps, followed by site preparation for installation of the new vertical turbine pumps. Site preparation would include excavation to accommodate placement of the new pumps below the ground surface. Due to the limited size of the pump station property, there is insufficient space to reuse excavated soils on site. Therefore, excess soils resulting from excavation would be removed from the site via truck and either transported to a landfill with sufficient capacity for off-site disposal, or transported to a secondary site for reuse, at the discretion of the construction contractor. Similarly, the electrical system components, horizontal split case pumps, control valves, surge tank air compressors, building roof, main door and glass sidelights, and interior and exterior lighting and fans would also be removed from the site via truck and transported to either a landfill or a recycling facility with sufficient capacity for off-site disposal, at the discretion of the construction contractor.

Excavation would be required during implementation of modifications to the piping system, control valves, and surge tank air compressors, due to the existing suction and discharge piping being situated underground. The existing discharge piping is under the walkway between the pumps and the pump station building; if the existing discharge piping must be removed to accommodate the proposed project improvements, it might be necessary to demolish part of the walkway to excavate and remove portions of the existing discharge pipe. However, this would be determined during final engineering design of the project and may not be necessary. Some limited ground disturbance would also be necessary to conduct the electrical system improvements and installation of the backup power generator. Preparation of the generator foundation would include over-excavation and re-compaction of the ground surface prior to placement of the concrete pad. In addition, implementation of the proposed electrical system improvements would include new conduits and duct banks, which are groups of conduits that are bundled together and protected by concrete or slurry. Installation of some of the new electrical infrastructure would also require over-excavation and re-compaction similar to preparation of the generator foundation.

No modifications to the alignment of the pump station's existing paved driveway are required to accommodate construction access. Access into the project site within Lindero Pump Station is outlined in blue on Figure 3; there are mature oak trees along this road that would be trimmed in preparation for project construction, to provide clearance for construction vehicles, equipment, and materials, without causing damage to the mature oaks. In addition, oak tree trimming may also occur within the 10-foot buffer area outside the site's northern perimeter wall, shown in Figure 3 with yellow hatching. The portion of the blue-outlined area in Figure 3 that stretches out horizontally along the site's northern wall indicates the approximate location of a new 18-foot-wide entry ramp and gate that would be installed as part of the project. The exact alignment of this improved entry and gate may shift slightly, but would remain in the eastern side of the northern

perimeter wall. The final opening in the perimeter wall is anticipated to be slightly wider than 18 feet, to accommodate the gate post footings. These entryway improvements are necessary to provide access to the new electrical equipment. Following the completion of project construction, the project site and the driveway providing access to Erbes Road would be repaved to repair any damage sustained during the construction period.

During construction of the project, vehicles and equipment would access the pump station from Erbes Road, using the existing paved entry and driveway. Calleguas would coordinate with the City of Thousand Oaks prior to the start of construction regarding the preferred haul routes that construction vehicles and equipment should use; this is not a regulatory requirement, but rather an effort to minimize or avoid traffic disruptions from the project. It is anticipated construction vehicles approaching the pump station would exit State Route (SR) 23 at Janss Road and turn left on Erbes Road, then turn right into Lindero Pump Station. Upon leaving the pump station, it is anticipated that construction vehicles would turn right onto Erbes Road then turn left on Avenida De Los Arboles and continue to SR 23 where vehicles may enter either the north- or south-bound lanes. No vehicles leaving the pump station would turn left onto Erbes Road, consistent with current traffic signage. These are the assumed routes and final construction haul routes would be confirmed in coordination between Calleguas and the City of Thousand Oaks.

Staging of vehicles, equipment, soil spoils, and parts and materials would occur on site throughout the construction period, including on the previously disturbed 12- to 15-foot-wide area located adjacent to the west of the pump station's perimeter wall but within the Lindero Pump Station property, and on the previously disturbed area at the entrance to Lindero Pump Station. Both of these areas, while previously disturbed, are currently undeveloped and therefore available for construction staging. In addition, the construction contractor may seek and obtain permission to use off-site locations for construction staging; such sites may include paved parking lots or equipment yards that are commonly used for such purposes.

Best Management Practices

During construction of the proposed project, Calleguas' construction contractor would implement best management practices (BMPs) in accordance with the project's specifications. BMPs for the proposed project are anticipated to include measures to prevent erosion, sediment transport, and runoff, and proper waste management. These types of measures are similar to the BMPs contained in a Stormwater Pollution Prevention Plan (SWPPP), when required for compliance with the National Pollutant Discharge Elimination System (NPDES) program. Construction of the proposed project would require less than 0.5 acre of ground disturbance, such that NPDES program compliance is not necessary. The project's BMPs for preventing erosion, sediment transport, and runoff, and proper waste management would include, but not be limited to, those listed below.

- **Erosion Controls** – minimize area of disturbance; provide temporary stabilization of disturbed surfaces; provide dust control; install final stabilization upon completion of active work
- **Sediment Controls** – use perimeter controls to prevent disturbed sediment from leaving the active work area; install stabilizing site entrance and conduct sweeping to prevent sediment from leaving the active work area
- **Runoff Controls** – divert runoff away from disturbed areas; prevent runoff from flowing over unprotected areas
- **Material and Waste Management Controls** – provide controls to prevent mobilization of construction materials; promptly clean up spills

In addition, BMPs for the proposed project are anticipated to include measures for the protection of land resources, protection of air quality, and noise control, which would also be specified by Calleguas in Calleguas' contractor specifications, for implementation as part of the project. These BMPs would include, but not be limited to, those listed below.

- **Protection of Land Resources** – temporarily disturbed areas would be restored to pre-project conditions; trees and shrubs would not be removed or cut without prior approval, and the trimming of specific oak trees required around the T.O. pump station would be coordinated with the City of Thousand Oaks' planning department; trees would be protected-in-place during construction activities, including those that would be trimmed to provide construction access
- **Protection of Air Quality** – dust control would be conducted during ground-disturbing activities using an approved method such as water application; no substantial ground-disturbing activities would be conducted during periods of high winds; on-site construction vehicles would not travel at speeds greater than 15 miles per hour; trucks transporting earth material to or from the project site would be covered and would maintain a minimum two-foot freeboard
- **Noise control** – implement noise abatement measures including the use of acoustical mufflers and engine shielding on construction equipment, limit the number and duration of equipment idling, direct noise away from residences, and maintain equipment in good condition without rattling or banging of parts; conduct immediate corrective action in the event that noise level limits are exceeded

The BMPs discussed above would be implemented as part of the proposed project.

Operation and Maintenance

Following implementation of the proposed improvements, operation and maintenance activities at Lindero Pump Station would continue, consistent with current operation and maintenance activities. As such, Lindero Pump Station would continue to be unstaffed and operated remotely via Calleguas' existing Supervisory Control and Data Acquisition (SCADA) system. The pump station would be visited periodically (typically at least weekly) by operations and maintenance personnel as needed to perform inspection and maintenance activities. Additionally, following construction of the project, Lindero Pump Station would operate at its design capacity, which is not currently possible due to hydraulic issues that would be addressed by the improvements included as part of the project. Operations would also have improved reliability due to the backup power generator that would allow for pump station operations to continue during utility power outages.

In addition, Calleguas has identified the following noise control goals for the project, to minimize or avoid potential impacts of noise on nearby sensitive land uses:

- Noise levels produced by the replacement pumps shall not exceed noise levels produced by the existing pumps.
- Noise produced by the new generator shall be limited to 60 dBA or less at the nearest residential use.

9. Surrounding Land Uses and Setting

Land uses surrounding the project site include open space to the east and south, and existing development to the west and north. The open space area is owned by the Conejo Recreation and Park District (CRPD) and managed by the Conejo Open Space Conservation Agency (COSCA), a joint

powers authority formed between the City of Thousand Oaks and the CRPD. The COSCA land is primarily characterized as undeveloped open space, although limited development has occurred to support recreational activities such as disc golf, bicycle motocross (BMX) on a designated track, a model airplane runway, and walking/hiking trails. To the north of the pump station are mixed uses, including a community park with a skateboarding area located at the southeast corner of East Avenida De Las Flores and Erbes Road, and a developed residential area immediately to the north of the park, within approximately 500 feet of the pump station. To the west of the pump station is Erbes Road, which is the primary access route to the pump station driveway.

Other land uses near Lindero Pump Station include Los Cerritos Middle School, which is located immediately to the west of the pump station, on the opposite (west) side of Erbes Road, as shown on Figure 1. A developed residential area is located immediately south of the middle school, approximately 800 feet (about 0.15 mile) to the southwest of the pump station. The pump station is set back from Erbes Road by approximately 550 feet, and this area contains existing trees and vegetation to the north and west of the pump station. This vegetation provides some visual screening between the pump station and visitors to the public park to the north, as well as motorists along Erbes Road, residents in areas to the north and west, and the school.

10. Other Public Agencies Whose Approval is Required

Calleguas Municipal Water District is the lead agency under CEQA with responsibility for approving the proposed project. No other public agencies have responsibility for discretionary approval of the project. The Ventura County Air Pollution Control District (APCD) is responsible for providing a Permit to Construct and a Permit to Operate for the proposed project's new diesel generator; this is a ministerial action.

11. Have California Native American Tribes Traditionally and Culturally Affiliated with the Project Area Requested Consultation Pursuant to Public Resources Code Section 21080.3.1?

Calleguas has not received any formal requests for consultation from any Native American tribes traditionally and culturally affiliated with the project area pursuant to Assembly Bill (AB) 52; however, Calleguas is providing courtesy notifications to such tribes. This includes distributing letters to tribes with known traditional and cultural affiliations with the project area to request review and input from the tribes on the proposed project.

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Environmental Factors Potentially Affected

This project would potentially affect the environmental factors checked below, involving at least one impact that is "Potentially Significant" or "Less than Significant with Mitigation Incorporated" as indicated by the checklist on the following pages.

☐	Aesthetics	☐	Agriculture and Forestry Resources	■	Air Quality
■	Biological Resources	■	Cultural Resources	☐	Energy
☐	Geology and Soils	☐	Greenhouse Gas Emissions	■	Hazards and Hazardous Materials
☐	Hydrology and Water Quality	☐	Land Use and Planning	☐	Mineral Resources
☐	Noise	☐	Population and Housing	☐	Public Services
☐	Recreation	☐	Transportation	■	Tribal Cultural Resources
☐	Utilities and Service Systems	☐	Wildfire	☐	Mandatory Findings of Significance

Determination

Based on this initial evaluation:

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

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

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

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

☐ I find that although the proposed project could have a significant effect on the environment, because all potential 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.

Signature	Date
Printed Name	Title

Environmental Checklist

1 Aesthetics

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Except as provided in Public Resources Code Section 21099, would the project:				
a. Have a substantial adverse effect on a scenic vista?	☐	☐	☐	■
b. Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	■
c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	■	☐
d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?	☐	☐	☐	■

a. Would the project have a substantial adverse effect on a scenic vista?

The project site is previously disturbed and developed with the existing Lindero Pump Station. It is located within an urbanized visual setting on Erbes Road, adjacent to open space and hillside terrain within the Sapwi Trails Community Park. Erbes Road is a locally designated scenic highway/corridor, as identified in the City of Thousand Oaks General Plan, Scenic Highways Element (City of Thousand Oaks 1974). In addition, the Conservation Element of the City's General Plan designates scenic vistas, which it defines as major ridgelines, hillside terrain greater than 25 percent slope, and prominent knolls, hills, and landforms (City of Thousand Oaks 2013). The Conservation Element indicates that features comprising scenic vistas are present in the vicinity of the project site, specifically in the hilltop portions of the adjacent Sapwi Trails Community Park (City of Thousand Oaks 2013). However, the project site is not characterized by scenic vistas and does not contain scenic vistas. Public views of the project site from Erbes Road are generally obstructed by vegetative screening. Neither the existing pump station nor the proposed improvements would obstruct views

of the hillsides surrounding the project site. The proposed project does not include activities that would result in adverse effects on scenic vistas. No impact would occur.

NO IMPACT

b. Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

As discussed above, Erbes Road is a locally designated scenic highway/corridor, as described in the City of Thousand Oaks General Plan Scenic Highways and Conservation Elements (City of Thousand Oaks 1974, 2013). However, Erbes Road is not a state scenic highway. There are no state scenic highways in the project area (California Department of Transportation [Caltrans] 2018). U.S. Highway 101, located approximately 2.5 miles south of the project site, is identified as eligible for the state scenic highway designation, but is not currently designated as such, and the site is not visible from that roadway (Caltrans 2018). Therefore, the proposed project would not damage scenic resources within a state scenic highway. No impact would occur.

NO IMPACT

c. Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from a publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

The project site is bounded to the east and south primarily by open space, and to the west and north primarily by urban development. For the purposes of this analysis, the project is considered to be located in a non-urbanized area. Public views of the project site are available from the trail system within Sapwi Trails Community Park, adjacent to the project site. Specifically, trails along the western border of Sapwi Trails Community Park are at a higher elevation than the project site, and there is little vegetative screening between the trails and the project site. Views of the project site from Erbes Road are generally obscured by vegetative screening.

The proposed project would implement necessary improvements and repairs of existing water supply infrastructure comprising the existing Lindero Pump Station and would not result in permanent adverse impacts to aesthetics. As discussed in Section 8, *Project Description*, the replacement pumps would be primarily underground; this represents the greatest change to the visual character of the site, as the existing pumps are currently situated above-ground. Visibility of this change is limited to portions of the higher-elevation trails within Sapwi Trails Community Park. Because the project would not change use of the site and would not introduce features that are inconsistent with the existing site development, the proposed project would not degrade the existing visual character of the site or the quality of public views surrounding the site.

During construction activities, the existing visual character of the project site would be temporarily affected by the staging and operation of construction equipment, which would be visible from the trails along the western border of Sapwi Trails Community Park, which sit at a higher elevation and overlook the project site. Construction activities would be partially obscured by vegetative screening along Erbes Road and between the project site and Sapwi Trails Community Park north of the project site. Construction-related impacts to the visual character or quality of public views of the sites and their surroundings would be temporary and limited to the project construction period. Upon completion of construction, construction equipment and materials would be removed from

the site and operation and maintenance of Lindero Pump Station would continue as under pre-project conditions. The project would not substantially alter the visual character or quality of the project site; however, due to potential visibility of the site from higher-elevation trails, and the temporary aesthetic impacts associated with the presence of construction vehicles, equipment, and activities, potential impacts would be less than significant and limited to the project's temporary construction period.

LESS THAN SIGNIFICANT IMPACT

d. Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

Construction would generally occur during the daytime hours and would generally not require the use of lighting. However, construction lighting may be required during the early morning hours in the late fall and early winter months. In this case, lights may be visible from surrounding roadways and residential and other land uses. The lighting would not face toward adjacent uses and would be directed down towards construction activities. Furthermore, if necessary, the use of nighttime construction lighting would be short-term and limited to the duration of temporary construction activities. Therefore, the proposed project would not create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the vicinity of the project site. No impact would occur.

NO IMPACT

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2 Agriculture and Forestry Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	■
b. Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	■
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))?	☐	☐	☐	■
d. Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	■
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	■

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

b. Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?

The project site is not zoned for agricultural use and is not located on or near land mapped as Prime Farmland, Unique Farmland, or Farmland of Statewide Importance under the California Department of Conservation's (CDOC) Farmland Mapping and Monitoring Program (CDOC 2016). Approximately 120 feet east of the project site is land designated as grazing land and approximately 150 feet east of the project site (30 feet east of grazing land) is land designated as farmland of local importance. As discussed in Initial Study Section 8, *Project Description*, project activities would occur within the

existing Lindero Pump Station site. The proposed project would not change the land uses on or near the project site and would not convert important farmland to non-agricultural use or conflict with existing zoning. No impact to agricultural resources would occur.

NO IMPACT

c. Would the project 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))?

d. Would the project result in the loss of forest land or conversion of forest land to non-forest use?

The project site and surrounding vicinity are not designated or zoned for forest land, timberland, or timberland zoned Timberland Production. The proposed project involves improvements and repairs to existing water infrastructure and would not change the land uses on the project site or facilitate off-site loss of forest land or conversion of forest land to non-forest use. Therefore, implementation of the proposed project would not convert any forest land to non-forest use, nor would it conflict with existing zoning for such lands. As such, no impact to forests or timberland would occur.

NO IMPACT

e. Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

As previously discussed under thresholds (a) through (d) above, the proposed project would not result in the conversion of farmland or forest land to non-agricultural or non-forest uses and no impact to agricultural or forestry resources would occur. The proposed project activities would be limited to the existing Lindero Pump Station site and would not result in other changes to the existing environment that could result in conversion of Farmland to non-agricultural use or forest land to non-forest use. No impact would occur.

NO IMPACT

3 Air Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☐	■
b. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?	☐	■	☐	☐
c. Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	■	☐
d. Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	■	☐

Overview of Air Pollution

The federal and State Clean Air Acts (CAA) mandate the control and reduction of certain air pollutants. Under these laws, the United States Environmental Protection Agency (USEPA) and the California Air Resources Board (CARB) have established the National Ambient Air Quality Standards (NAAQS) and the California Ambient Air Quality Standards (CAAQS) for "criteria pollutants" and other pollutants. Some pollutants are emitted directly from a source (e.g., vehicle tailpipe, an exhaust stack of a factory) into the atmosphere, including carbon monoxide (CO), volatile organic compounds (VOC)/reactive organic compounds (ROC),[1] nitrogen oxides (NO_X), particulate matter with diameters of ten microns or less (PM_{10}) and 2.5 microns or less ($PM_{2.5}$), sulfur dioxide, and lead. Other pollutants are created indirectly through chemical reactions in the atmosphere, such as ozone, which is created primarily by reactions between ROC and NO_X. Secondary pollutants include oxidants, ozone, and sulfate and nitrate particulates (smog).

Air pollutant emissions are generated primarily by stationary and mobile sources. Stationary sources can be divided into two major subcategories:

- Point sources occur at a specific location and are often identified by an exhaust vent or stack. Examples include boilers or combustion equipment that produce electricity or generate heat.
- Area sources are widely distributed and include residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, landfills, and some consumer products.

[1] CARB defines VOC and ROC similarly as, "any compound of carbon excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate," with the exception that VOC are compounds that participate in atmospheric photochemical reactions. For the purposes of this analysis, ROC and VOC are considered comparable in terms of mass emissions, and the term ROC is used in this IS-MND.

Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and can also be divided into two major subcategories:

- On-road sources that may be legally operated on roadways and highways.
- Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

Air pollutants can also be generated by the natural environment, such as high winds that suspend fine dust particles. The air quality in the South Central Coast Air Basin (SCCAB) is influenced by a wide range of emission sources, such as dense population centers, heavy vehicular traffic, industry, and weather. In addition, San Joaquin Valley Fever (Valley Fever), an infectious disease caused by the fungus *Coccidioides immitis*, is a disease of concern in the SCCAB. This disease is related to air pollution because infection is caused by inhalation of *Coccidioides immitis* spores that have become airborne when dry, dusty soil or dirt is disturbed by natural processes, such as wind or earthquakes, or by human-induced ground-disturbing activities, such as construction, farming, or other activities (VCAPCD 2003). In 2020, the total number of cases of Valley Fever reported in California was 7,867 with 197 cases reported in Ventura County (CDPH [California Department of Public Health] 2021).

Air Quality Standards and Attainment

The project is located in the SCCAB, which is under the jurisdiction of San Luis Obispo Air Pollution Control District, Santa Barbara County Air Pollution Control District, and Ventura County Air Pollution Control District (VCAPCD). The project site is located specifically in Ventura County, which is under the VCAPCD's jurisdiction. As the local air quality management agency, the VCAPCD is required to monitor air pollutant levels to ensure that the NAAQS and CAAQS are met and, if they are not met, to develop strategies to meet the standards. Depending on whether the standards are met or exceeded, the Ventura County portion of the SCCAB is classified as being in "attainment" or "nonattainment." In areas designated as non-attainment for one or more air pollutants, a cumulative air quality impact exists for those air pollutants and the human health impacts associated with these criteria pollutants, presented in Table 1, are already occurring in that area as part of the environmental baseline condition. Under state law, air districts are required to prepare a plan for air quality improvement for pollutants for which the district is in nonattainment. Ventura County is designated a nonattainment area for the ozone NAAQS and CAAQS and the PM_{10} CAAQS (CARB 2021a).

Table 1 Health Effects Associated with Non-Attainment Criteria Pollutants

Pollutant	Adverse Effects
Ozone	(1) Short-term exposures: (a) pulmonary function decrements and localized lung edema in humans and animals and (b) risk to public health implied by alterations in pulmonary morphology and host defense in animals; (2) long-term exposures: risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (3) vegetation damage; and (4) property damage.
Suspended particulate matter (PM_{10})	(1) Excess deaths from short-term and long-term exposures; (2) excess seasonal declines in pulmonary function, especially in children; (3) asthma exacerbation and possibly induction; (4) adverse birth outcomes including low birth weight; (5) increased infant mortality; (6) increased respiratory symptoms in children such as cough and bronchitis; and (7) increased hospitalization for both cardiovascular and respiratory disease (including asthma).

Source: USEPA 2021

Air Quality Management

Under State law, the VCAPCD is required to prepare a plan for air quality improvement for pollutants for which Ventura County is in nonattainment. The VCAPCD's 2016 Air Quality Management Plan (AQMP) is an update of the previous 2007 AQMP. The 2016 AQMP, adopted on February 14, 2017, incorporates new scientific data and notable regulatory actions that have occurred since adoption of the 2007 AQMP, including the approval of the new federal eight-hour ozone standard of 0.070 parts per million (ppm) that was finalized in 2015. The 2016 AQMP builds upon the approaches taken in the 2007 AQMP and includes attainment and reasonable further progress demonstrations of the new federal eight-hour ozone standard (VCAPCD 2017). Currently, the VCAPCD is developing a new 2022 AQMP to attain the 2015 federal 8-hour ozone standard and will submit the AQMP to the USEPA for approval in August 2022 (VCAPCD 2022).

Air Pollutant Emission Thresholds

The analysis presented in this section is based upon guidance found in the *Ventura County Air Quality Assessment Guidelines* (Guidelines), adopted by the VCAPCD in 2003. The VCAPCD's Guidelines recommend specific air emission criteria and threshold levels for determining whether a project may have a significant adverse impact on air quality within Ventura County. The project would have a significant impact if operational emissions exceed 25 pounds per day (lbs/day) of ROC or 25 lbs/day of NO_X. The 25 lbs/day thresholds for ROC and NO_X are not intended to be applied to construction emissions because such emissions are temporary. Nevertheless, the VCAPCD's Guidelines state that construction-related emissions should be mitigated if estimates of ROC or NO_X emissions from heavy-duty construction equipment exceed 25 lbs/day for either ROC or NO_X.

The VCAPCD has not established quantitative thresholds for particulate matter for either construction or operation. However, the VCAPCD indicates that a project that may generate fugitive dust emissions in such quantities as to cause injury, detriment, nuisance, or annoyance to any considerable number of persons, or which may endanger the comfort, repose, health, or safety of any such person, or which may cause or have a natural tendency to cause injury or damage to business or property, would have a significant air quality impact. This threshold applies to the generation of fugitive dust during construction grading and excavation activities. The VCAPCD Guidelines recommend application of fugitive dust mitigation measures for all dust-generating activities. Such measures include minimizing the project disturbance area, watering the site prior to commencement of ground-disturbing activities, covering all truck loads, and limiting on-site vehicle speeds to 15 miles per hour or less.

The VCAPCD has not established quantitative thresholds for CO for either construction or operation. However, the VCAPCD states a CO hotspot screening analysis should be conducted for any project with indirect CO emissions greater than the applicable ozone project significance thresholds (i.e., 25 lbs/day) that may significantly impact roadway intersections currently operating at, or that are expected to operate at, Level of Service (LOS) E or F. A CO hotspot screening analysis should also be conducted for any project-impacted roadway intersection at which a CO hotspot might occur (VCAPCD 2003). If project emissions do not meet these criteria, then the project would have a less than significant impact related to CO hotspots. However, if project emissions exceed these criteria and the screening analysis demonstrates there may be a CO hotspot, the VCAPCD recommends use of the CALINE4 model to determine whether the project would create or contribute to an existing CO hotspot.

The VCAPCD recommends the use of the following significance threshold for toxic air containments (TAC) (VCAPCD 2003):

- Lifetime probability of contracting cancer is greater than 10 in one million
- Ground-level concentrations of non-carcinogenic toxic air pollutants would result in a Hazard Index of greater than 1

The VCAPCD has not established a significance threshold for impacts related to Valley Fever. However, the VCAPCD recommends consideration of the following factors that may indicate a project's potential to result in impacts related to Valley Fever:

- Disturbance of the topsoil of undeveloped land (to a depth of about 12 inches)
- Dry, alkaline, sandy soils
- Virgin, undisturbed, non-urban areas
- Windy areas
- Archaeological resources probable or known to exist in the area (e.g., Native American midden sites)
- Special events (fairs, concerts) and motorized activities (motocross track, All-Terrain Vehicle activities) on unvegetated soil (non-grass)
- Non-native population (i.e., out-of-area construction workers)

Applicable VCAPCD Rules and Regulations

The VCAPCD implements rules and regulations for emissions that may be generated by various uses and activities. The rules and regulations detail pollution-reduction measures that must be implemented during project activities in Ventura County. Relevant rules and regulations to the project include:

- **Rule 50 (Opacity).** This rule sets opacity standards on the discharge from sources of air contaminants. This rule would apply during construction of the project.
- **Rule 51 (Nuisance).** This rule prohibits any person from discharging air contaminants or any other material from a source that would cause injury, detriment, nuisance, or annoyance to any considerable number of persons or the public or which endangers the comfort, health, safety, or repose to any considerable number of persons or the public.
- **Rule 55 (Fugitive Dust).** This rule requires fugitive dust generators, including construction and demolition projects, to implement control measures limiting the amount of dust from vehicle track-out, earth moving, bulk material handling, and truck hauling activities.[2]
- **Rule 55.1 (Paved Roads and Public Unpaved Roads).** This rule requires fugitive dust generators to begin the removal of visible roadway accumulation within 72 hours of any written notification from the VCAPCD. The use of blowers is expressly prohibited under any circumstances. This rule also requires controls to limit the amount of dust from any construction activity or any earthmoving activity on a public unpaved road.
- **Rule 55.2 (Street Sweeping Equipment).** This rule requires the use of PM_{10} efficient street sweepers for routine street sweeping and for removing vehicle track-out pursuant to Rule 55.

[2] The emission estimates of particulate matter PM_{10} and $PM_{2.5}$ reflect application of water to exposed soils twice daily to reduce dust emissions during grading activities, which would be required for compliance with Rule 55.

Methodology

Air pollutant emissions from the project were estimated using the California Emissions Estimator Model (CalEEMod), version 2020.4.0. CalEEMod uses project-specific information, including acreage and location, to model a project's construction and operational emissions. The analysis reflects the construction and operation of the project as described under *Project Description*.

Construction

Emissions modeled for project activities include emissions generated by heavy-duty equipment used on-site and emissions generated by vehicle trips associated with project activities, such as worker and vendor trips. CalEEMod estimates emissions by multiplying the amount of time equipment is in operation by emission factors. Project activities were analyzed based on the schedule and equipment list provided by Calleguas. Project activities would include demolition, site preparation, grading, building construction/infrastructure installation, paving, and architectural coating. During construction, approximately 1,000 cubic yards of soil would be exported from the site and 1,000 cubic yards of soil material would be imported to the site. In addition, during demolition, approximately 4,340 square feet of building and pump infrastructure would be removed based on size calculations using Google Earth. It is assumed all heavy-duty equipment used would be diesel-powered. This analysis assumes the project would comply with all applicable regulatory standards. In particular, the project would comply with VCAPCD Rules 50, 51, 55, 55.1, and 55.2.

Operation

As discussed in Section 8, *Project Description*, no expansion of existing operation and maintenance activities would occur under the proposed project and daily operations would remain the same as existing conditions. However, the project would include a new backup generator for emergency purposes. The generator would be a 3,230-kilowatt diesel generator powered by a 4,332-horsepower engine. For testing and maintenance purposes, the generator would be operated for a maximum of 20 hours per year pursuant with the assumption used in the Health Risk Assessment (HRA) prepared by Kennedy Jenks Consultants on June 11, 2021. Based on this testing and maintenance schedule, the daily hourly usage was derived by dividing the maximum 20 hours by 365 days to get a rate of 0.054 hour per day. This is a conservative approach because the emergency generator would never be tested on a daily basis but instead be tested periodically every other week. The HRA computed the cancer and non-cancer (chronic and acute risk) health risk impacts upon nearby sensitive receptors from testing of the diesel backup generator. Refer to Appendix A for the detailed methodology used in the HRA prepared by Kennedy Jenks Consultants.

a. Would the project conflict with or obstruct implementation of the applicable air quality plan?

According to the VCAPCD's Guidelines, a project may be inconsistent with the applicable air quality plan if it would cause the existing population to exceed forecasts contained in the most recently adopted AQMP. The VCAPCD adopted the *2016 Ventura County AQMP* to demonstrate a strategy for, and reasonable progress toward, attainment of the eight-hour ozone NAAQS (VCAPCD 2017). The project does not include the construction of residences and it would not increase the number of Calleguas employees needed for operation and maintenance of the facility. Therefore, the project would neither increase the existing population nor exceed the regional population growth forecasted in the *2016 Ventura County AQMP*, which underlies the AQMP's air pollutant emissions forecasts. As a result, the project would not conflict with or obstruct implementation of the AQMP and no impact would occur.

NO IMPACT

b. Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard?

Ventura County is designated nonattainment for the NAAQS for ozone and the CAAQS for ozone and PM_{10}. Construction would periodically generate temporary air pollutant emissions associated with fugitive dust (PM_{10} and $PM_{2.5}$) and exhaust emissions from heavy-duty equipment and construction vehicles. Table 2 summarizes the estimated maximum daily emissions of pollutants during project activities. Air pollutant emissions generated by construction would only occur for a short period of time (11 months); therefore, project construction emissions are compared to VCPACD thresholds for construction emissions. As noted earlier under *Air Pollutant Emission Thresholds*, the VCAPCD's 25 lbs/day thresholds for ROC and NO_X do not apply to construction emissions because such emissions are temporary. Therefore, the project's air quality impacts would be less than significant. However, the VCAPCD recommends mitigation if ROC or NO_X emissions exceed 25 lbs/day during construction activities. As shown in Table 2, ROC and NO_X emissions generated during project construction would not exceed 25 lbs/day. Impacts from construction activities would be less than significant.

Table 2 Estimated Maximum Daily Construction Emissions

Construction Year	ROC	NO_x	CO	SO_2	PM_{10}	$PM_{2.5}$
Maximum Construction Emissions (lbs/day)	6	21	24	<1	1	1

lbs/day = pounds per day; ROC = reactive organic compounds, NO_X = nitrogen oxides, CO = carbon monoxide, SO_2 = sulfur dioxide, PM_{10} = particulate matter 10 microns or less in diameter, $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

Notes: All emissions modeling was completed using CalEEMod; see Appendix B. Emission data reflects the CalEEMod "mitigated" results, which account for compliance with regulations (including VCAPCD Rule 55). Emissions presented are the highest modeled.

Operation of the project would generate criteria air pollutant emissions associated with area sources (e.g., architectural coatings, consumer products, and landscaping equipment) and stationary sources (e.g., backup generator). Operation of the project would not generate new daily trips. The proposed project would allow Lindero Pump Station to operate at its design capacity, and with the improved-efficiency pumps, energy consumption would not increase compared to existing conditions. Table 3 summarizes the operational emissions from the project; as shown, ROC and NO_x emissions do not exceed 25 lbs/day. Impacts from operation of the project would be less than significant.

Table 3 Estimated Maximum Daily Operational Emissions

	Maximum Daily Emissions (lbs/day)					
Emission Sources	**ROC***	**NO_X***	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Area	<1	0	<1	0	0	0
Stationary	<1	2	1	<1	<1	<1
Total	<1	2	1	<1	<1	<1
VCAPCD Threshold	25	25	N/A	N/A	N/A	N/A
Threshold Exceeded	No	No	N/A	N/A	N/A	N/A

lbs/day = pounds per day; ROC = reactive organic compounds, NO_X = nitrogen oxides, CO = carbon monoxide, SO_2 = sulfur dioxide, PM_{10} = particulate matter 10 microns or less in diameter, $PM_{2.5}$ = particulate matter 2.5 microns or less in diameter

Notes: All emissions modeling was completed made using CalEEMod. See Appendix B for modeling results. Some numbers may not add up due to rounding. Emissions presented are the highest of the winter and summer modeled emissions.
* Ozone is a secondary criteria pollutant that is the result of a photochemical reaction with ROC and NOx. The latter two pollutants are precursor pollutants that lead to the creation of ozone. This is why VCAPCD is concerned with both these pollutants.

LESS THAN SIGNIFICANT IMPACT

c. Would the project expose sensitive receptors to substantial pollutant concentrations?

Certain population groups, such as children, the elderly, and people with health problems, are particularly sensitive to air pollution. Therefore, the majority of sensitive receptor locations are schools, hospitals, and residences (VCAPCD 2003). The closest sensitive receptor is Los Cerritos Middle School located approximately 340 feet west of the site.

Fugitive Dust

The VCAPCD requires implementation of the fugitive dust control measures described in Rules 55, 55.1, and 55.2 as part of all project-related dust-generating operations and activities (VCAPCD 2003). These measures address both PM_{10} and $PM_{2.5}$ emissions from construction activities. The project would be required to implement these fugitive dust control measures; therefore, project construction would not expose sensitive receptors to substantial pollutant concentrations and impacts would be less than significant.

Carbon Monoxide Hotspots

A carbon monoxide hotspot is a localized concentration of carbon monoxide that is above the NAAQS and CAAQS for carbon monoxide. Localized carbon monoxide hotspots can occur at intersections with heavy peak hour traffic. No carbon monoxide hotspots would occur as a result of the project because, as with existing conditions, Lindero Pump Station would be primarily operated remotely. Periodic visits would occur for maintenance purposes consistent with existing conditions, but the project would not generate new daily trips. Therefore, the proposed project would not expose sensitive receptors to substantial CO concentrations. No impact would occur.

Toxic Air Contaminants

Construction

Construction-related activities would result in temporary project-generated emissions of diesel particulate matter (DPM) exhaust emissions from off-road, heavy-duty diesel equipment for site preparation, grading, building construction, and other construction activities. DPM was identified as

a TAC by CARB in 1998. The potential cancer risk from the inhalation of DPM (discussed in the following paragraphs) outweighs the potential non-cancer health impacts (CARB 2021b) and is therefore the focus of this analysis.

Generation of DPM from construction projects typically occurs in a single area for a short period. Construction of the proposed project would occur over approximately 11 months. The dose to which the receptors are exposed is the primary factor used to determine health risk. Dose is a function of the concentration of a substance or substances in the environment and the extent of exposure that person has to the substance. Dose is positively correlated with time, meaning that a longer exposure period would result in a higher exposure level for the Maximally Exposed Individual. The risks estimated for a Maximally Exposed Individual are higher if a fixed exposure occurs over a longer period of time. According to the California Office of Environmental Health Hazard Assessment, health risk assessments, which determine the exposure of sensitive receptors to toxic emissions, should be based on a 30-year or 70-year exposure period; however, such assessments should be limited to the period/duration of activities associated with the project. Thus, the duration of proposed construction activities (11 months) is approximately three percent of the total exposure period used for 30-year health risk calculations. Current models and methodologies for conducting health-risk assessments are associated with longer-term exposure periods of 9, 30, and 70 years, which do not correlate well with the temporary and highly variable nature of construction activities, resulting in difficulties in producing accurate estimates of health risk (Bay Area Air Quality Management District 2017).

The maximum exhaust PM_{10} and $PM_{2.5}$ emissions, which are used as surrogates for DPM, would occur during site preparation and the installation of replacement infrastructure including pumps. These activities would last for approximately 150 days. PM emissions would decrease for the remaining construction period as construction activities such as building construction and architectural coating would require less intensive construction equipment. While the maximum DPM emissions associated with demolition, site preparation, and grading activities would only occur for a portion of the overall construction period, these activities represent the worst-case condition for the total construction period. This would represent less than two percent of the total 30-year exposure period for health risk calculation. Given the aforementioned discussion, DPM generated by project construction would not create conditions where the probability is greater than one in one million of contracting cancer for the Maximally Exposed Individual or to generate ground-level concentrations of non-carcinogenic TACs that exceed a Hazard Index greater than one for the Maximally Exposed Individual. Therefore, project construction would not expose sensitive receptors to substantial TAC concentrations and impacts would be less than significant.

Operation

An HRA for the proposed backup diesel generator was prepared by Kennedy Jenks Consultants on June 11, 2021. The HRA analyzed the DPM emissions that could be released during testing and maintenance activities for the backup generator. The USEPA AERMOD dispersion model was used to compute the concentration (micrograms per cubic meter) of DPM and the CARB Hotspots Analysis Report Program Version 2 (HARP2) Risk Assessment Standalone Tool (RAST) was used to calculate the cancer and non-cancer (i.e., acute and chronic hazards) risk values. It was assumed that the generator would not operate more than 20 hours per year for testing and maintenance purposes. Refer to Appendix A for the full methodology details.

Based on the results of the HRA, the maximum cancer risk would be 1.7 in one million at the point of maximum impact and 0.4 in one million at the Los Cerritos Middle School property. The hazard

index level at both locations would be less than 0.1. These cancer risk and hazard index values do not exceed the VCAPCD thresholds of 10 in one million for cancer risk and greater than 1 for the hazard index. Therefore, the backup generator would not expose sensitive receptors to substantial TAC concentrations during operation, and impacts would be less than significant.

San Joaquin Valley Fever

Project ground-disturbing activities would have the potential to release *Coccidioides immitis* spores. However, the population of Ventura County has been and would continue to be exposed to Valley Fever from agricultural and ground-disturbing activities, such as construction, occurring throughout the region. In addition, substantial increases in the number of reported cases of Valley Fever tend to occur only after major ground-disturbing events such as the 1994 Northridge earthquake (VCAPCD 2003). Construction of the project would not result in comparable major ground disturbance during the earthwork phase and compliance with VCAPCD Rule 55 (Fugitive Dust) and implementation of construction BMPs outlined in Section 2, *Project Description*, would limit the number of spores released during ground disturbance. The project would not involve grading of previously undisturbed soils. In addition, the project does not include special events (such as fairs or concerts) or motorized activities that would result in substantial ground disturbance during operation. Therefore, per VCAPCD guidance, project activities would not result in a substantial increase in entrained fungal spores that cause Valley Fever above existing background levels and impacts related to Valley Fever would be less than significant.

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d. Would the project result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

Based on the VCAPCD Guidelines (2003), a project may have a significant impact if it would generate an objectionable odor to a degree that would cause injury, detriment, nuisance, or annoyance to a considerable number of persons or to the public, or which would endanger the comfort, repose, health, or safety of any such persons or the public, or which would cause, or have a natural tendency to cause, injury or damage to business or property. During project construction activities, heavy equipment and vehicles would emit odors associated with vehicle and engine exhaust and during idling. However, these odors would be intermittent and temporary and would cease upon completion. In addition, the backup generator would emit diesel odors during maintenance and testing, but these odors would also be temporary, and the backup generator would not emit continuous diesel exhaust emissions unless operating when utility power is lost. Overall, project activities would not generate other emissions, such as those leading to odors, affecting a substantial number of people. Impacts related to emission leading to odors would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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4 Biological Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	■	☐	☐
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?	☐	■	☐	☐
c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	■	☐	☐
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?	☐	☐	■	☐
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	■	☐	☐
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?	☐	☐	☐	■

Lindero Pump Station is located along Erbes Road in the eastern portion of Thousand Oaks, north of the Santa Monica Mountain Range. The project site is bordered by protected open space to the east

and south and residential development to the north. Los Cerritos Middle School is located west of the project site along Erbes Road. The project site is developed and elevation on site ranges from approximately 906 to 1,000 feet above mean sea level. Based on the United States Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) Web Soil Survey (WSS), soils within the project site include a Gilroy-Topdeck-Cropley-Hambright complex consisting of shallow to very deep moderately well to well-drained soils formed in material weathered from basic igneous and metamorphic rocks; colluvium and residuum from basalt; breccia and andesite and alluvium from mixed rock sources (NRCS 2021). The nearest water source is Lang Creek within the Arroyo Conejo watershed, located near the western and northern boundary of the project site.

The project site is developed as the existing Lindero Pump Station and contains no vegetation. A dirt access road surrounds the perimeter of the pump station on the west, north, and east sides, and a CRPD maintenance yard is adjacent to the south. A compacted dirt area west of the pump station would be used for staging materials during construction. Vegetation on adjacent properties consists of ornamental species and manicured grass at Los Cerritos Middle School and Sapwi Trails Community Park. Vegetation east of the project site consists of ruderal (weedy) habitat. Mature trees are present to the north and west of the project site and include coast live oak (*Quercus agrifolia*), California sycamore (*Platanus racemosa*), valley oak (*Quercus lobata*), western redbud (*Cercis occidentalis*), Fremont cottonwood (*Populus fremontii*), coast redwood (*Sequoia sempervirens*), white alder (*Alnus rhombifolia*), and arroyo willow (*Salix lasiolepis*). A single coast live oak tree is adjacent to the northern wall of the project site. The remaining trees are associated with Lang Creek, which is outside of the project site. Figure 4 and Figure 5 provide an overview of vegetation communities, land cover types and probable jurisdictional waters within the study area.

Methodology

Rincon Consultants, Inc. conducted a field reconnaissance survey at Lindero Pump Station on June 24, 2021, to evaluate the existing conditions for biological resources. The study area encompassed the project site, defined hereafter as the proposed construction footprint, staging, and parking areas within the developed/disturbed portion of the pump station facility, and a 500-foot survey buffer beyond the limits of the project site. In addition to the reconnaissance survey, the evaluation of biological resources that informs this analysis included a literature review and documentation of existing site conditions, including the potential presence of special-status plant and wildlife species, sensitive plant communities, jurisdictional waters and wetlands, and habitat for nesting birds. Plant communities are shown on Figure 4 and the approximate alignment of Lang Creek with respect to the project site is shown on Figure 5.

Queries of the United States Fish and Wildlife Service (USFWS) *Information for Planning and Consultation System* (USFWS 2021a), USFWS Critical Habitat Portal (USFWS 2021b), and California Department of Fish and Wildlife (CDFW) *California Natural Diversity Database* (CNDDB) (CDFW 2021) were conducted within a five-mile radius of the study area. The queries provided comprehensive information regarding state and federally listed species, as well as other special status species, considered to have potential to occur within the study area. In addition, other resources that were reviewed for information about the study area included aerial photographs of the study area and vicinity, the Natural Resources Conservation Service (NRCS) *Web Soil Survey* (NRCS 2021), and the USFWS *National Wetlands Inventory* (USFWS 2021c). The findings of the assessment are considered in the impact analysis below.

Figure 4 Vegetation Types at Lindero Pump Station

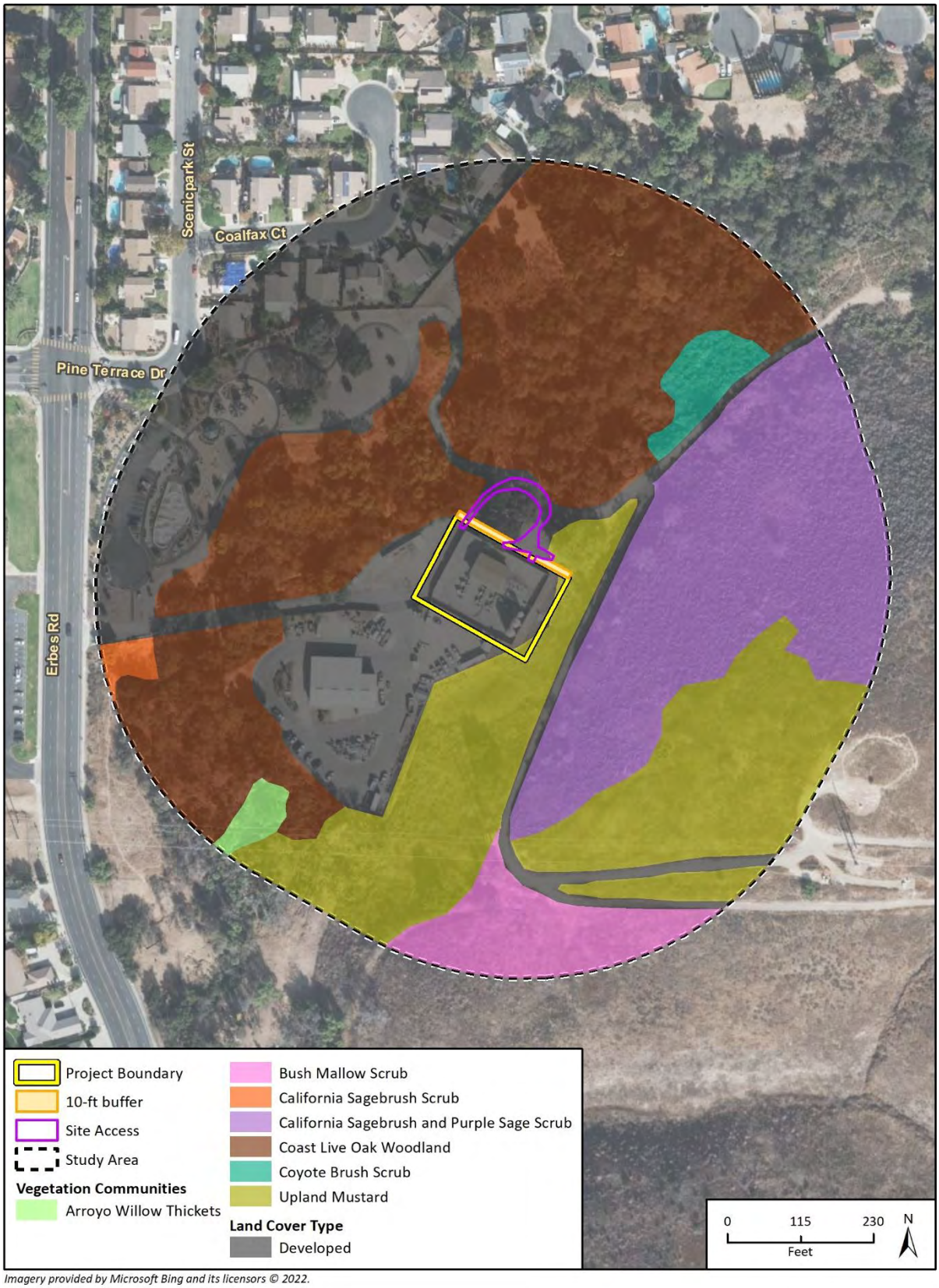

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Figure 5 Proximity of Lang Creek to Lindero Pump Station

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

Special-Status Plants

Special-status plants either have unique biological significance, limited distribution, restricted habitat requirements, particular susceptibility to human disturbance, or a combination of these factors. For the purpose of this analysis, special-status plants include: plants listed, proposed for listing, or candidates for listing as Threatened or Endangered by the USFWS under the federal Endangered Species Act (FESA); plants listed or proposed for listing as Rare, Threatened, or Endangered by the CDFW under the California Endangered Species Act (CESA); and plants on the California Native Plant Society (CNPS) *Inventory of Rare and Endangered Vascular Plants* with a California Rare Plant Rank (CRPR) of 1A (plants presumed extirpated in California and either rare or extinct elsewhere), 1B (plants considered to be rare, threatened, or endangered species in California and elsewhere), 2A (plants presumed extirpated in California, but more common elsewhere), and 2B (plants considered rare, threatened, or endangered in California, but more common elsewhere).

Plants with a CRPR of 4 are not rare, but rather are included on a "watch list" of species with limited distribution. While plants in this category cannot be called "rare" from a statewide perspective, and very few, if any, are eligible for state listing, many of them are significant locally. For this reason, CNPS strongly recommends that CRPR 4 plants be evaluated during preparation of environmental documents, and that factors to consider when evaluating CRPR 4 plants include: the characteristics of the location where the CRPR 4 plant is found; populations located at the periphery of a species' range; areas where the taxon is especially uncommon; areas where the taxon has sustained heavy losses; and populations that exhibit unusual morphology or occur on unusual substrates.

Based upon a review of the resources and databases listed above, 61 special-status plants have been documented within a five-mile radius of the study area. The analysis of the potential for occurrence of special-status plants is presented in Appendix C, including growth form, blooming period, protection status, primary habitat associations, and an evaluation of their potential for occurrence in the study area. The evaluation considers the potential for occurrence within the study area, i.e., within the development footprint and 500-foot buffer.

In total, 32 special-status plants have the potential to occur within the study area (of the aforementioned 61 species documented within a five-mile radius of the study area). However, most are precluded from occurring on the project site and adjacent areas due to lack of suitable habitat, and/or because the site is outside of the known range of the species. Other conspicuous special-status plants, including shrubs and perennial herbs, were not found during the survey. Based on the field reconnaissance and the built-up nature of the project site, no special-status plants are anticipated to occur within the project site. Southern California black walnut (*Juglans californica*) [CRPR 4.2] was documented within the study area; however, this species is not considered special status under CEQA. Further, no federally designated Critical Habitat occurs within or adjacent to the study area.

Due to the limited habitat within the project site and low potential for special status plants to occur, the number of individuals affected by the project would be low, if any, and would not result in population-level effects on these species. Indirect impacts to special-status plants potentially occurring outside of the project site could occur as a result of temporary construction-related dust or runoff; however, the potential for such effects to impact plants would be minimal. In addition,

Mitigation Measures BIO-1 through BIO-3, as presented under "Mitigation Measures" and discussed further below, are recommended to minimize or avoid potential impacts to special-status plants.

Special-Status Wildlife

For the purposes of this analysis, special-status wildlife are those species that are listed, proposed for listing, or that meet the criteria for listing as endangered or threatened under the FESA or CESA; and those that are listed on the CDFW Special Animals list with a designation of California Species of Special Concern (SSC), Watch List (WL), or California Fully Protected (CFP). As described below, vegetation surrounding the pump station site and associated workspaces, staging, and parking areas has the potential to support special-status wildlife species; however, no special-status wildlife are anticipated to occur within the project site.

Based upon a review of the resources and databases listed above, 15 special-status wildlife species were determined to have potential to occur within the study area based upon known ranges, habitat preferences for the species, and species occurrence records from CNDDB. As described in Appendix C, five special-status reptiles, three special-status birds, and two special-status mammals have a moderate or high potential to occur in the study area. Reptiles include California legless lizard (*Anniella* spp.) [SSC], southern California legless lizard (*Anniella stebbinsi*) [SSC], coastal whiptail (*Aspidoscelis tigris stejnegeri*) [SSC], western pond turtle (*Emys marmorata*) [SSC], and two-striped gartersnake (*Thamnophis hammondii*) [SSC]. Birds that may forage or nest in the study area include southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*) [WL], coastal California gnatcatcher (*Polioptila californica californica*) [FT] and least Bell's vireo (*Vireo bellii pusillus*) [FE/SE]. The reptiles and birds are associated with Lang Creek and coastal sage scrub, arroyo willow thickets, and coast live oak woodland communities that surround the project site. Pallid bat (*Antrozous pallidus*) and western small-footed myotis (*Myotis ciliolabrum*) have a moderate potential to forage within the study area but marginally suitable roosting habitat for these species (rocky or vegetated drainages with limited or no riparian vegetation) is only present within the 500-foot study area outside of the project site. These species have potential to occur as transients in the area but are not expected to be impacted by the project.

In addition, the study area contains habitat capable of supporting non-listed nesting birds, including raptors, protected under the California Fish and Game Code (CFGC) and the federal Migratory Bird Treaty Act (MBTA). The native, non-native, and ornamental vegetation throughout the study area provides suitable nesting habitat for avian species. Specifically, the mature coast live oak and valley oak trees throughout the study area provide suitable habitat for raptor species and passerines while the coastal sage scrub community provides suitable habitat for many passerine species. As discussed in the Project Description above, in preparation for project construction, oak tree trimming would occur along the site access shown in Figure 4 and Figure 5, to provide adequate clearance for construction vehicles and equipment while avoiding damage to the existing trees. Potentially significant direct impacts to raptors and other nesting birds may result if construction occurs while they are present within or adjacent to the project footprint, through direct mortality or abandonment of nests. Though impacts to common avian species do not rise to the level of significance under CEQA, the destruction of nests during construction activities would be a violation of the MBTA and CFGC Section 3503 and therefore must be avoided. Implementation of Mitigation Measure BIO-3 would maintain compliance with these federal and state laws.

Excavation and grading for the project would occur in previously disturbed areas that have been compacted by existing development and covered by impermeable surfacing. Bare soil and sparse vegetation cover associated with the developed project site do not provide suitable habitat for

special-status wildlife. However, some woodland and scrub habitat adjacent to the developed/disturbed project site is potentially suitable for these species. Direct impacts including injury or mortality could occur during temporary staging and parking activities, if such activities occur in areas where leaf litter and loose soils could accommodate special-status wildlife such as legless lizards or coastal whiptail.

Additionally, impacts from construction-related activities (e.g., equipment generated noise and dust and the presence of construction personnel) could indirectly impact special-status birds potentially present within woodland and scrub habitat adjacent to the project. However, given the proximity of the project site to surrounding development and existing disturbances from the current pump station facility, CRPD maintenance yard, Erbes Road, private residences, and Sapwi Trails Park, and the fact that the project would be implemented within existing developed areas, the level of disturbance from the project is not likely to be substantially greater than that which is currently present. Therefore, indirect impacts to special-status birds have a low potential to occur. To minimize or avoid the potential for impacts to special-status wildlife, Mitigation Measures BIO-1 through BIO-4 are recommended, as presented in full under "Mitigation Measures" below.

Mitigation Measures

BIO-1 Biological and Environmental Awareness Training (BEAT) Program

Prior to initiation of construction activities (including staging and mobilization), all personnel associated with project construction shall attend a BEAT Program sensitivity training conducted by a qualified biologist, to assist workers in recognizing special-status biological resources which may occur in the study area. The specifics of the BEAT Program shall include information about nesting birds and identification of special-status species and habitats at the project site, a description of the regulatory status and general ecological characteristics of special-status resources, and review of the limits of construction and measures required to avoid and minimize impacts to biological resources within the work area. The BEAT Program shall provide specific training on construction BMPs required under Mitigation Measure BIO-2, *Construction BMPs for Biological Resources*, presented below. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employees, and other personnel involved with construction of the project.

All employees shall sign a form provided by the trainer documenting they have attended the BEAT Program sensitivity training and understand the information presented to them. If new construction personnel are added to the project, the contractor shall confirm the new personnel receive the BEAT Program sensitivity training before starting work. The subsequent training of personnel can include a video recording of the initial training and/or the use of written materials rather than in-person training by a biologist.

The BEAT Program sensitivity training may be provided jointly with the Cultural and Archeological Resources Education (CARE) Program required under Mitigation Measure CUL-1. If provided as a joint BEAT/CARE sensitivity training session, all requirements of both programs, as defined under Mitigation Measures BIO-1 and CUL-2, will be explicitly addressed.

BIO-2 Construction BMPs for Biological Resources

To avoid and/or minimize potential direct and indirect impacts to special-status species, sensitive vegetation, and potentially jurisdictional waters and water quality outside of the project site, the following BMPs shall be implemented:

a. Prior to project mobilization, all limits of construction work shall be clearly delineated with orange construction fencing or similar highly visible material and maintained throughout the duration of construction.
b. No native vegetation with a diameter at breast height (DBH) of more than four (4) inches shall be removed or damaged without approval by Calleguas.
c. Staging and parking areas shall be limited to sites which are unvegetated and/or previously disturbed areas comprising ruderal vegetation or non-native annual grasslands, ornamental landscaping, and paved/graded areas, to the extent practicable.
d. Materials and equipment (when not in use) shall be stored on impervious surfaces or plastic ground covers to prevent spills or leakage.
e. Adequate spill prevention and response equipment shall be maintained on site and readily available to implement to minimize impacts to the aquatic environment.
f. Construction materials and spoils shall be protected from stormwater runoff using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate.
g. Off-site tracking of loose construction materials and soil shall be prevented by implementing street sweeping, vacuuming, and rumble plates, as appropriate.
h. All vehicles and equipment shall be in good working condition and free of leaks. When vehicles or equipment are stationary, mats or drip pans shall be placed below vehicles to contain fluid leaks. The contractor shall prevent oil, petroleum products, or any other pollutants from contaminating the soil or entering a watercourse (dry or otherwise).
i. Fugitive dust from ground disturbance activities shall be minimized using water trucks and covering of soil stockpiles.
j. A speed limit of 15 mph for construction vehicles shall be implemented on unpaved roads.
k. All food related trash shall be disposed of in closed containers and removed from the project site each day during the construction period. Construction personnel shall not feed or otherwise attract wildlife to the construction area. At project completion, all project-generated debris, vehicles, building materials, and rubbish shall be removed from the project site.

BIO-3 Pre-Construction Nesting Bird Surveys

To avoid disturbance of nesting and special-status birds protected by the MBTA and CFGC, including raptors, project construction activities such as vegetation removal, ground disturbance, and construction and demolition shall occur outside of the bird breeding season (February 1 through August 31) to the extent feasible. If project construction activities commence during the breeding season for migratory birds (February 1 through August 31), a pre-construction nesting bird survey shall be conducted no more than seven days prior to initiation of ground disturbance and vegetation removal activities. The nesting bird pre-construction survey shall be conducted on foot inside the project footprint, including a 100-foot buffer (300 feet for raptors). The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California coastal communities. If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and directed to avoid entering the buffer zone while the nest remains active. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed

breeding/nesting is completed and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist, and any encroachment will be monitored by the biologist for the duration of the activities within the buffer.

If active nests of federally or state-listed species (e.g., least Bell's vireo, coastal California gnatcatcher) are detected during the survey, a 500-foot avoidance buffer from the nest shall be established and demarcated by the biologist with flagging, construction lathe, or other means to mark the boundary. If the 500-foot avoidance buffer is infeasible, then Calleguas' contractor(s) shall implement noise reduction measures, such as mufflers and temporary sound walls, that reduce construction noise levels to at or below 60 dBA L_{eq} at the nest site. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed breeding/nesting is completed and the young have fledged the nest, or noise levels remain at or below 60 dBA L_{eq} at the nest site. Encroachment into the buffer shall occur only at the discretion of the qualified biologist, and any encroachment shall be monitored by the biologist for the duration of the activities within the buffer.

BIO-4 Pre-Construction Presence/Absence Survey for Special-Status Species

Within seven days prior to the commencement of ground disturbing activities, a qualified biologist shall be retained to perform a survey for California legless lizard, southern California legless lizard, coastal whiptail, western pond turtle, and two-striped gartersnake in natural habitat areas within the project footprint and a 50-foot buffer to determine the presence/absence of these species. Raking shall be conducted in areas of sandy, loose, and moist soils under sparse vegetation/leaf litter to determine the presence/absence of special-status reptiles. The qualified biologist shall relocate any identified special-status species to suitable habitat outside of the construction area. Construction shall not proceed until the work area is determined to be free of special-status species. Survey results shall be documented in a technical memorandum submitted to Calleguas.

Significance after Mitigation

Mitigation Measures BIO-1, *Worker Environmental Awareness Program,* and BIO-2, *Construction BMPs for Biological Resources,* require that all construction personnel are informed of environmentally sensitive areas around the project site, and are appropriately trained on when and how to implement BMPs during construction, as specified in Mitigation Measure BIO-2. In addition, Mitigation Measures BIO-3, *Pre-Construction Nesting Bird Surveys,* and BIO-4, *Pre-Construction Presence/Absence Survey for Special Status Species,* require appropriate surveys for nesting birds and special-status species prior to project-related activities that could result in impacts to such species. With implementation of Mitigation Measures BIO-1 through BIO-4, potential impacts to special-status plants and wildlife would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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

The study area contains sensitive oak riparian woodland as depicted in Figure 5; however, the project site is disturbed and fully developed with the existing pump station facilities. Woodland and riparian habitat within the study area would not be directly impacted by the project. Nevertheless, project activities could indirectly affect sensitive habitat through generation of dust and inadvertent encroachment by construction personnel and/or vehicles during the construction period. Table 4 summarizes the Vegetation Communities and Land Cover Types within the study area.

Table 4 Vegetation Communities and Land Cover Types within Study Area

Vegetation Community/Land Cover	Sensitivity Rank[1]	CDFW Sensitive Natural Community	Acres within Study Area	Acres within Project Site
Coyote Brush Scrub	G5/S5	No	0.38	–
Upland Mustard	GNA/SNA	No	5.28	0.03
Bush Mallow Scrub	G4/S4	No	1.11	–
Coast Live Oak Woodland	G5/S4	Yes	8.08	<0.01
California Sagebrush Scrub	G4/S4	No	0.12	–
California Sagebrush and Purple Sage Scrub	G4/S4	No	4.76	–
Arroyo Willow Thickets	G4/S4	Yes	0.17	–
Developed	G4/S4	No	8.26	0.76
Total			28.16	0.80

[1] Vegetation communities identified as "Sensitive" are those considered as such according to the Sensitive Natural Communities list (CDFW 2020). G4, G5, S4, S5 = Apparently secure, common, and abundant. NA = Not Applicable

As shown in Table 4, sensitive natural communities in the study area include Coast Live Oak Woodland and Arroyo Willow Thickets. Arroyo Willow Thickets occur within the adjacent Lang Creek riparian corridor and would not be directly impacted by proposed construction activities. Coast Live Oak Woodland occurs within the study area. Oak trees are located within the disturbed area adjacent to the northern perimeter wall of the project site; potential impacts to oak trees are addressed below under threshold (e). The extent of habitat impacts caused by the project (e.g., indirect impacts from dust and inadvertent encroachment by construction personnel) is expected to be minor, because the affected areas are small and at the interface where oak woodland habitat abuts the developed pump station facility. However, because oaks have high biological value and take a long time to reach maturity, mitigation is required to minimize or avoid potential indirect impacts to Coast Live Oak woodland. Implementation of Mitigation Measure BIO-2, *Construction BMPs for Biological Resources,* would employ BMPs to avoid and protect Coast Live Oak woodland.

Mitigation Measures

Mitigation Measure BIO-2 is presented in full above, under the discussion for threshold (a).

Significance after Mitigation

Mitigation Measure BIO-2, *Construction BMPs for Biological Resources,* requires appropriate BMPs to be implemented during construction that would help assure avoidance or minimization of potential impacts to sensitive natural communities. Construction limits shall be clearly delineated to ensure construction personnel do not enter sensitive habitat areas. In addition, staging and parking areas shall be limited to unvegetated or previously disturbed sites, to the extent practicable, to avoid impact to sensitive natural communities. With implementation of Mitigation Measure BIO-2, potential impacts of the proposed project to riparian habitat and other sensitive natural communities would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

The project site is not within or abutting a wetland, streambed, or waterway. The nearest waterway to the project site is Lang Creek, which is a jurisdictional stream within the Calleguas Creek and Arroyo Conejo watershed. Figure 5 shows the alignment of Lang Creek in relation to Lindero Pump Station. The access road used to access the pump station currently, which also would be used during implementation of the proposed project, is outside the jurisdictional boundaries of Lang Creek, as is the pump station itself. Proposed project construction activities would be limited to the existing Lindero Pump Station site and facilities and would avoid direct impacts to streambeds. Indirect impacts could occur during construction, if disturbed soils are not properly secured, such that sediments could be mobilized in stormwater runoff and adversely affect water quality (e.g., increased turbidity, addition of pollutants), particularly during storm events. However, Mitigation Measure BIO-2, *Construction BMPs for Biological Resources*, would include implementation of BMPs to minimize or avoid the potential for such impacts.

Mitigation Measures

Mitigation Measure BIO-2 is presented in full under the discussion for threshold (a).

Significance after Mitigation

Mitigation Measure BIO-2, *Construction BMPs for Biological Resources,* requires appropriate BMPs to be implemented during construction to avoid potential impacts to jurisdictional waters and wetlands. Construction limits are required to be clearly delineated to ensure construction personnel do not enter waters or wetlands. Adequate material storage and spill prevention is required to be implemented to minimize impacts to nearby aquatic environments. With implementation of Mitigation Measure BIO-2, potential impacts of the proposed project on protected wetlands would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

d. Would the project 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?

The project is located adjacent to open space, a large expanse of California sagebrush and purple sage scrub, and a forested/shrub riparian woodland where wildlife movement is unrestricted. The riparian woodland associated with Lang Creek, south and southwest of the project site, provides extensive cover for feeding, sheltering, and breeding, and is also passable during longer movements such as migration or dispersal. The project site is neither within a documented wildlife corridor nor located within an Essential Connectivity Area as mapped in the *California Essential Habitat Connectivity Project: A Strategy for Conserving a Connected California* (CDFW 2010).

Although the areas surrounding the project site are permeable to wildlife, the project site itself is developed and offers little value to migrating wildlife. Furthermore, the Lindero Pump Station is entirely fenced with security chain-link fencing or walls and inaccessible to larger wildlife. In all cases, the station is constructed to prevent access by wildlife and therefore does not provide access to water sources that would attract wildlife or increase migration through the site. Construction activities would be limited to improvements and repairs in previously disturbed areas on the project site. During construction, it is possible that temporary noise and human presence may deter wildlife from transiting near the project site; however, animals would be expected to easily find alternate travel routes due to the open and permeable nature of the area (i.e., access to resources would not be cut off by the project). The project would not result in any substantial permanent changes to the project site, and long-term suitability for wildlife movement would be the same as the current condition. As such, the project's effects on wildlife movement would be less than significant.

LESS THAN SIGNIFICANT IMPACT

e. Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The project is not subject to City zoning and building codes, pursuant to Section 53091 of the California Government Code, because it involves the repair and replacement of water storage facilities. Nevertheless, the project's consistency with local policies and ordinances protecting biological resources is considered, for informational purposes. The proposed project would require trimming of at least one coast live oak tree, which is addressed in the Thousand Oaks General Plan in the Conservation Element (City of Thousand Oaks 2013), under the following policies:

- Policy CO-29 protects oak and landmark trees in preservation of their historic and aesthetic environmental value.
- Policy CO-21 encourages proper management, conservation, and protection of native plant communities throughout the planning area.

An oak tree permit would typically be required from the City of Thousand Oaks for the removal, cutting, or encroachment into the protected zone of one or more oak trees (Thousand Oaks Municipal Code Section 9-4.4204). However, as a water supply infrastructure project being conducted by Calleguas Municipal Water District, the project is exempt from City permitting requirements. Implementation of the project would require trimming of coast live oak tree(s) adjacent to the north perimeter wall of the project site, along the "Site Access" shown in Figure 3 through Figure 5. Therefore, Mitigation Measure BIO-5, *Certified Arborist Guidance for Oak Tree*

Trimming, would be implemented to provide consistency of project-related tree trimming with local policies and ordinances regarding tree protection.

Mitigation Measures

BIO-5 Certified Arborist Guidance for Oak Tree Trimming

Any trimming of coast live oak trees necessary to provide sufficient clearance for site access during construction of the project shall be conducted under the guidance and direction of a certified arborist. The certified arborist shall be present during all oak tree trimming activities conducted for the project and shall provide direction as to how tree trimming shall be conducted in a manner which avoids damage to the tree(s).

Significance After Mitigation

With implementation of Mitigation Measure BIO-5, the project would be consistent with local policies and ordinances by providing a certified arborist to oversee trimming of oak trees in a matter which avoids damage to the affected tree(s).

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

f. Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

The project does not occur within the coverage area of any Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plan, and would not cause any impact related to inconsistencies with such a plan. No impact would occur.

NO IMPACT

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5 Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?	☐	☐	☐	■
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	☐	■	☐	☐
c. Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	■	☐

A Cultural Resources Assessment was conducted for the proposed project, and a memorandum documenting the assessment is included as Appendix E to this IS-MND. The memorandum provides detailed background information regarding eligibility of the existing facilities for listing in the National Register of Historic Places (NRHP) and the California Register of Historical Resources (CRHR), including the criteria used to consider eligibility. The memorandum also documents the results of a pedestrian field survey of the project site that was conducted on August 17, 2021, and used to inform the analysis provided herein.

a. Would the project cause a substantial adverse change in the significance of a historical resource pursuant to §15064.5?

Historical aerial photographs and available original plans suggest that the site of Lindero Pump Station was largely undeveloped until the pump station was constructed in 1969. A reconnaissance field survey of the project site was conducted on August 17, 2021. The field survey and archival research conducted for this study identified one property over 45 years of age within the project site, the Lindero Pump Station at 2106 Erbes Road (APNs 569-032-003, 569-032-004, 569-032-005). The potential resource was recorded and evaluated on California Department Parks and Recreation (DPR) 523 series forms, which are included in the Cultural Resources Assessment Memorandum provided as Appendix E.

Lindero Pump Station is recommended ineligible for listing in the NRHP, CRHR, or as a City of Thousand Oaks Landmark or Point of Historic Interest under any applicable criteria. Generally, water conveyance-related properties are only eligible under NRHP Criterion A/CRHR Criterion 1 if they are associated with specific important events (e.g., first long-distance transmission of hydroelectric power) or important patterns of events (e.g., development of irrigated farming) (JRP Historical Consulting Services and Caltrans 2000:93). Archival research indicates the Lindero Pump Station was part of a series of water infrastructure projects to support the development of Thousand Oaks and the expanding Calleguas Municipal Water District, which was founded in 1953; in 1960, Calleguas joined the Metropolitan Water District of Southern California, a cooperative of cities and municipal

water districts that supplies imported water throughout Southern California (Calleguas 2017). The development of Lindero Pump Station was part of the gradual expansion of the Calleguas' system and was due to what could be considered an expected response to the growth of the surrounding community and the increasing need for a reliable water system. Lindero Pump Station therefore does not appear to be significant within the context of water conveyance systems or any other event or pattern of events in the history of the county, region, state, or nation (NRHP Criterion A/CRHR Criterion 1/City of Thousand Oaks Criterion 2).

Archival research failed to identify any individuals associated with Lindero Pump Station who can be considered important within the history of the county, region, state, or nation. Lindero Pump Station therefore does not appear significant for its association with a notable person (NRHP Criterion B/CRHR Criterion 2/City of Thousand Oaks Criterion 3).

The results of the cultural resources records search or research conducted as part of this evaluation did not reveal anything suggesting the Lindero Pump has the potential to yield important information. It is therefore recommended ineligible for information potential (NRHP Criterion D/CRHR Criterion 4/City of Thousand Oaks Criterion 4).

Finally, Lindero Pump Station is not eligible for listing as a City of Thousand Oaks Point of Historic Interest. It does not have significance to the City of Thousand Oaks. As outlined above, it is not significant for its developmental history or the site of a historic event, it is not associated with a person important to history, nor does it embody a distinctive architectural style.

No impact to historical resources would occur as a result of the project.

NO IMPACT

b. Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?

A search of the California Historical Resources Information System (CHRIS) was completed by in-house staff at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton. The CHRIS records search did not identify any archaeological resources in or adjacent to the project area, and the project site is highly disturbed from previous construction of buildings and adjacent paving and landscaping. Rincon also contacted the Native American Heritage Commission (NAHC) on June 23, 2021 and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project site. On July 27, 2021, Rincon received a response from the NAHC stating the SLF search results were negative for any known resources located within or near the project site. A review of historical maps revealed the nearest Chumash Village site to the project site is the Sap'wi ("house of the deer") Chumash village location, approximately 1.5 miles to the east/northeast of the project site. The present-day, Chumash Indian Museum in Oakbrook Regional Park is built on this village site.

During the cultural resources survey conducted at the project site, overall ground visibility ranged from approximately 15 to 100 percent due to vegetation including leaves and weeds. Where present, exposed native soil was a medium brown, medium grained sandy silt. The terrain in the property was relatively flat. Results of the field survey identified no evidence of archaeological remains or prehistoric cultural resources within the project site. If archaeological resources are encountered during ground-disturbing activities, work in the immediate area should be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1995) should be contacted immediately to evaluate the find.

Due to previous disturbance and the existing development of the project site, as well as the lack of previous or present archaeological resources at the project site, it is considered highly unlikely that archaeological resources or human remains would be encountered during project construction. However, to minimize the potential for the project to result in adverse impacts to cultural resources in the unlikely event of an inadvertent discovery during construction activities, Mitigation Measures CR-1 and CR-2 have been developed to provide staff training and appropriate response actions. These mitigation measures are presented below, followed by discussion.

Mitigation Measures

CR-1 Cultural and Archaeological Resources Education (CARE) Program

Prior to any ground-disturbing activity, an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall provide an initial sensitivity training session to the assigned Calleguas inspectors, contractors, subcontractors, and other workers prior to their involvement in any ground-disturbing activities, with subsequent training sessions to accommodate new personnel becoming involved in the project. The CARE Program shall address the cultural sensitivity of the affected site and how to identify these types of resources; specific procedures to be followed in the event of an inadvertent discovery; safety procedures when working with monitors; and consequences in the event of non-compliance.

The CARE Program sensitivity training may be provided jointly with the BEAT Program sensitivity training required under Mitigation Measure BIO-1, *Biological and Environmental Awareness Training (BEAT) Program*. If provided as a joint CARE/BEAT sensitivity training session, all requirements of both programs, as defined under Mitigation Measures BIO-1 and CR-1, will be explicitly addressed.

CR-2 Unanticipated Find of Archaeological Resources

An archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall conduct periodic spot checks during excavation. In the event that unanticipated cultural resources are encountered during ground-disturbing activities associated with the project, work in the immediate area must halt and appropriate evaluation and treatment procedures implemented. In addition, upon inadvertent discovery of a potential resource, the qualified archaeologist must be contacted immediately to evaluate the find. If the discovery proves to be eligible for listing in the NRHP or the CRHR, additional work may be warranted, such as data recovery excavation and coordination with interested Tribes on the identification, treatment, and disposition of the resource(s).

Significance after Mitigation

With implementation of Mitigation Measure CR-1 to provide cultural resources sensitivity training through the CARE Program, as well as Mitigation Measure CR-2 to address unanticipated find(s) of archaeological resources with appropriate reporting and response actions, the potential for the project to adversely affect cultural or archaeological resources related to an inadvertent discovery would be avoided or reduced to a less-than-significant level.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project disturb any human remains, including those interred outside of formal cemeteries?

Construction of the proposed project would include substantial excavation to remove the existing pumps and replace them with below-ground pumps. However, the site has previously been substantially disturbed for construction of the existing pump station. Due to this previous disturbance, and a lack of known cultural resources on the project site, it is considered highly unlikely for human remains to be found during construction. However, the discovery of human remains is always a possibility during ground-disturbing activities.

If human remains are encountered during project construction, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner determines the origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains were determined to be prehistoric, the Coroner would notify the Native American Heritage Commission, which would determine and notify a most likely descendant (MLD). The MLD has 48 hours from being granted site access to make recommendations for the disposition of the remains. If the MLD does not make recommendations within 48 hours, the landowner shall reinter the remains in an area of the property secure from subsequent disturbance. These procedures are regulatory requirements and do not constitute mitigation for the proposed project. As mentioned, it is considered highly unlikely that the project would disturb human remains; however, if such remains are encountered, the project would be conducted in compliance with existing regulatory requirements and potential impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

6 Energy

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	■	☐
b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☐	■

As a state, California is one of the lowest per capita energy users in the United States, ranked 50th in the nation, due to its energy efficiency programs and mild climate (USEIA [United States Energy Information Administration] 2021). Project operation would not require the consumption of electricity or natural gas beyond that currently used for operations; therefore, this analysis focuses primarily on the consumption of transportation fuels consumed during construction and by the proposed backup generator. Petroleum fuels are primarily consumed by on-road and off-road equipment in addition to some industrial processes, with California being one of the top petroleum-producing states in the nation (CEC [California Energy Commission] 2021). Gasoline, which is used by light-duty cars, pickup trucks, and sport utility vehicles, is the most used transportation fuel in California with 12.6 billion gallons sold in 2020 (CEC 2021). Diesel, which is used primarily by heavy duty-trucks, delivery vehicles, buses, trains, ships, boats and barges, farm equipment, and heavy-duty construction and military vehicles, is the second most used fuel in California with 1.9 billion gallons sold in 2020 (CEC 2021). Table 5 summarizes the petroleum fuel consumption for Ventura County, where the project site is located, as compared to statewide consumption.

Table 5 2020 Annual Gasoline and Diesel Consumption

Fuel Type	Ventura County (millions of gallons)	California (millions of gallons)	Proportion of Statewide Consumption[1]
Gasoline	262	12,572	2.1%
Diesel	32	1,744	1.8%

[1] For reference, the population of Ventura County (835,223 persons) is approximately 2.1 percent of the population of California (39,466,855 persons) (CDF [California Department of Finance] 2021).

Source: CEC 2021

Energy consumption is directly related to environmental quality in that the consumption of nonrenewable energy resources releases criteria air pollutant and greenhouse gas (GHG) emissions into the atmosphere. The environmental impacts of air pollutant and GHG emissions associated with

the project's energy consumption are discussed in detail in Environmental Checklist Section 3, *Air Quality*, and Section 8, *Greenhouse Gas Emissions*, respectively.

a. Would the project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

Project construction would use nonrenewable energy resources during the demolition, site preparation, grading, building construction/infrastructure installation, paving, and architectural coating construction phases. During project construction, energy would be consumed in the form of petroleum-based fuels used to power off-road heavy-duty vehicles and equipment on the project site, worker travel to and from the project site, and vehicles used to deliver materials to the site. Information provided by Calleguas and the CalEEMod outputs for the air pollutant and GHG emissions modeling (Appendix B) were used to estimate energy consumption associated with the proposed project. As shown in Table 6, construction activities would require approximately 1,201 gallons of gasoline and approximately 38,163 gallons of diesel fuel. These construction energy estimates are conservative because they assume that the construction equipment used in each phase of construction is operating every day of construction.

Table 6 Estimated Fuel Consumption during Construction

	Fuel Consumption (gallons)	
Source	**Gasoline**	**Diesel**
Construction Equipment & Hauling Trips	N/A	38,163
Construction Worker Vehicle Trips	1,201	N/A

N/A = not applicable

See Appendix F for energy calculation sheets.

Energy use during construction would be temporary in nature and heavy-duty equipment used would be typical of similar-sized construction projects in the region. In addition, project contractors and Calleguas staff would be required to comply with the provisions of California Code of Regulations Title 13 Sections 2449 and 2485, which prohibit diesel-fueled commercial motor vehicles and off-road diesel vehicles from idling for more than five minutes and would minimize unnecessary fuel consumption. Heavy-duty equipment would be subject to the USEPA Construction Equipment Fuel Efficiency Standard, which would also minimize inefficient, wasteful, or unnecessary fuel consumption. These practices would result in efficient use of energy necessary to perform construction of the project. In the interest of cost-efficiency, project contractors and Calleguas staff also would not utilize fuel in a manner that is wasteful or unnecessary. Therefore, construction would not involve the inefficient, wasteful, and unnecessary use of energy and impacts related to energy consumption would be less than significant.

Operation

New energy consumption during project operation would consist solely of diesel fuels for backup generator testing and, if needed due to loss of utility power, operation. Following construction of the project, the Lindero Pump Station would operate at its design capacity with improved-efficiency pumps; energy consumption would not increase overall as a result of the project. In addition, there would be an emergency generator on site that would be activated for testing and maintenance purposes throughout the year. In the event of a power outage, the project would rely on these

backup generators to provide electricity. Testing of the generators would occur no more than 20 hours annually, consistent with the VCAPCD's permitting limits. Based on the general specifications for the proposed emergency generator, approximately 191 gallons of diesel fuel are required per hour to test generators at full load (see Appendix A for generator specifications). As shown in Table 7, project operation would require 3,820 gallons of diesel fuel annually for generator testing assuming testing is occurring at 100 percent prime power. This is a conservative assumption representing the probable upper limit of fuel consumption during testing. The periodic emergency generator testing would not likely occur at 100 percent load capacity for each hour; therefore, the fuel consumption would likely be lower than the calculated amount shown in Table 7. Since generator testing would be intermittent and not continuously consume diesel, project operation would not involve the inefficient, wasteful, and unnecessary use of energy, and impacts related to energy consumption would be less than significant.

Table 7 Estimated Annual Fuel Consumption during Operation

Source	Energy Consumption	
Generator Diesel Fuel[1]	3,820 gallons	487 MMBtu

[1] Assumes maximum permitted operations of 20 hours per year for each generator and that diesel fuel consumption rate for generator testing at 100 percent load is approximately 191 gallons per hour for the 3,000-kW generator (see Appendix A for generator specifications).

kBtu = thousand British thermal units, MMBtu = million British thermal units

See Appendix F for energy calculation sheets.

LESS THAN SIGNIFICANT IMPACT

b. Would the project conflict with or obstruct a state or local plan for renewable energy or energy efficiency?

Calleguas has not adopted specific renewable energy or energy efficiency plans. Energy-related plans and policies adopted by the City of Thousand Oaks are not applicable to the proposed project because Calleguas is the lead agency and not subject to City-adopted policies. Therefore, the project would result in no impact.

NO IMPACT

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7 Geology and Soils

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1. 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?	☐	☐	☐	■
2. Strong seismic ground shaking?	☐	☐	■	☐
3. Seismic-related ground failure, including liquefaction?	☐	☐	☐	■
4. Landslides?	☐	☐	☐	■
b. Result in substantial soil erosion or the loss of topsoil?	☐	☐	■	☐
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☐	■
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?	☐	☐	☐	■
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?	☐	☐	☐	■
f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	■	☐

a.1. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving 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?

The project site is not located in an Alquist-Priolo Fault Zone, and there are no known active or potentially active faults located on or adjacent to the project site (CDOC 2016). The closest active or potentially active fault to the project site is the Simi-Santa Rosa fault, which is located approximately four miles to the north. Therefore, the proposed project would not result in substantial adverse effects associated with the rupture of a known earthquake fault. No impact would occur.

NO IMPACT

a.2. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?

The project site is located in a seismically active region of southern California, and therefore, as with all projects in the greater southern California region, the site is susceptible to strong seismic ground shaking associated with earthquakes. The proposed project would be constructed in compliance with applicable seismic requirements established by current California Building Standards Code. Seismic design standards established by the State address structural integrity during a seismic event. Compliance with applicable state requirements for seismic integrity and safety reduce the potential for adverse impacts to occur in response to seismic ground shaking. Potential impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

a.3. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?

Liquefaction occurs when the strength and stiffness of a soil is reduced by intense ground shaking typically associated with an earthquake in areas with a high groundwater table, i.e. where groundwater is present at shallow depths from the ground surface. Lindero Pump Station is located in a seismically active area of southern California and shallow groundwater is known to be present at the site; therefore, there is some existing risk of liquefaction at Lindero Pump Station in its current, pre-project condition. The proposed project would replace pump station components within the existing site and would not introduce new uses or activities to the site that would have potential to affect existing seismic- or soils-related hazards present at the site. No impact associated with liquefaction would occur as a result of the proposed project.

NO IMPACT

a.4. Would the project directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

The project site is adjacent to hillside areas within the Sapwi Trails Community Park. Previous landslide events have been known to occur in the vicinity of the project site, including on hillsides within the adjacent Sapwi Trails Community Park. This park has been characterized as being underlain by an ancient landslide, referred to as the Erbes Road Landslide (ERL), which was used by the California Division of Mines and Geology to inform the hazards map for the Thousand Oaks quadrangle (CRPD 2014). The ERL originally occurred over 12,000 years ago and has been determined to be stable in its current configuration and with consideration to subsurface conditions as they are presently understood (CRPD 2014).

In general, a landslide event may be triggered by removing material down-slope of potentially unstable materials that would otherwise support such materials; placing fill or heavy structures upslope of potentially unstable materials; or applying substantial amounts of water to the surface or subsurface such that it decreases the strength of potentially unstable geologic areas. The project site is previously disturbed and developed and is characterized by a gentle slope to the west. Although the project site is adjacent to hillside areas, the project would not involve activities that would disturb or burden potentially unstable geologic areas. As discussed above, all project improvements would be constructed in compliance with applicable standards for seismic integrity and safety, which includes the potential for landslides. The proposed project would not have potential to cause substantial adverse effects involving landslides; no impact related to landslide would occur.

NO IMPACT

b. Would the project result in substantial soil erosion or the loss of topsoil?

Soil erosion or the loss of topsoil may occur when soils are disturbed but not secured or restored, such that wind or rain events may mobilize disturbed soils, resulting in their transport off the project site. No loss of topsoil is anticipated, because the project site is previously disturbed and mostly paved with asphalt. During construction of the proposed project, ground-disturbing activities would include excavation to facilitate the subsurface installation of replacement pumps. Limited additional grading and excavation would also be conducted to construct the proposed improvements.

The NPDES Construction General Permit, which is authorized by the federal Clean Water Act, requires development and implementation of a project-specific SWPPP for projects disturbing more than one acre. When required, a SWPPP must contain BMPs to control erosion and sedimentation. Such BMPs typically include the use of temporary de-silting basins, construction vehicle maintenance in staging areas to avoid leaks, and installation of silt fences and erosion control blankets. The proposed project disturbance area is smaller than one acre and construction activities are not anticipated to be subject to the Construction General Permit requirements. However, Calleguas has identified BMPs that would be required for implementation by the construction contractor and include comparable measures to those typically contained in a SWPPP.

As discussed in the Initial Study Section 8, *Project Description*, under “Best Management Practices,” the proposed project design includes the following BMPs for preventing erosion, sediment transport, and runoff, and proper waste management, which are comparable to those that would be contained in a SWPPP:

- **Erosion Controls** – minimize area of disturbance; provide temporary stabilization of disturbed surfaces; provide dust control; install final stabilization upon completion of active work

- **Sediment Controls** – use perimeter controls to prevent disturbed sediment from leaving the active work area; install stabilizing site entrance and conduct sweeping to prevent sediment from leaving the active work area
- **Runoff Controls** – divert runoff away from disturbed areas; prevent runoff from flowing over unprotected areas
- **Material and Waste Management Controls** – provide controls to prevent mobilization of construction materials; promptly clean up spills

The BMPs above are included in the design of the project and do not constitute mitigation measures; therefore, this impact is less than significant with no mitigation required.

LESS THAN SIGNIFICANT IMPACT

c. Would the project 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?

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

The proposed project would rehabilitate the existing Lindero Pump Station and would not introduce new infrastructure to previously undeveloped portions of the site. As discussed above with respect to the threshold (a) criteria, the proposed project would be implemented in accordance with standards for seismic integrity and safety as defined in the California Building Code. The project improvements would not be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and the project would not be located on expansive soils or create substantial direct or indirect risks to life or property. Due to its design, as well as the nature of the project to rehabilitate the existing pump station, no impact would occur.

NO IMPACT

e. Would the project 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?

The proposed project does not include the installation of a new septic system or alternative wastewater disposal system. There is an existing septic system at Lindero Pump Station, which would continue to be used for wastewater disposal under post-project conditions. The proposed project would not modify or otherwise affect the existing septic system. The proposed project would not increase the number of operational staff required to support Lindero Pump Station and would not introduce a need to replace or expand the existing septic system. No impact associated with soils' capability to support the use of such systems would occur as a result of the project.

NO IMPACT

f. Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

The paleontological sensitivities of the geologic units underlying the project site were evaluated to determine if the proposed project could result in significant impacts to paleontological resources. This analysis was based on the results of an online paleontological locality search and review of existing information in the scientific literature concerning known fossils within geologic units mapped within the project site. Fossil collections records from the Paleobiology Database and University of California Museum of Paleontology (UCMP) online database were reviewed for known fossil localities in Ventura County (UCMP 2021). The project site is underlain by Quaternary Alluvium (Qal), which covers much of the floor of the Conejo Valley and the bottoms of stream channels (City of Thousand Oaks 2014). The alluvium is comprised of slightly to poorly consolidated and poorly sorted stream and floodplain deposits up to 100 feet thick. A search of the paleontological locality records on the UCMP online database resulted in no previously recorded vertebrate fossil localities within Holocene sedimentary deposits within the project vicinity. The potential for a project to impact paleontological resources is based on the potential for project-related ground disturbance to directly impact paleontologically-sensitive geologic units.

Although construction of the proposed project would include substantial excavation to install the replacement pumps below the ground surface, as discussed above, the soils underlying the project site are not likely to contain paleontological resources. In addition, the site is previously disturbed and it is highly unlikely that excavation activities would disturb previously undisturbed (native) sediments that could potentially contain fossiliferous deposits or result in impacts to paleontological resources. Therefore, the proposed project is unlikely to result in the destruction, damage, or loss of scientifically important paleontological resources and associated stratigraphic and paleontological data. Potential impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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8 Greenhouse Gas Emissions

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	■	☐
b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☐	■

Climate change is the observed increase in the average temperature of the Earth's atmosphere and oceans along with other substantial changes in climate (such as wind patterns, precipitation, and storms) over an extended period of time. Climate change is the result of numerous, cumulative sources of GHG emissions contributing to the "greenhouse effect," a natural occurrence which takes place in Earth's atmosphere and helps regulate the temperature of the planet. The majority of radiation from the sun hits Earth's surface and warms it. The surface, in turn, radiates heat back towards the atmosphere in the form of infrared radiation. Gases and clouds in the atmosphere trap and prevent some of this heat from escaping into space and re-radiate it in all directions.

GHG emissions occur both naturally and from human activities such as fossil fuel burning, decomposition of landfill wastes, raising livestock, and deforestation. GHGs produced by human activities include carbon dioxide (CO_2), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Different types of GHGs have varying global warming potentials (GWP). The GWP of a GHG is the potential of a gas or aerosol to trap heat in the atmosphere over a specified timescale (generally, 100 years). Because GHGs absorb different amounts of heat, a common reference gas (CO_2) is used to relate the amount of heat absorbed to the amount of the gas emitted, referred to as "carbon dioxide equivalent" (CO_2e), which is the amount of GHG emitted multiplied by its GWP. Carbon dioxide has a 100-year GWP of one. By contrast, methane has a GWP of 30, meaning its global warming effect is 30 times greater than CO_2 on a molecule-per-molecule basis (Intergovernmental Panel on Climate Change [IPCC] 2021).[3]

In its *Sixth Assessment Report* (2021), the United Nations IPCC expressed that the rise and continued growth of atmospheric CO_2 concentrations is unequivocally due to human activities. Human influence has warmed the atmosphere, ocean, and land, which has led the climate to warm at an unprecedented rate in the last 2,000 years. It is estimated that between the period of 1850 through 2019, a total of 2,390 gigatons of anthropogenic CO_2 was emitted. It is likely that anthropogenic activities have increased the global surface temperature by approximately 1.07 degrees Celsius

[3] The Intergovernmental Panel on Climate Change's (2021) *Sixth Assessment Report* determined that methane has a GWP of 30. However, the 2017 Climate Change Scoping Plan published by the California Air Resources Board uses a GWP of 25 for methane, consistent with the Intergovernmental Panel on Climate Change's (2007) *Fourth Assessment Report*. Therefore, this analysis utilizes a GWP of 25.

between the years 2010 through 2019 (IPCC 2021). Furthermore, since the late 1700s, estimated concentrations of CO_2, methane, and nitrous oxide in the atmosphere have increased by over 43 percent, 156 percent, and 17 percent, respectively, primarily due to human activity (USEPA 2021). Emissions resulting from human activities are thereby contributing to an average increase in Earth's temperature. Potential climate change impacts in California may include loss of snowpack, sea level rise, more extreme heat days per year, more high ozone days, more large forest fires, and more drought years (State of California 2018).

In response to climate change, California implemented Assembly Bill (AB) 32, the "California Global Warming Solutions Act of 2006." AB 32 required the reduction of statewide GHG emissions to 1990 emissions levels (essentially a 15 percent reduction below 2005 emission levels) by 2020 and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective GHG emissions reductions. On September 8, 2016, the Governor signed Senate Bill 32 into law, extending AB 32 by requiring the State to further reduce GHG emissions to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). On December 14, 2017, the California Air Resources Board (CARB) adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 target. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program and the Low Carbon Fuel Standard and implementation of recently adopted policies and legislation, such as SB 1383 (aimed at reducing short-lived climate pollutants including methane, hydrofluorocarbon gases, and anthropogenic black carbon) and SB 100 (accelerates the State's Renewables Portfolio Standard Program). The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2013 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends local governments adopt policies and locally appropriate quantitative thresholds consistent with a statewide per capita goal of six metric tons (MT) of CO_2e by 2030 and two MT of CO_2e by 2050 (CARB 2017).

Methodology

GHG emissions associated with project activities were estimated using CalEEMod, version 2020.4.0, with the assumptions described under Section 3, *Air Quality*.

Individual projects do not generate sufficient GHG emissions to influence climate change directly. However, physical changes caused by a project can contribute incrementally to significant cumulative effects, even if individual changes resulting from a project are limited. The issue of climate change typically involves an analysis of whether a project's contribution towards an impact would be cumulatively considerable. "Cumulatively considerable" means the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, other current projects, and probable future projects (CEQA Guidelines Section 15064[h][1]).

According to CEQA Guidelines Section 15183.5(b), projects can tier from a qualified GHG reduction plan, which allows for project-level evaluation of GHG emissions through the comparison of the project's consistency with the GHG reduction policies included in a qualified GHG reduction plan. However, neither Calleguas nor VCAPCD has formally adopted a Climate Action Plan or other GHG reduction plan to date. Thus, this approach is not currently feasible for this analysis.

Local air districts have developed significance thresholds, which are numeric mass emissions thresholds that identify the level at which additional analysis of project GHG emissions is necessary. If project emissions are equal to or below the significance threshold, with or without mitigation, the project's GHG emissions would be less than significant. VCAPCD has not established quantitative

significance thresholds for evaluating GHG emissions in CEQA analyses, but it recommends using the California Air Pollution Control Officers Association (CAPCOA)'s 2008 *CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act* white paper and other resources when developing GHG evaluations (VCAPCD 2003). CAPCOA's paper provides a common platform of information and tools to support local governments and was prepared as a resource, not as a guidance document. CEQA Guidelines Section 15064.4 expressly provides a "lead agency shall have discretion to determine, in the context of a particular project," whether to "quantify GHG emissions resulting from a project" and/or "rely on a qualitative analysis or performance-based standards." Updates to CEQA Guidelines Section 15064.4 that took effect in December 2018 further state that a lead agency should "focus its analysis on the reasonably foreseeable incremental contribution of the project's emissions to the effects of climate change" and that the analysis should "reasonably reflect evolving scientific knowledge and state regulatory schemes."

Considering that no specific GHG threshold or qualified GHG reduction plan has been recommended or adopted by Calleguas or VCAPCD, it is appropriate to refer to guidance from other agencies when discussing GHG emissions. The VCAPCD generally refers to South Coast Air Quality Management District (SCAQMD) methodology for evaluating GHG emissions. In guidance provided by the SCAQMD's GHG CEQA Significance Threshold Working Group in September 2010, SCAQMD considered a tiered approach to determine the significance of residential and commercial projects. The draft tiered approach is outlined in meeting minutes dated September 29, 2010 (SCAQMD 2010):

- **Tier 1.** If the project is exempt from further environmental analysis under existing statutory or categorical exemptions, there is a presumption of less than significant impacts with respect to climate change. If not, then the Tier 2 threshold should be considered.
- **Tier 2.** Consists of determining whether the project is consistent with a GHG reduction plan that may be part of a local general plan, for example. The concept embodied in this tier is equivalent to the existing concept of consistency in CEQA Guidelines Section 15064(h)(3), 15125(d) or 15152(a). Under this Tier, if the project is consistent with the qualifying local GHG reduction plan, it is not significant for GHG emissions. If there is not an adopted plan, then a Tier 3 approach would be appropriate.
- **Tier 3.** Establishes a screening significance threshold level to determine significance. The Working Group has provided a recommendation of 10,000 MT of CO_2e per year for industrial projects and 3,000 MT of CO_2e per year for non-industrial projects.
- **Tier 4.** Establishes a service population threshold to determine significance. The Working Group has provided a recommendation of 4.8 MT of CO_2e per year for land use projects.

The project would not be statutory or categorically exempt and therefore Tier 1 does not apply. As previously stated, Calleguas does not have a local, qualified GHG reduction plan from which the project may tier; thus, Tier 2 would not apply. For Tier 4, service population is defined as employees plus residents; however, the project would not generate any residents or require new employees because it is related to the operation and maintenance of existing water infrastructure. Therefore, a service population threshold such as that recommended under Tier 4 would not provide an accurate depiction of the project's GHG emission impacts. Thus, for the purposes of this analysis, the bright-line threshold of 3,000 MT of CO_2e per year for non-industrial projects recommended by the SCAQMD under Tier 3 is used in this analysis to determine the significance of the project's GHG emissions.

a. Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Construction of the project would generate GHG emissions as a result of operation of heavy-duty equipment on-site as well as from vehicles transporting workers to and from the project site and heavy trucks to export soil material. Table 8 below indicates unmitigated construction-related GHG emissions from the project.

Table 8 Estimated Unmitigated Construction GHG Emissions

Year	Emissions (MT of CO_2e)
2022	301
2023	56
Total	**357**
Amortized over 30 Years	**12**

MT = metric tons; CO_2e = carbon dioxide equivalents
Notes: Emissions modeling was completed using CalEEMod. See Appendix B for modeling results.

As shown in Table 8, construction of the project would generate an estimated total of 357 MT of CO_2e over the course of its one-year construction period. Amortized over a 30-year period (the assumed life of the project per SCAQMD guidance [2008]), construction of the project would generate about 12 MT of CO_2e per year.

Operation of the proposed project would also generate GHG emissions; during operation, GHG emissions would be associated with area sources (e.g., architectural coatings, consumer products, and landscaping equipment) and stationary sources (e.g., backup generator). Table 9 summarizes the project's operational GHG emissions combined with amortized construction emissions.

Table 9 Estimated Unmitigated Operational GHG Emissions

Emission Source	Annual Emissions (CO_2e in metric tons)
Construction (unmitigated)	12
Operational	
Area	<1
Stationary	33
Total	**45**
SCAQMD Threshold[1]	3,000
Threshold Exceeded?	No

CO_2e = carbon dioxide equivalent
[1] The threshold of 3,000 MT of CO_2e per year is the threshold recommended for non-industrial projects by the SCAQMD under Tier 3 (SCAQMD 2010).
Notes: See Appendix B for modeling results.

As shown above, the project would generate approximately 45 MT of CO_2e per year, which is below the 3,000-MT/year threshold of CO_2e. Therefore, impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Several plans and policies have been adopted to reduce GHG emissions in the southern California region, including the State's 2017 Scoping Plan. Calleguas has not adopted a GHG reduction plan to date; therefore, this discussion focuses on the project's consistency with State plans and policies. The principal State plans and policies are AB 32, the California Global Warming Solutions Act of 2006, and the subsequent legislation, SB 32. The quantitative goal of SB 32 is to reduce GHG emissions to 40 percent below 1990 levels by 2030; the State's 2017 Scoping Plan was then created to outline goals and measures to achieve that reduction, and addressed activities related but not limited to increasing water conservation and facilitating the sustainable management of water supply. As discussed in Initial Study Section 8, *Project Description*, under Figure 2*Calleguas MWD Service Regions and Infrastructure*, the proposed project improvements are critical to Calleguas' ability to continue providing a reliable water supply to the Oak Park Region. Following construction of the project, the Lindero Pump Station would operate at its design capacity with improved-efficiency pumps, and energy consumption would not increase overall as a result of the project. The project would not conflict with plans, policies, or regulations related to greenhouse gas emissions. No impact would occur.

NO IMPACT

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9 Hazards and Hazardous Materials

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	■	☐
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?	☐	■	☐	☐
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	■	☐
d. Be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	■
e. For a project located in 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 or excessive noise for people residing or working in the project area?	☐	☐	☐	■
f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	■
g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	■	☐

a. Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

b. Would the project 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?

Potentially hazardous materials include diesel fuel, oil, solvents, and other petroleum-based products that are routinely used to operate vehicles, equipment, and machinery. Construction of the proposed project would temporarily require the transport and use of potentially hazardous materials to operate the equipment and machinery required to conduct the project. Hazardous or potentially hazardous materials would be handled, transported, used, and disposed of in limited quantities. Such activities would be temporary in duration and limited to short-term construction activities on the project site. If needed, any storage of hazardous materials during construction would occur in secure, designated staging areas within the project site and would be limited to the quantities required to support construction activities. In addition, project activities requiring the transport, use, or disposal of hazardous materials would comply with all applicable federal, state, and local agencies and regulations, including as specified by the USEPA, the Resource Conservation and Recovery Act, Caltrans, and the Ventura County Certified Unified Program Agency/Hazardous Materials Program.

Following completion of the proposed project improvements to Lindero Pump Station, operation and maintenance activities and procedures at the pump station would remain largely the same as under existing conditions, with one exception being the introduction a new diesel-fueled backup power generator. Potentially hazardous materials include diesel fuel, and the backup generator would be powered by diesel fuel; therefore, during operation and maintenance of the project, an incrementally increased amount of potentially hazardous materials would be present at Lindero Pump Station, in the form of diesel fuel contained within the new backup generator. Fuel for the generator would only be handled when re-fueling is necessary.

As discussed in Initial Study Section 8, *Project Description*, as well as in Environmental Checklist Section 7, *Geology and Soils*, the proposed project design includes BMPs similar to those that would be included in a SWPPP, such as erosion controls, sediment controls, runoff controls, and materials and waste management controls. In addition to the project design BMPs, Environmental Checklist Section 4, *Biological Resources*, includes Mitigation Measure BIO-2, *Construction BMPs for Biological Resources*, which details specific BMPs related to hazardous materials, including requirements regarding how to conduct re-fueling in a manner to reduce or avoid the potential for an accidental spill to occur and to ensure appropriate response actions are implemented should such a condition occur. In addition, regular visual inspections of the Lindero Pump Station facilities occur as part of normal operation and maintenance activities and would include the inspection of the new diesel backup generator for any potential leaks or needed repairs, which would be addressed promptly to avoid potential for related impacts to occur.

Therefore, implementation of the project design BMPs as well as the hazardous materials BMPs required under Mitigation Measure BIO-2, *Construction BMPs for Biological Resources* would minimize or avoid potentially adverse impacts associated with hazardous materials, including accidental upset or accident conditions. Potential impacts would be less than significant with mitigation incorporated.

Mitigation Measures

Mitigation Measure BIO-2 is presented in full under the discussion for threshold (a) in Environmental Checklist Section 4, *Biological Resources*.

Significance after Mitigation

With implementation of Mitigation Measure BIO-2, potential impacts of the proposed project related to accidental upset conditions would be less than significant with mitigation incorporated.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

c. Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

The nearest school to the project site is Los Cerritos Middle School, which is located approximately 0.13 mile to the west, on the opposite side of Erbes Road. As discussed above for threshold (a), potential impacts of project construction associated with the routine transport, handling, and use of hazardous materials would be less than significant. In addition, BMPs included as part of the project as well as Mitigation Measure BIO-2 would minimize the potential for an accidental spill or release of hazardous or potentially hazardous materials to result in adverse impacts. Emissions from project construction would be limited to those associated with the operation of construction vehicles and equipment, which are addressed under Environmental Checklist Section 3, *Air Quality,* and Section 8, *Greenhouse Gas Emissions*, and would be less than significant.

In addition, as discussed under thresholds (a) and (b) above, following completion of the proposed project, operation and maintenance activities and procedures at Lindero Pump Station would remain largely the same as under existing conditions, with one exception being the introduction of a new diesel-fueled backup power generator. Although the backup generator would introduce a new use of diesel fuel at the project site, the fuel would only be present in quantities required to operate the backup generator and would only be handled when it is necessary to refuel the generator. This activity does not have potential to result in adverse impacts at the nearest school, due to the limited handling of diesel fuel and the use of BMPs to minimize or avoid potential for spill. Potential impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

d. Would the project be located on a site that is included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Government Code Section 65962.5 requires the California Environmental Protection Agency to develop an updated Hazardous Waste and Substances Sites List, also known as the Cortese List. The California Department of Toxic Substance Control (DTSC) is responsible for a portion of the information contained in the Cortese List; other state and local government agencies are also required to provide additional hazardous material release information for the Cortese List. Based upon review of the SWRCB GeoTracker database (SWRCB 2021) and the California DTSC EnviroStor database (California DTSC 2021), the project site is not included on existing lists of hazardous materials sites compiled pursuant to Government Code Section 65962.5. No impact would occur.

NO IMPACT

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 or excessive noise for people residing or working in the project area?

The project site is not located within an airport land use plan or within two miles of a public or private airport. The nearest airport is the Camarillo Airport, approximately 14.2 miles to the west.

NO IMPACT

f. Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Construction of the proposed project would introduce construction-related vehicles on local roadways, with access provided via Erbes Road. As discussed in the impact analysis provided under Environmental Checklist Section 17, *Transportation*, construction traffic associated with the project would not result in significant impacts and the project would not affect the level of service (LOS) at existing study area intersections to the extent that roadway operations would be adversely affected and interfere with flow of traffic on local roadways. Project activities would not impede access by emergency responders or interfere with the implementation of an adopted emergency response plan or emergency evacuation plan. Following the completion of project construction, operational procedures would be consistent with existing conditions and would not adversely affect emergency responders or emergency response or evacuation plans.

In addition, as discussed in Initial Study Section 8, *Project Description*, the proposed project would repave the existing driveway, install a new 18-foot-wide entry with a driveway ramp to provide access to the proposed electrical equipment, and repair any damage that may occur during construction activities. Following the completion of construction, site ingress and egress would be improved from existing conditions. No adverse impacts would occur.

NO IMPACT

g. Would the project expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

The project site is located in a Local Responsibility Area (LRA) designated as a very high fire hazard severity zone (CAL FIRE [California Department of Forestry and Fire Protection] 2021). Project construction would involve the use of heavy equipment and machinery within the project site, which is near vegetated hillside areas; however, activities would be limited to the existing Lindero Pump Station site, which does not support vegetated hillsides. The project would comply with regulations related to fire hazards and wildfire safety, including mandatory use of spark arrestors (Public Resources Code [PRC] Section 4442), maintenance of fire suppression equipment during the highest fire danger period (PRC Section 4428), and adherence to standards for conducting construction activities on days when a burning permit is required (PRC Sections 4427 and 4431). Therefore, although the project site is located within an area susceptible to wildfire, the proposed project would not increase fire risks on the project site or surrounding area and potential impacts associated with wildland fire would be less than significant.

Following the completion of project construction, operational procedures would remain consistent with existing conditions and the project would not pose a substantial risk of wildfire ignition. The project would not include housing or other structures which could accommodate occupants who could potentially be exposed to risk of loss, injury, or death involving wildland fires.

LESS THAN SIGNIFICANT IMPACT

10 Hydrology and Water Quality

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?	☐	☐	■	☐
b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☐	■
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
(i) Result in substantial erosion or siltation on- or off-site;	☐	☐	■	☐
(ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	■	☐
(iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☐	■
(iv) Impede or redirect flood flows?	☐	☐	☐	■
d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☐	■
e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	■

a. Would the project violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?

Project construction would include earthwork activities and soil disturbance that could potentially impact downstream water quality, if disturbed soils are left unsecured such that they may be conveyed via wind or stormwater flows off of the project site. However, as discussed in the impact analyses for Environmental Checklist Section 7, *Geology and Soils*, and Environmental Checklist Section 9, *Hazards and Hazardous Materials,* the proposed project includes implementation of BMPs to minimize or avoid potentially adverse impacts, including those associated with earthwork activities that could lead to water quality degradation. The project's proposed disturbance area is not anticipated to necessitate preparation of a SWPPP for NPDES Program compliance; however, BMPs included in the project design are comparable to those that would be required by a SWPPP and would effectively minimize or avoid potentially adverse impacts to water quality resulting from project activities. Therefore, potential impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

A limited water supply would be required during project construction, primarily for dust suppression during ground-disturbing activities; this demand would be short-term and limited to specific activities during the construction period. The temporary construction water supply would be provided by Calleguas from existing supply sources, which are limited to imported surface water procured from the Metropolitan Water District of Southern California. Calleguas supplies do not include groundwater resources and the project's water requirements would have no effect on groundwater availability. The project site is previously disturbed and developed, such that implementation of the proposed improvements would not increase impervious surfaces and groundwater recharge rates would not be affected.

The project site overlies the Conejo Valley Groundwater Basin, where the average depth to groundwater is approximately 50 feet (VCWPD 2016). Perched groundwater is known to occur in the vicinity of Lindero Pump Station and could be encountered during project-related excavation activities. Perched groundwater is surface water that has infiltrated the soil and encountered an impermeable (or low-permeability) layer that prevents it from joining the underlying groundwater basin. Perched groundwater is not hydrologically connected to the underlying groundwater basin, so its removal from the active excavation area (if needed) would not have the potential to adversely impact the groundwater basin.

Following the completion of construction activities, operation and maintenance procedures at Lindero Pump Station would be consistent with existing conditions. Therefore, no impact to groundwater supply or recharge would occur.

NO IMPACT

c.(i) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would result in substantial erosion or siltation on- or off-site?

c.(ii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

The project would not alter the course of a stream or river and would not introduce new impervious surfaces that could result in substantial erosion, siltation, or flooding on- or off-site. BMPs included in the project design, as discussed under "Best Management Practices" in the Project Description, include measures to secure disturbed soils and prevent runoff from exiting the work area in a manner that could have adverse impacts. Site-specific drainage pattern alterations would occur as a result of replacing the existing above-ground pumps with below-ground pumps; however, these alterations would be conducted with implementation of the aforementioned BMPs, such that drainage patterns would be maintained in a manner which does not increase erosion, siltation, or flooding on- or off-site. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c.(iii) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner that would create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

As discussed above, the project would not alter the course of a stream or river and would not introduce new additional impervious surfaces that could result in erosion, siltation, or flooding on- or off-site. The project would replace existing facilities at Lindero Pump Station and would not increase surface runoff or result in flooding on- or off-site; discharges following project implementation would be the same as existing conditions at Lindero Pump Station. In addition, as discussed for threshold (a) above, the project would not result in water quality degradation; therefore, the project would not introduce a source of polluted runoff. The proposed project would not exceed the capacity of existing or planned stormwater drainage system and would not provide substantial additional sources of polluted runoff. No impact would occur.

NO IMPACT

c.(iv) Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would impede or redirect flood flows?

As discussed above for thresholds (c.ii) and (c.iii), potential impacts related to drainage pattern alterations from the proposed project would be less than significant. The project would result in minor site-specific drainage pattern alterations, particularly associated with replacing existing above-ground pumps with new below-ground pumps; however, these alterations would occur within the existing footprint of Lindero Pump Station and would not impede or redirect flood flows on the project site or in the surrounding area. No impact would occur.

NO IMPACT

d. In flood hazard, tsunami, or seiche zones, would the project risk release of pollutants due to project inundation?

The project site is not located within a Special Flood Hazard Area identified by the Federal Emergency Management Agency (FEMA), as designated on FEMA Flood Insurance Rate Maps and shown on the City of Thousand Oaks online mapping tool (City of Thousand Oaks 2021). The project site is also not located in a coastal area that is subject to tsunami hazards or near an enclosed body of water that could inundate the site in the event of a seiche. No impact would occur.

NO IMPACT

e. Would the project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

As discussed under thresholds (a) and (b), respectively, the proposed project would not result in significant impacts to water quality or to groundwater resources. Following the completion of project construction, operations at the project site would continue as under present conditions. Additionally, the Conejo Valley Groundwater Basin has been designed as a very low priority basin and no Groundwater Sustainability Plan is required under the Sustainable Groundwater Management Act. The proposed project would not conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan. No impact would occur.

NO IMPACT

11 Land Use and Planning

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Physically divide an established community?	☐	☐	☐	■
b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	■

a. Would the project physically divide an established community?

The proposed project would implement necessary improvements at the existing Lindero Pump Station and would not expand the site or alter operation and maintenance of the pump station. The project would not physically divide an established community. No impact would occur.

NO IMPACT

b. Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

Per California Government Code 53091, building and zoning ordinances of a county or city do not apply to the location or construction of facilities for the production, storage, or transmission of water, wastewater, or electrical energy by a local agency. The proposed project would implement improvements to the existing Lindero Pump Station, which consists of water storage and transmission facilities, and is exempt from local building and zoning ordinances. Additionally, the proposed project would not change land uses on the project site. The proposed project would improve the reliability of water supply storage and conveyance, particularly for the Oak Park Region. The proposed project would not conflict with land use plans, policies, or regulations. No impact would occur.

NO IMPACT

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12 Mineral Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	■
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?	☐	☐	☐	■

a. Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

b. Would the project 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?

There are no known mineral resources or mineral resources extraction operations on or adjacent to the project site (City of Thousand Oaks 2013). The proposed project would not result in the loss of availability of a known mineral resource or a locally important mineral resource recovery site. No impact would occur.

NO IMPACT

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13 Noise

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project result in:				
a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☐	☐	■	☐
b. Generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	■	☐
c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☐	■

Steve Rogers Acoustics (SRA) prepared an analysis of operational noise associated with the proposed project. The reported findings are provided in Appendix G to this IS-MND. The operational noise analysis included collection of noise measurements on and around the project site to establish existing ambient conditions at nearby noise sensitive receivers, as well as noise measurements of existing pump station operational noise, and SoundPLAN modeling of proposed new pumps and generator noise. The operational analysis below is based on this noise report.

Overview of Noise and Vibration

Noise

Sound is a vibratory disturbance created by a moving or vibrating source, which is capable of being detected by the hearing organs. Noise is defined as sound that is loud, unpleasant, unexpected, or undesired and may therefore be classified as a more specific group of sounds. The effects of noise on people can include general annoyance, interference with speech communication, sleep disturbance, and, in the extreme, hearing impairment (Caltrans 2013).

HUMAN PERCEPTION OF SOUND

Noise levels are commonly measured in decibels (dB) using the A-weighted sound pressure level (dBA). The A-weighting scale is an adjustment to the actual sound pressure levels so that they are consistent with the human hearing response. Decibels are measured on a logarithmic scale that

quantifies sound intensity in a manner similar to the Richter scale used to measure earthquake magnitudes. A doubling of the energy of a noise source, such as doubling of traffic volume, would increase the noise level by 3 dB; dividing the energy in half would result in a 3 dB decrease (Caltrans 2013).

Human perception of noise has no simple correlation with sound energy: the perception of sound is not linear in terms of dBA or in terms of sound energy. Two sources do not "sound twice as loud" as one source. It is widely accepted that the average healthy ear can barely perceive changes of 3 dBA, increase or decrease (i.e., twice the sound energy); that a change of 5 dBA is readily perceptible (8 times the sound energy); and that an increase (or decrease) of 10 dBA sounds twice (half) as loud (10.5 times the sound energy) (Caltrans 2013).

Sound Propagation and Shielding

Sound changes in both level and frequency spectrum as it travels from the source to the receiver. The most obvious change is the decrease in the noise level as the distance from the source increases. The manner by which noise reduces with distance depends on factors such as the type of sources (e.g., point or line), the path of sound travel, site conditions, and obstructions.

Sound levels are described as either a "sound power level" or a "sound pressure level," which are two distinct characteristics of sound. Both share the same unit of measurement, the dB. However, sound power (expressed as L_{pw}) is the energy converted into sound by the source. As sound energy travels through the air, it creates a sound wave that exerts pressure on receivers, such as an eardrum or microphone, which is the sound pressure level. Sound measurement instruments only measure sound pressure and noise level limits are typically expressed as sound pressure levels.

Noise levels from a point source (e.g., construction, industrial machinery, air conditioning units) typically attenuate, or drop off, at a rate of 6 dBA per doubling of distance. Noise from a line source (e.g., roadway, pipeline, railroad) typically attenuates at about 3 dBA per doubling of distance (Caltrans 2013). Noise levels may also be reduced by intervening structures; the amount of attenuation provided by this "shielding" depends on the size of the object and the frequencies of the noise levels. Natural terrain features, such as hills and dense woods, and man-made features, such as buildings and walls, can significantly alter noise levels. Generally, any large structure blocking the line of sight provides at least a 5-dBA reduction in source noise levels at the receiver (Federal Highway Administration [FHWA] 2011). Structures can substantially reduce exposure to noise as well. The FHWA's guidance indicates that modern building construction generally provides an exterior-to-interior noise level reduction of 10 dBA with open windows and an exterior-to-interior noise level reduction of 20 to 35 dBA with closed windows (FHWA 2011).

Descriptors

The impact of noise is not a function of loudness alone. The time of day when noise occurs and the duration of the noise are also important factors of project noise impact. Most noise that lasts for more than a few seconds is variable in its intensity. Consequently, a variety of noise descriptors have been developed. The noise descriptors used for this study are the equivalent noise level (L_{eq}), and the community noise equivalent level (CNEL). L_{eq} is one of the most frequently used noise metrics; it considers both duration and sound power level. The L_{eq} is defined as the single steady-state A-weighted sound level equal to the average sound energy over a time period. When no time period is specified, a 1-hour period is assumed. The L_{max} is the highest noise level within the sampling period, and the L_{min} is the lowest noise level within the same period. Conversation is

typically in the 60 to 65-dBA L_{eq} range; ambient noise levels greater than 65 dBA L_{eq} can interrupt conversations (FTA [Federal Transit Administration] 2018).

Noise that occurs at night tends to be more disturbing than that occurring during the day. Community noise can also be measured using Community Noise Equivalent Level (CNEL), which is the 24-hour average noise level with a +5 dBA penalty for noise occurring from 7:00 p.m. to 10:00 p.m. and a +10 dBA penalty for noise occurring from 10:00 p.m. to 7:00 a.m. (Caltrans 2013).[4] The relationship between the peak-hour L_{eq} value and the CNEL depends on the distribution of noise during the day, evening, and night; however, noise levels described by L_{DN} and CNEL usually differ by 1 dBA or less. Quiet suburban areas typically have CNEL noise levels in the range of 40 to 50 CNEL, while areas near arterial streets are in the 50 to 60+ CNEL range (FTA 2018).

Ground-borne Vibration

Ground-borne vibration of concern in environmental analysis consists of the oscillatory waves that move from a source through the ground to adjacent buildings or structures and vibration energy may propagate through the buildings or structures. Vibration may be felt, may manifest as an audible low-frequency rumbling noise (referred to as ground-borne noise), and may cause windows, items on shelves, and pictures on walls to rattle. Although ground-borne vibration is sometimes noticeable in outdoor environments, it is almost never annoying to people who are outdoors. The primary concern from vibration is that it can be intrusive and annoying to building occupants at vibration-sensitive land uses and may cause structural damage.

Ground-borne vibration generated by manmade activities attenuates rapidly as distance from the source of the vibration increases. Vibration amplitudes are usually expressed in peak particle velocity (PPV) or root mean squared (RMS) vibration velocity, which are typically described in inches per second (in/sec). PPV is the maximum instantaneous positive or negative peak of a vibration signal as it corresponds to the stresses experienced by buildings (Caltrans 2020). High levels of ground-borne vibration may cause damage to buildings or structures, while lower levels may cause minor cosmetic (i.e., non-structural) damage such as cracks. These effects are exclusive to high impact activities such as blasting, pile-driving, vibratory compaction, demolition, drilling, and excavation. The American Association of State Highway and Transportation Officials (AASHTO) has determined vibration levels with potential to damage buildings and structures, as shown in Table 10.

Table 10 AASHTO Maximum Vibration Levels for Preventing Damage

Type of Situation	Limiting Velocity (in/sec)
Historic sites or other critical locations	0.1
Residential buildings, plastered walls	0.2–0.3
Residential buildings in good repair with gypsum board walls	0.4–0.5
Engineered structures, without plaster	1.0–1.5

Source: Caltrans 2020

Numerous studies have been conducted to characterize the human response to vibration. The vibration annoyance potential criteria recommended by Caltrans are based on the general human response to different levels of ground-borne vibration velocity levels, as described in Table 11.

[4] L_{eq} and CNEL are typically used to assess human exposure to noise; the use of A-weighted sound pressure level (dBA) is implicit. Therefore, when expressing noise levels in terms of L_{eq} or CNEL, the dBA unit is not included.

Table 11 Vibration Annoyance Potential Criteria

	Vibration Level (in/sec PPV)	
Human Response	**Transient Sources**	**Continuous/Frequent Intermittent Sources[1]**
Severe	2.0	0.4
Strongly perceptible	0.9	0.10
Distinctly perceptible	0.25	0.04
Barely perceptible	0.04	0.01

in/sec = inches per second; PPV = peak particle velocity

Source: Caltrans 2020

[1] Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, and vibratory equipment.

Project Noise Setting

SENSITIVE RECEIVERS

Noise exposure goals for various types of land uses reflect the varying noise sensitivities associated with those uses. The City of Thousand Oaks' Noise Element of the General Plan defines noise sensitive land uses as residential uses, schools, hospitals, churches, outdoor spectator sports facilities, performing arts facilities, hotels, and motels (City of Thousand Oaks 2000). The nearest noise-sensitive receivers are the Sapwi Trails Community Park located approximately 390 feet northwest, single-family homes along Coalfax Court approximately 490 feet to the northwest, and the Los Cerritos Middle School approximately 680 feet to the west of the project site. Additional sensitive receivers include residences along Erbes Road to the northwest and southwest of the project site, the closest of which is approximately 800 feet southwest and 870 feet northwest of the project site across Erbes Road.

NOISE MEASUREMENTS

The most prevalent source of noise in the project site vicinity is vehicular traffic on Erbes Road to the west and Avenida de las Flores to the west. To characterize ambient sound levels at and near the project site, two long term 24-hour noise measurements were conducted between April 22 and 23, 2021 (SRA 2021). Noise measurement locations are shown in Appendix G, and Table 12 summarizes the results of the noise measurements.

Table 12 Project Site Vicinity Sound Level Monitoring Results- Short-Term

				L_{eq}, 1-hour dBA	
Measurement Location		**Sample Times**	**Approximate Distance to Primary Noise Source**	**L_{eq}, 1-Daytime Maximum**	**L_{eq}, Nighttime Maximum**
NM-A	100 ft. east of Erbes Rd and 135 ft south of Sapwi Park	April 22-23, 2021	100 feet to Erbes Road	57.6	39.0
NM-B	Adjacent to and south of Sapwi Park, north of project site	April 22-23, 2021	475 feet to Erbes Road	54.6	38.3

L_{eq} = average noise level equivalent; dBA = A-weighted decibel

Source: SRA (Steve Rogers Acoustics) 2021; see Appendix G.

Regulatory Setting

General Plan Noise Element

Chapter 4.6 of the City of Thousand Oaks General Plan Noise Element develops more specific thresholds of significance where the ambient noise is at or above certain levels. Table 13 identifies noise impacts associated with project related noise level increases.

Table 13 City of Thousand Oaks Stationary Noise Standards

If the annual average noise level with the proposed project, cumulative projects, and General Plan buildout in an area currently used for or designated in the General Plan for a noise-sensitive land use[1] is expected to be:	A significant project or cumulative impact may result if the change in annual average noise levels from existing conditions due to all sources in an area currently used for or designated in the General Plan for a noise-sensitive land use[1] is:	The project alone may be considered to make a substantial contribution to significant cumulative impact if the change in annual average noise level due to the project is:
Less than 55 dBA CNEL	Not significant for any change in noise level	Not significant for any change in noise level
55 – 60 dBA CNEL	Equal to or greater than 3.0 dBA	Equal to or greater than 1.0 dBA
60 – 70 dBA CNEL	Equal to or greater than 1.5 dBA	Equal to or greater than 0.5 dBA
Greater than 70 dBA CNEL	Equal to or greater than 1.0 dBA	Equal to or greater than 0.5 dBA

[1] A noise-sensitive land use is a use for which the lower limit of the noise level considered "normally unacceptable" for development because of noise impact is 70 dBA CNEL or lower. In identifying land use areas, areas which are undevelopable for noise-sensitive uses because of slope, development restriction, easement, etc., or which are used for non-noise-sensitive components of a multiple-use or mixed-use project, should not be considered noise sensitive.

Source: City of Thousand Oaks 2000

Chapter 4.9 of the City of Thousand Oaks General Plan Noise Element limits construction activities to the hours between 7:00 a.m. and 7:00 p.m., Monday through Saturday, with no construction permitted on Sunday. As mentioned throughout this document and introduced in Initial Study Section 7, *Zoning,* pursuant to California Government Code 53091, building and zoning ordinances of a county or city do not apply to the location or construction of facilities for the production, storage, or transmission of water, wastewater, or electrical energy by a local agency. As a water supply infrastructure project being conducted by Calleguas Municipal Water District, the project is exempt from City planning and zoning requirements. However, Calleguas would conduct the proposed project with sensitivity to potential noise impacts on nearby land uses and for consistency with the City's Noise Element. Construction activities would not be conducted during nighttime hours, unless necessary due to shutdown restrictions that require around-the-clock work in order for Calleguas' customers to continue receiving necessary water supplies.

Vibration

The City of Thousand Oaks does not have defined thresholds for vibration. Therefore, vibration impacts are analyzed using the thresholds from Caltrans' Transportation and Construction Vibration Guidance Manual and the FTA's Transit Noise and Vibration Impact Assessment Manual (Caltrans 2020; FTA 2018).

Noise Level Increases over Ambient Noise Levels

The operational and construction noise limits used in this analysis are set at reasonable levels at which a substantial noise level increase as compared to ambient noise levels would occur. Operational noise limits are lower than construction noise limits to account for the fact that permanent noise level increases associated with continuous operational noise sources typically result in adverse community reaction at lower magnitudes of increase than temporary noise level increases associated with construction activities that occur during daytime hours and do not affect sleep. Furthermore, these noise limits are tailored to specific land uses; for example, the noise limits for residential land uses are lower than those for commercial land uses. The difference in noise limits for each land use indicates that the noise limits inherently account for typical ambient noise levels associated with each land use. Therefore, an increase in ambient noise levels that exceeds these absolute limits would also be considered a substantial increase above ambient noise levels. As such, a separate evaluation of the magnitude of noise level increases over ambient noise levels would not provide additional analytical information regarding noise impacts and therefore is not included in this analysis.

a. Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction Noise

Construction activity would generate temporary noise in the project area, potentially affecting sensitive receivers. Maximum hourly and instantaneous noise for the nearest noise sensitive receivers that would occur during project construction were calculated in the Roadway Construction Noise Model (RCNM), based upon assumptions about the equipment types and quantities required during construction. In order to characterize the maximum potential impacts assoicated with the project activities, conservative assumptions about equipment usage were input into the RCNM. Specifically, although the project site is likely not large enough to accommodate more than one large piece of equipment at a time (refer to Figure 3 Proposed Project Site Plan and Access within Lindero Pump Station), it was assumed that the construction equipment associated with each phase of project construction would be operated on every day of construction activities for the respective phase.

The footnotes to Table 14, below, indicate that for each of the five construction phases, four pieces of large equipment would be operated on the proejct site. As mentioned, this is unlikely to occur because the project site is likely only large enough to accommodate one large piece of equipment at a time. The over-estimation of construction noise levels facilitates the capture of all potential impacts of the project, which is considered a conservative approach for CEQA purposes. This approach of over-stating the intensity of equipment usage was also employed for other issue area analyses that are informed by equipment types and quantities (refer to the discussions provided in Environmental Checklist Section 3, *Air Quality*, Section 6, *Energy*, and Section 8, *Greenhouse Gas Emissions*).Construction noise levels at the nearest sensitive receptors are provided below in Table 14, and the RCNM calculations used to inform this table are provided in Appendix H.

Table 14 Construction Noise Levels at Nearest Receivers

Construction Equipment	Land Use	Distance to Receiver (feet)	Noise Level, dBA L_{eq}	Noise Level, dBA L_{max}
Demolition[1]	Residential	490	65	70
	Park	390	67	72
Site Preparation[2]	Residential	490	62	61
	Park	390	64	63
Grading[3]	Residential	490	62	63
	Park	390	64	65
Building Construction[4]	Residential	490	60	61
	Park	390	62	63
Paving[5]	Residential	490	62	63
	Park	390	64	65

[1] Demolition: excavator, concrete saw, backhoe, generator

[2] Site Preparation: backhoe, excavator, drill rig, generator

[3] Grading: backhoe, compactor, roller, generator

[4] Building Construction: aerial lift, backhoe, drill rig, excavator

[5] Paving: compactor, generator, loader, paver

Leq: one-hour equivalent noise level; L_{eq}: instantaneous maximum noise level; dBA: A-weighted decibel

Notes: See Appendix H for RCNM results.

As discussed above and shown in the footnotes to Table 14, this analysis assumed that during each of the five construction phases of the proposed project, four different pieces of equipment would be operated at the same time. However, due to the small size of the project site, it is unlikely that more than one piece of equipment would be operated within the project site at any one given time. The over-stating of equipment usage intensity provides that all potential noise impacts are captured in the impact analysis provided herein; this conservative approach was also used for the characterization of impacts associated with air quality, greenhouse gas emissions, and energy.

The closest sensitive receivers to project construction would be Sapwi Park users approximately 390 feet to the north and residences 490 feet to the northwest of the project site. As shown in Table 14, construction noise levels would range from 60 dBA to 67 dBA L_{eq} at the residences to the northwest and from 61 dBA to 72 dBA L_{max} at Sapwi Park users; these levels do not exceed the FTA's daytime construction noise threshold of 80 dBA L_{eq}. Construction noise levels at other nearby sensitive receivers would be less than the noise levels at the nearest sensitive receiver due to distance attenuation. Therefore, construction noise impacts during any phase of construction would be less than significant.

Operational Noise

Lindero Pump Station currently has horizontal split case pumps which are situated aboveground. Under the proposed project, the horizontal split case pumps would be replaced with three 1,000 horsepower vertical turbine pumps. The replacement pumps would primarily be situated belowground. A removable protective canopy would be installed over the pumps to protect the motors from over-heating. A new stationary 3-megawatt diesel backup generator would also be

installed at the pump station. The new generator design features a critical class silencer and a sound-attenuating enclosure, which includes wall and roof assemblies capable of achieving noise attenuation, specially treated ventilation openings, and sealed acoustical doors.

A site-specific operational noise report was prepared by Steve Rogers Acoustics for the project (SRA 2021; included as Appendix G). Noise impacts from the new pumps and generator were analyzed through SoundPLAN software to create a scale 3D computer model of the project site and its surroundings, including the topography of the area and presence of existing buildings. The model allows for the evaluation of various scenarios considering various noise sources, including the existing pumps, new generator (with and without attenuation), and replacement pumps. Noise spectrum data provided by U.S. Motors was input into the model for the new pumps and Kohler and Caterpillar provided noise spectrum data for the new generator (SRA 2021).

Assuming all three pumps operating simultaneously, the model results showed that homes on Coalfax Court would be exposed to pump noise level of 46 dBA L_{eq}, homes at the corner of Avenida de las Flores and Erbes Road would be exposed to pump noise level of 44 dBA L_{eq}, and homes on Erbes Road would be exposed to pump noise level of 43 dBA L_{eq} (SRA 2021). Appendix G shows the noise maps created from SoundPLAN modeling for a visual representation. These noise levels would be lower than the existing noise levels attributable to existing pump noise levels that range from 44 dBA to 50 dBA L_{eq} at nearby noise sensitive receivers, or a reduction of 4 dBA for homes on Coalfax Court, 3 dBA for homes at the corner of Avenida de las Flores and Erbes Road, and 2 dBA at homes on Erbes Road (SRA 2021).

The new generator was also modeled in SoundPLAN with all three new pumps operating simultaneously. As mentioned above, the new generator would be outfitted with a critical class silencer (for the exhaust) and it would be situated within a sound-attenuating enclosure (for the engine); these features are part of the project design to effectively minimize noise generation associated with the intermittent operation of the diesel backup power generator. Noise levels under this scenario (operation of the new generator) resulted in homes on Coalfax Court exposed to a combined noise level of 59 dBA L_{eq}, homes at the corner of Avenida de las Flores and Erbes Road would be exposed a combined noise level of 54 dBA L_{eq}, and homes on Erbes Road would be exposed to a combined level of 52 dBA L_{eq} (SRA 2021). The combined operational noise from the three new pumps and the new generator operating simultaneously would not exceed Calleguas' noise standard of 60 dBA at residential receivers (to the northwest, west, and southwest of the project site). Therefore, potential impacts of the project related to temporary or permanent noise generation would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project result in generation of excessive ground-borne vibration or ground-borne noise levels?

Project construction would not involve activities typically associated with excessive ground-borne vibration such as pile driving or blasting. As discussed under noise threshold (a), above, the approach employed for this analysis assumed that four pieces of equipment would be operated on the project site during each of the project's five construction phases, which is a highly conservative approach because the project site is likely only large enough to accommodate one large piece of equipment at a time. This approach of over-stating the intensity of equipment usage, which was also employed for other issue area analyses informed by equipment types and quantities (refer to the discussions provided in Environmental Checklist Section 3, *Air Quality*, Section 6, *Energy*, and

Section 8, *Greenhouse Gas Emissions*), fully characterizes the potential noise and vibration impacts of the project, as the actual equipment usage intensity would likely be less than assumed herein.

The City of Thousand Oaks has not adopted standards to assess vibration impacts; therefore, Caltrans' thresholds for the assessment of vibration from transportation projects were used to inform this analysis and are summarized in Table 10 and Table 11. The Caltrans thresholds are reflective of standard practice for analyzing vibration impacts on structures from continuous and intermittent sources and are therefore appropriate for use in this analysis. Table 15, below, provides the calculated vibration levels associated with project construction equipment, in comparison to the aforementioned thresholds.

Table 15 Vibration Levels at Sensitive Receivers

Equipment	Estimated in/sec PPV at Nearest Building (490 feet)
Roller	0.008
Threshold – Damage to structures	**0.2**
Threshold – Distinctly perceptible	**0.25**
Threshold Exceeded?	No

Source: FTA 2020

As shown above, project construction activities would not result in the exceedence of vibration thresholds. Therefore, construction vibration impacts, including with consideration to the conservative inventory of equipment types and quantities used to inform this analysis, would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

The airport nearest to the project site, Camarillo Airport, is located approximately 14.2 miles to the east. The project would not be located within the noise contours of the airport, as shown in Exhibit 2J of the Ventura County Airport Comprehensive Land Use Plan (Ventura County Land Use Commission 2000). Therefore, no substantial noise exposure from airport noise would occur to construction workers or users of the project and no impacts would occur.

NO IMPACT

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14 Population and Housing

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?	☐	☐	☐	■
b. Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	■

a. Would the project induce substantial unplanned 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)?

The proposed project would not directly or indirectly induce unplanned population growth or cause increased development. The proposed project would rehabilitate the existing Lindero Pump Station, which has not been substantially modified since its original construction in 1969, and is necessary to support current customers in the Oak Park Region of Calleguas' service area. No impact associated with unplanned population growth would occur as a result of the project.

NO IMPACT

b. Would the project displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

The proposed project would enhance water supply reliability for residents and businesses that rely on conveyance from Lindero Pump Station to meet water demands. The proposed project would not necessitate the construction of replacement housing. No impact would occur.

NO IMPACT

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15 Public Services

		Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a.	Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
	1 Fire protection?	☐	☐	☐	■
	2 Police protection?	☐	☐	☐	■
	3 Schools?	☐	☐	☐	■
	4 Parks?	☐	☐	☐	■
	5 Other public facilities?	☐	☐	☐	■

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

a.1. Fire protection?

a.2. Police protection?

a.3. Schools?

a.4. Parks?

a.5. Other public facilities?

As listed above, for the purposes of this analysis, public services include fire and police protection, as well as schools, parks, and other public facilities such as libraries and community-based resources. As discussed in Environmental Checklist Section 14, *Population and Housing*, the proposed project would not directly or indirectly induce population growth. Because the project would not increase population, it also would not increase existing demands for public facilities, including parks and schools. In addition, as discussed throughout this document, operation and maintenance activities following the completion of project construction would be consistent with

existing operation and maintenance activities at the pump station, with the exception that the proposed project would improve the reliability of pump station operations and decrease the need for replacement parts and repairs. The proposed project would not introduce any features or facilities requiring additional or unusual fire or police protection or response.

In the event that fire services are required at the project site, service would be provided from Ventura County Fire Station 37, located 3 miles from the pump station at 2010 Upper Ranch Road and/or from Ventura County Fire Station 31, located 3.2 miles from the pump station at 151 Duesenberg Drive, both in Thousand Oaks. Should police service be required at the project site, the nearest police station is the Ventura County Sheriff's Department office located at 2101 East Olsen Road, approximately three miles north of Lindero Pump Station. The proposed project would not change existing demand for fire or police protection services because it would not cause or contribute to population growth. No impact would occur.

NO IMPACT

16 Recreation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	■
a. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	■

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

b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

The project site is located adjacent to the Sapwi Trails Community Park open space area, which bounds the project site to the north, east, and south. The northern portion of the park includes a skate park, children's playground, and disc golf course. The eastern and southern portion of the park involve mostly trail uses, as well as a bike park and additional disc golf course. Construction activities would result in short-term, temporary impacts to recreational users through the introduction of construction noise and dust. These impacts would be limited to the construction period and no adverse long-term impacts to recreationists would occur. Due to the temporary nature associated with impacts related to construction activities, the construction of replacement parks or additional park or public facilities would not be necessary. The proposed project would not increase the use of the adjacent parks or other local recreational resources, facilities, or opportunities; the project would not result in deterioration of parks. The proposed project does not include recreational facilities, nor does it require the construction or expansion of recreational facilities. No impact would occur.

NO IMPACT

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17 Transportation

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?	☐	☐	■	☐
b. Conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?	☐	☐	☐	■
c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?	☐	☐	☐	■
d. Result in inadequate emergency access?	☐	☐	☐	■

a. Would the project conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?

Construction of the proposed project would temporarily increase traffic associated with the project site due to construction workers traveling to and from the site, the transport of construction equipment and machinery to the site, and the export of solid waste materials for off-site disposal. Construction vehicles and equipment would access the pump station from Erbes Road, using the existing paved driveway. No modifications to the alignment of the pump station's existing paved driveway are required to accommodate construction access. Calleguas would coordinate with the City of Thousand Oaks prior to the start of construction regarding the preferred haul routes that construction vehicles and equipment should use; this is not a regulatory requirement, but rather an effort to minimize or avoid traffic disruptions from the project. It is anticipated that construction vehicles approaching the pump station would exit SR 23 at Janss Road and turn left on Erbes Road, then turn right into Lindero Pump Station. Upon exiting the pump station, it is anticipated that construction vehicles would turn right onto Erbes Road then turn left on Avenida De Los Arboles and continue to SR 23 where vehicles may enter either the north- or south-bound lanes. These are the assumed routes and final construction haul routes would be confirmed in coordination between Calleguas and the City of Thousand Oaks.

No vehicles leaving the pump station would turn left onto Erbes Road, consistent with current traffic signage. In addition, heavy-duty equipment would be staged at the project site, reducing the need for daily vehicle trips to and from the site. Following the completion of project construction, traffic associated with operation and maintenance activities would be comparable to present conditions. It is likely that fewer trips by maintenance personnel would be required to and from the project site during operations, as implementation of the proposed project would improve reliability of the pump

station and reduce the need for replacement parts or repairs. Therefore, because construction-related traffic would be short-term and would cease upon completion of construction activities, in addition to the project likely reducing maintenance-related trips during project operations, potential impacts associated with management of the circulation system would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)?

CEQA Guidelines Section 15064.3(b) identifies criteria for evaluating transportation impacts and states that vehicle miles traveled (VMT) exceeding a specific threshold may indicate a significant impact. A VMT calculation is typically conducted on a daily or annual basis to determine operational usage of a project. In accordance with Section 15064.3(b)(3) of the State CEQA Guidelines, a lead agency may include a qualitative analysis of operational and construction traffic.

Construction of the proposed project would increase vehicle trips to and from the project site due to construction worker trips, as well as material and equipment deliveries. VMT associated with these activities would cease once construction is completed and VMT levels would return to pre-project conditions. Following the completion of construction activities, operation and maintenance of the pump station would be consistent with existing conditions, with the exception that fewer repairs are anticipated due to the improved performance and reliability to be provided by the project. Therefore, because VMT from construction would be temporary and short-term and limited to the active construction period and operation and maintenance activities would likely be less frequent than under existing conditions, no impact associated with VMT would occur and the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b).

NO IMPACT

c. Would the project substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible use (e.g., farm equipment)?

As discussed under Initial Study Section 8, *Project Description*, the proposed project would repave the existing driveway and install a new 18-foot-wide entry with a driveway ramp in the eastern portion of the northern perimeter wall, as shown on Figure 3. This new entry and ramp would provide access to the project's electrical equipment. The project would not change the alignment of existing roadways or introduce any roadway hazards. Construction vehicles would turn right from Erbes Road into the project site and vehicles leaving the pump station would turn right onto Erbes Road, consistent with current signage. No impact would occur.

NO IMPACT

d. Would the project result in inadequate emergency access?

No changes to the existing street system would occur as a result of the project and emergency access to the project site would be maintained throughout construction and operation. Project operation and maintenance would not introduce new activities or traffic with the potential to result in inadequate emergency access. As discussed in Environmental Checklist Section 15, *Public Services,* the proposed project would not increase demand for emergency services at the project site. No impact associated with inadequate emergency access would occur as a result of the project.

NO IMPACT

18 Tribal Cultural Resources

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in a Public Resources Code Section 21074 as either a site, feature, place, or 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:				
a. 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)?	☐	■	☐	☐
b. 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 Resources Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.	☐	■	☐	☐

California Assembly Bill 52 of 2014 (AB 52) was enacted on July 1, 2015, and expands CEQA by defining a new resource category, "tribal cultural resources." AB 52 states, "A project with an effect that may cause a substantial adverse change in the significance of a tribal cultural resource is a project that may have a significant effect on the environment" (PRC Section 21084.2). It further states the lead agency shall establish measures to avoid impacts altering the significant characteristics of a tribal cultural resource, when feasible (PRC Section 21084.3).

PRC Section 21074 (a)(1)(A)-(B) defines tribal cultural resources as being "sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe" and also meets one or both of the following criteria:

1) Listed or eligible for listing in the CRHR or in a local register of historical resources as defined in PRC section 5020.1(k), or

2) 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 PRC Section 5024.1. In applying these criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.

AB 52 also establishes a formal consultation process for California tribes regarding those resources. The consultation process must be completed before a CEQA document can be certified or adopted. Under AB 52, lead agencies are required to "begin consultation with a California Native American tribe that is traditionally and culturally affiliated with the geographic area of the proposed project."

Native American tribes to be included in the process are those having requested notice of projects proposed in the jurisdiction of the lead agency. No tribes have officially requested notification of Calleguas' activities under AB 52, such that formal consultation is not required for the project. However, Calleguas has elected to conduct this consultation as a courtesy to Native American tribes associated with the area.

a. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code Section 21074 that is 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)?

b. Would the project cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code 21074 that is 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?

On July 15, 2021, the NAHC provided records search results for the project site from the SLF. This information was requested by Rincon Consultants, Inc., on behalf of Calleguas, to identify the potential for cultural resources within the pump station site and to obtain contact information for Native American groups or individuals who may have knowledge of cultural resources in the vicinity of Lindero Pump Station. The response provided by the NAHC confirmed that the SLF search was negative for cultural resources, indicating the NAHC has no knowledge of sacred sites in the vicinity of the project area. In addition, no evidence of cultural materials was identified during the pedestrian field survey on August 17, 2021, as discussed in Environmental Checklist Section 5, *Cultural Resources*, and in Appendix E to this IS-MND.

On August 25, 2021, Calleguas distributed AB 52 consultation letters to individuals representing six Native American Tribes, as follows:

- Julie Tumamait-Stenslie, Chairperson, Barbareño/Ventureño Band of Mission Indians
- Julie Quair, Chairperson, Chumash Council of Bakersfield
- Martinez Sullivan, Chairperson, Coastal Band of the Chumash Nation
- Fred Collins, Spokesperson, Northern Chumash Tribal Council
- Mark Vigil, Chief, San Luis Obispo County Chumash Council
- Kenneth Kahn, Chairperson, Santa Ynez Band of Chumash Indians

The AB 52 letters, which included a description of the proposed project, relevant maps, and contact information for Calleguas, were distributed via Certified Mail to contacts with a physical address provided, and via email to contacts with only a P.O. Box provided. Under AB 52, Native American

tribes have 30 days to respond to a consultation letter and request further project information and formal consultation.

Chairperson Tumamait-Stenslie of the Barbareño/Ventureño Band of Mission Indians requested formal consultation on the proposed project, in response to Calleguas' outreach via the AB 52 letters. Calleguas has engaged in consultation with Chairperson Tumamait-Stenslie regarding interests and concerns of the Barbareño/Ventureño Band of Mission Indians. Specific or recorded tribal cultural resources have not been identified at Lindero Pump Station; however, the tribe has expressed concern that buried resources could be present due to the previous recordation of archaeological sites within the adjacent Sapwi Trails Community Park open space area.

Ground-disturbing activities conducted under the proposed project would be limited to previously disturbed areas, where the potential to encounter resources is low. Due to previous disturbance and the existing development of the project site, as well as the lack of previous resources at the project site, it is considered highly unlikely that tribal cultural resources or human remains would be encountered during project construction. However, to minimize the potential for the project to result in adverse impacts to such resources in the unlikely event of an inadvertent discovery during construction activities, all construction personnel would receive sensitivity training for cultural resources through the CARE Program defined under Mitigation Measure CR-1, and appropriate reporting and response actions would be conducted should an unanticipated find occur, in accordance with Mitigation Measure CR-2.

Mitigation Measures

Mitigation Measure CR-1, *Cultural and Archeological Resources Education (CARE) Program*, would provide cultural resources sensitivity training through the CARE Program, and Mitigation Measure CR-2, *Unanticipated Find of Archaeological Resources*, would be implemented to provide staff training and appropriate response actions. These measures are presented in full in Environmental Checklist Section 5, *Cultural Resources*, to minimize or avoid potential impacts of the project to archaeological resources, and would be equally effective at minimizing or avoiding potential impacts to tribal cultural resources, as discussed above.

Significance after Mitigation

It is considered unlikely that an unknown resource would be encountered during project construction, due to the absence of recorded resources and the project's activities occurring in previously disturbed areas. However, should unknown buried resources be present at the project site and encountered during project construction, they would not experience a "substantial adverse change in significance" because construction workers would be trained on how to identify potential resources (Mitigation Measure CR-1) and how to respond to an unanticipated find (Mitigation Measure CR-2). Potential impacts to tribal cultural resources would be less than significant.

LESS THAN SIGNIFICANT WITH MITIGATION INCORPORATED

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19 Utilities and Service Systems

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Would the project:				
a. Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☐	■
b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?	☐	☐	☐	■
c. 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?	☐	☐	☐	■
d. Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	■	☐
e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	■	☐

a. Would the project require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?

As discussed throughout this document, the proposed project would provide necessary improvements to existing water infrastructure at Lindero Pump Station. The project would not expand existing facilities, but would improve reliability. The project would not generate wastewater or introduce a new demand for wastewater treatment.

As discussed in Environmental Checklist Section 10, *Hydrology and Water Quality*, the project would not introduce new additional impervious surfaces or otherwise substantially alter existing drainage

patterns on the project site, which is currently developed with the existing Lindero Pump Station. Surface runoff and drainage patterns would not be modified as a result of the project, and the project would not increase runoff rates or result in flooding on- or off-site.

Electric power to the project site would not be altered by project construction or operation. The proposed project would install a backup power generator at the site, which would improve water supply reliability to the Oak Park Region in the event of a power outage. The proposed project would also replace the pump station's existing electrical system, which is currently at a non-standard voltage, due to system age and a lack of availability of replacement parts. Under the proposed project, electrical and controls equipment would be replaced with new equipment that runs on a standard voltage, including the main transformer, motor control center, and uninterruptible power supply. The existing electrical and control conduits would also be replaced. Following construction of the project, the Lindero Pump Station would operate at its design capacity with improved-efficiency pumps; energy consumption would not increase overall as a result of the project. The project would not involve any components requiring natural gas service and would not involve the relocation of existing natural gas facilities.

A SCADA system is currently used to remotely monitor and control the existing pump station and would continue to be used for pump station operations following implementation of the proposed project. No substantial changes are proposed to the existing SCADA system. The project would not require the construction or relocation of telecommunication facilities. No cell towers or wireless equipment are located within the project site and no such facilities would be constructed or relocated as a result of the project. No impact would occur.

NO IMPACT

b. Would the project have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?

Construction of the proposed project would require a temporary water supply for dust suppression during ground disturbing activities, in accordance with standard construction BMPs, including, but not limited to, those specified in Mitigation Measure BIO-2, *Construction BMPs for Biological Resources*. Water for dust suppression would be provided from existing sources and would not affect water supply availability. Following completion of construction, project operation would increase reliability of water supply conveyance through Lindero Pump Station to existing customers. Operation of the project would not require a water supply, but rather, the project is required to reliably manage the existing water supply. The project would have no impact on water supply availability.

NO IMPACT

c. Would the project 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?

The proposed project would not introduce a new source of wastewater or need for wastewater treatment at Lindero Pump Station. The pump station has an existing bathroom and septic system for wastewater disposal. These facilities would not be modified by the proposed project. No impact would occur.

NO IMPACT

d. Would the project generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

e. Would the project comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

During construction of the proposed project, solid waste would be generated in the form of demolition debris, consisting of the existing pump station facilities and components that would be replaced as part of the project. The electrical system components, horizontal split case pumps, control valves, surge tank air compressors, building roof, main door and glass sidelights, and interior and exterior lighting and fans would be dismantled during project construction and would be removed from the site via truck and transported to either a solid waste facility for disposal or recycling. It is anticipated the majority of solid waste would be serviced by the Simi Valley Landfill and Recycling Center (SVLRC) located approximately 6.3 miles northeast of the project site. The SVLRC is permitted to accept up to 64,750 tons per week of refuse, can accept 6,250 tons of recyclable materials, and, as of January 2019, has a total remaining capacity of 82,954,873 tons (Waste Management 2021; CalRecycle 2021).

Following the completion of project construction, operation and maintenance activities would be consistent with current operation of the pump station, likely with fewer repairs necessary, as the proposed project would rehabilitate the facility. The need for replacement parts in future operations is expected to decrease with the project such that solid waste generated during operation would also decrease. The project would not generate solid waste in excess of State or local standards. The project would be implemented in compliance with all federal, State, and local statutes and regulations for solid waste. Potential impacts associated with solid waste would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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20 Wildfire

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:				
a. Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	■	☐
b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	■	☐
c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☐	■
d. Expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	■	☐

a. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project substantially impair an adopted emergency response plan or emergency evacuation plan?

The California Department of Forestry and Fire Protection (CAL FIRE) evaluates fire hazards based on fuel, slope, and weather, and identifies hazard areas as Moderate, High, or Very High, which are mapped on Fire Hazard Severity Zone (FHSZ) maps. These maps reflect "hazard" not "risk", where hazards are based on the physical conditions that create a likelihood and expected fire behavior over a 30- to 50-year period without consideration to modifications such as fuel reduction efforts (CAL FIRE 2021). In comparison, "risk" is the potential damage a fire could do to an area under existing conditions, including with consideration to fuel reduction efforts and other modifications such as the maintenance of defensible space and ignition resistant building construction (CAL FIRE 2021). FHSZ designations are used for planning purposes, including to designate areas where California's defensible space standards and wildland urban interface building codes are required.

Lindero Pump Station is located within a Very High FHSZ (CAL FIRE 2020). As discussed in Environmental Checklist Section 9, *Hazards and Hazardous Materials*, and Section 17, *Transportation*, neither construction nor operation and maintenance of the proposed project would impair or conflict with an adopted emergency response or evacuation plan and the project would not result in inadequate access for emergency response vehicles. Potential impacts of the project associated with implementation of an emergency response or evacuation plan in a Very High FHSZ would be less than significant.

LESS THAN SIGNIFICANT IMPACT

b. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project, due to slope, prevailing winds, and other factors, exacerbate wildfire risks and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

As discussed under threshold (a), above, Lindero Pump Station is located within a Very High FHSZ; this indicates that the slope, winds, and fuel availability around the project site indicate a high potential for fire, absent any fuel modification efforts. Construction of the proposed project would include the use of heavy-duty equipment; in accordance with PRC Section 4442, equipment including earth-moving and portable construction equipment with internal combustion engines would be equipped with spark arrestors to prevent the emission of flammable debris from exhaust, when operating on any forest-covered, brush-covered, or grass-covered land. In addition, PRC Sections 4427 and 4431 specify standards for conducting construction activities on days when a burning permit is required, and PRC Section 4428 requires construction contractors to maintain fire suppression equipment during the highest fire danger period (April 1 to December 1) when operating on or near any forest-covered, brush-covered, or grass-covered land.

The project site consists of Lindero Pump Station, which is paved; however, the open space area adjacent to and surrounding Lindero Pump Station to the north and east is characterized as grass-covered land. Therefore, the fire precautions prescribed by PRC Section 4442, 4427, 4428, and 4431 would be implemented during project construction activities. Through compliance with applicable PRC provisions, project construction would not exacerbate wildfire risk. Following completion of the construction period, operation and maintenance activities would be comparable to existing conditions, with fewer activities required to repair or replace pump station components. The project would not introduce habitable structures or expose individuals to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire. The proposed project would not exacerbate fire risks and potential impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

c. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

As noted above, the existing Lindero Pump Station is located within a Very High FHSZ (CAL FIRE 2020). However, the project would include replacement of existing equipment at the pump station, installation of a backup power generator, and improvements to the existing site access, as shown on Figure 3, in Initial Study Section 8, *Project Description*; the project does not include new roads or structures outside the project site. Operation and maintenance of the pump station following project implementation would be comparable to existing conditions. The project would not alter or exacerbate fire risk. No impact would occur.

NO IMPACT

d. If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project expose people or structures to significant risks, including downslopes or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

Generally, a project may have a significant impact if it would expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes. When hillside development or other such development that would disturb slopes is damaged or destroyed by a wildfire, subsequent precipitation events could result in flooding or landslides.

Although the project is located immediately downslope from naturally vegetated hillsides, construction would occur within previously developed land, rather than within the adjacent Sapwi Trails Community Park. Additionally, as discussed in Environmental Checklist Section 10, *Hydrology and Water Quality*, the proposed project would not alter existing drainage patterns or stormwater runoff rates or patterns, and would include the use of stormwater BMPs to avoid causing or contributing to increased runoff, post-fire slope instability, or drainage changes. Compliance with applicable regulatory requirements would not expose people or structures to significant downslope or downstream flooding or landslide risks resulting from runoff, post-fire slope instability, or drainage changes. Impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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21 Mandatory Findings of Significance

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less than Significant Impact	No Impact
Does the project:				
a. Have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☐	☐	■	☐
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)?	☐	☐	■	☐
c. Have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	■	☐

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

Potential impacts to biological resources are addressed in Environmental Checklist Section 4, *Biological Resources*. As described therein, there is potential for certain special-status plant and wildlife species to occur on or near the project site. Implementation of Mitigation Measures BIO-1, *Biological and Environmental Awareness Training (BEAT) Program*; BIO-2, *Construction BMPs for Biological Resources*; and BIO-3, *Pre-Construction Nesting Bird Surveys*, would mitigate direct and indirect impacts to special-status plant and wildlife species to a less-than-significant level. Therefore, the project would not substantially reduce the habitat of fish and wildlife species, cause a

fish or wildlife population to drop below self-sustaining levels, eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal. In addition, as discussed in Environmental Checklist Section 5, *Cultural Resources*, the project would not eliminate important examples of major periods of California history or prehistory because none are known to be present in the project area. Potential impacts would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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

Cumulative impacts occur when similar impacts of two or more projects combine in geographic and/or temporal scope to result in new or intensified impacts, which may be "cumulatively considerable" (CEQA Guidelines Section 15065(a)(3)). The cumulative scenario for the proposed project is defined as construction or development projects that would occur within the same geographic and temporal scope as the proposed project. An overview of the cumulative scenario for the proposed project is provided below.

Table 16 Cumulative Scenario Overview

City of Thousand Oaks Projects	Relevance to the Cumulative Scenario
Citywide Street Overlay and Resurfacing Program (City of Thousand Oaks)	If resurfacing of Janss Road, Erbes Road, or Avenida De Los Arboles in the vicinity of Lindero Pump Station were to occur at the same time as proposed project construction, it may be possible for cumulative impacts to occur. Specifically, if project-related construction vehicles and equipment traveling to and/or from Lindero Pump Station were to be present on the aforementioned roadways or associated detour routes at the same time as vehicles and equipment associated with the City's roadwork, cumulative traffic delays and congestion could occur. However, it is anticipated that project-related construction traffic would be routed and/or timed to avoid conflicting with City roadwork, such that the potential for cumulative impacts to occur would be avoided. If cumulative impacts would occur, they would be less than significant due to the temporary and short duration of construction activities.
Flashing Yellow Arrow Traffic Signals Project (City of Thousand Oaks)	If installation of new traffic signals along Janss Road, Erbes Road, or Avenida De Los Arboles in the vicinity of Lindero Pump Station were to occur at the same time as proposed project construction, it may be possible for cumulative impacts to occur. As described above with respect to the Citywide Street Overlay and Resurfacing Program, it is anticipated that such impacts would be avoided or, if they would occur, would be less than significant.
Janss Road Underground Utilities Project (City of Thousand Oaks)	As part of the Utility Undergrounding Master Plan, the utilities above-ground on Janss Road will be placed underground. This project is currently in the planning and design phase, and the construction schedule is not expected to be developed until 2023, with construction activities occurring after 2023; as such, it is unlikely that this project and the proposed project would occur at the same time.
Lawrence Dr. and Teller Rd. Intersection Improvements (City of Thousand Oaks)	As part of the City's signal prioritization plan, the City is improving the intersection of Lawrence and Teller to feature a new traffic signal. Construction of this project has initiated, and could overlap with the proposed project construction schedule; however, even if construction overlaps, this intersection is roughly eight miles southwest of Lindero Pump Station, and therefore cumulative impacts are unlikely to occur.

Los Feliz Sidewalk Project (City of Thousand Oaks)	The proposed improvements include installing new sidewalk on both sides of Los Feliz Drive, between Conejo School Road and Thousand Oaks Boulevard. Construction of this project has initiated and could be concurrent with the proposed project. However, this project would not occur on Erbes Road, which would be used for proposed project access, and cumulative impacts are therefore unlikely to occur.
State Route 23 Pavement Rehabilitation Project (Caltrans)	The SR 23 Project is replacing pavement on the outer two lanes of SR 23 from U.S. 101 to SR 118 to provide a service life of 40 years. Construction vehicles and equipment for the proposed project would use SR 23 in transit to and from the project site. The SR 23 Project is currently under construction, and proposed project traffic would comply with traffic control around the SR 23 Project activities, as applicable. Cumulative impacts are not anticipated.

Source: City of Thousand Oaks 2022a; City of Thousand Oaks 2022b; Caltrans 2022

As indicated above, the cumulative scenario for the proposed project is defined by transportation and circulation improvements being conducted by the City of Thousand Oaks and Caltrans. No other construction or development projects are approved or ongoing within the same geographic and temporal scope as the proposed project. Therefore, the cumulative scenario is limited to those projects summarized above.

In order for a project to contribute to cumulative impacts, it must result in some level of impact on a project-specific level. A number of the environmental topic areas would experience "No Impact" as a result of the proposed project, and would therefore have no potential to result in cumulative impacts. These environmental topics include the following, which are not addressed further herein:

- Agricultural and Forestry Resources
- Land Use
- Mineral Resources
- Public Services
- Recreation

As described in the analyses presented in Environmental Checklist Sections 1 through 20, which address each of the environmental issue areas identified in the State CEQA Guidelines Appendix G Environmental Checklist, all impacts associated with project construction and operation would either be a "Less than Significant Impact" or "Less than Significant with Mitigation Incorporated". The following discussions assess the potential cumulative impacts that may occur under these environmental topics, with consideration to the cumulative scenario summarized above.

- **Aesthetics.** Temporary aesthetic impacts associated with the presence and use of equipment and machinery at and around the project site may be visible from public access points. As discussed in Environmental Checklist Section 1, *Aesthetics*, the areas around the site are not identified as scenic vistas or scenic resource areas. The proposed project would not conflict with applicable zoning and other regulations governing scenic quality or create a significant new source of light and glare when considered in conjunction with other cumulative development. Therefore, no contribution to a cumulative impact would occur.
- **Air Quality.** Air pollutant and GHG emissions disperse from their original source and can affect the entire air basin (or, with global warming, potentially the entire Earth). For air quality, the baseline analysis addresses the cumulative condition or the project's contribution to the larger picture which is assessed in analyses of consistency with regional air quality strategies and

pollutant dispersal. As discussed in Environmental Checklist Section 3, *Air Quality,* the proposed project's construction and operational air quality emissions would be less than significant. Construction emissions would be adequately controlled by existing regulations and the project's air quality impacts would not individually jeopardize attainment of the CAAQS or NAAQS and the project's contribution to cumulative impacts would not be considerable.

- **Biological Resources.** As described in Environmental Checklist Section 4, *Biological Resources*, implementation of Mitigation Measures BIO-1 through BIO-3 would reduce potential impacts of the proposed project to biological resources impacts to less-than-significant levels. Other projects in the region would also be required to comply with federal, State, regional, and local regulations and laws put in place to minimize impacts to biological resources. Therefore, the proposed project would not have a contribution to cumulative impacts. No contribution to cumulative impacts, significant or otherwise, would occur.
- **Cultural Resources.** As described in Environmental Checklist Section 5, *Cultural Resources*, no historical or archaeological resources are known to exist within the pump station site and unanticipated discoveries are unlikely due to previous disturbance and the fact that cultural resources impacts are inherently site-specific. The project would not result in a substantial adverse change to a built environment resource listed or eligible for listing in the NRHP or the CRHR. No contribution to cumulative impacts, significant or otherwise, would occur.
- **Geology and Soils.** Most impacts associated with geology and soils, including paleontological resources, are inherently restricted to the location of the project activities, and would not have potential to combine with impacts of other projects. If ground-disturbing activities during project construction results in erosion that is allowed to be conveyed off-site in stormwater runoff, cumulative impacts could occur; however, the proposed project would include implementation of erosion and stormwater control BMPs to prevent erosion on- or off-site, such that the proposed project would not contribute to cumulative impacts.
- **GHG Emissions.** Refer to the discussion within the *Air Quality* bullet above. The project's GHG emissions would not exceed applicable thresholds and the project's GHG impacts would not be cumulatively considerable.
- **Hazards and Hazardous Materials.** With regard to hazards and hazardous materials, no regional concern is identified (i.e., no significant cumulative impact). The project would also comply with applicable federal, State, and local laws and regulations regarding hazardous materials. Therefore, no contribution to cumulative impacts, significant or otherwise, would occur.
- **Hydrology and Water Quality.** The project site is fully developed with the existing Lindero Pump Station and the project would not create or contribute additional runoff on the project site or alter existing drainage patterns. In addition, implementation of BMPs included as part of the project design would serve the same purpose as a SWPPP required for NPDES Program compliance minimizing or avoiding the potential for drainage- and water quality-related impacts to occur. Therefore, no contribution to cumulative impacts would occur.
- **Noise.** Noise levels at the pump station site are typical of low-density residential areas. The primary sources of existing ambient noise are vehicular traffic along roadways, including local streets, and ambient sounds from local fauna. There are no other construction or development projects in the area, or other substantial noise-producing activities planned in the vicinity of the project site. Project construction would not have the potential to combine with other projects to create a cumulative noise impact. No contribution to a cumulative impact would occur.
- **Transportation.** No substantial long-term transportation impacts would occur as a result of the project. Given the temporary nature of construction-related traffic impacts and the fact the

project would not generate new operational traffic, the contribution to cumulative transportation impacts would not be cumulatively considerable.

- **Tribal Cultural Resources.** Specific or recorded tribal cultural resources have not been identified at Lindero Pump Station and project-related ground disturbance would be limited to previously disturbed areas; the potential to encounter unknown resources is considered low, and the potential for cumulative impacts to tribal cultural resources would be negligible.
- **Utilities and Service Systems.** The project would not induce population growth and therefore would not directly or indirectly contribute to cumulative impacts to utilities and service systems.
- **Wildfire.** As described in Environmental Checklist Section 20, *Wildfire*, potential wildfire impacts associated with the project would be less than significant. Given there would be no long-term operational wildfire impacts and the short-term nature of any construction-related wildfire impacts, the project's contribution to any cumulative impact would not be considerable.

As discussed above, the proposed project would not result in a considerable contribution to any cumulative effects and potential impacts would be less than significant.

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

In general, impacts to human beings are associated with air quality, hazards and hazardous materials, and noise impacts. As detailed in the preceding sections, the project would not result, either directly or indirectly, in substantial adverse effects related to air quality, hazards and hazardous materials, or noise. Therefore, impacts to human beings would be less than significant.

LESS THAN SIGNIFICANT IMPACT

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Appendix A

Health Risk Assessment

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Health Risk Assessment for Emissions of Diesel Particulate Matter Lindero Pump Station Rehabilitation (Project No. 592)

11 June 2021

Prepared for

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K/J Project No. 2144202*00

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Section 1: Introduction

This Health Risk Assessment for Diesel Particulate Matter Report (Report) presents the results of a Health Risk Assessment (HRA) performed by Kennedy Jenks for the backup generator planned to be installed by Calleguas Municipal Water District (CMWD) as part of its Lindero Pump Station Rehabilitation (Project). Figure 1 identifies the location of the Project in Ventura County within the city limits of Thousand Oaks, California. The emergency diesel-fueled engine-generator (genset) will be located outside, adjacent to an existing structure and is surrounded by a school to the west, residential units to the north, and undeveloped land to the south and east. Included in this Report is a discussion on the purpose and background of the HRA, a summary of the methods used to perform the HRA, and the results obtained for the HRA as it pertains to emissions of Diesel Particulate Matter (DPM) from the diesel-fueled engines that support the genset.

The HRA was performed to support the permitting process for the Project in accordance with the requirements of the Ventura County Air Pollution Control District (VCAPCD). The VCAPCD administers a program that requires new air pollution-emitting facilities to obtain permits to construct and operate those facilities, referred to as Authority to Construct and Permit to Operate, respectively. CMWD is currently working with VCAPCD to obtain an Authority to Construct and, as part of the permitting process, VCAPCD has requested CMWD perform an air toxic review (i.e., HRA) for the Project. The HRA is limited to DPM emissions that may occur from the diesel-fueled engine that supports the genset.

As requested by VCAPCD, the HRA is being performed for DPM emissions that could be released during the testing and maintenance operations performed on the diesel-fueled engine. The genset serves as an emergency power source and will be tested on a routine basis for maintenance and readiness.

VCAPCD has developed an Engineering Division Policy and Procedure (Policy), issued 12 February 1992, for conducting an air toxic review of new potential pollution-emitting facilities. According to the Policy, each Authority to Construct application for new potential pollution-emitting facilities is reviewed by the Air Toxics Section to determine whether an HRA needs to be prepared. The policy has established cancer risk levels and non-cancer chronic and acute hazard indices designed to protect human health and welfare with an acceptable margin of safety.

Cancer risk is expressed as the maximum number of new cases of cancer projected to occur in a population of one million people due to exposure to the cancer-causing substance over a 70-year residential period. Cancer risk is calculated by multiplying the daily inhalation or oral dose, by a cancer potency factor, the age sensitivity factor, the frequency of time spent at home (for residents only), and the exposure duration divided by averaging time, to yield the excess cancer risk.

Non-cancer hazard index and non-cancer acute hazard index are defined on the Emission Inventory and Risk Glossary of the California Air Resources Board (CARB) website (CARB 2013) as follows:

- **Non-Cancer Chronic Hazard Index:** "The potential non-cancer health impacts resulting from exposure to toxic substances usually lasting from 1 year to a lifetime. The total hazard index includes the sum of hazard indices for pollutants with non-cancer health effects that have the same or similar adverse health effects (endpoints). A chronic hazard index is calculated by dividing the annual average concentration of a toxic pollutant by the chronic reference exposure level for that pollutant."

- **Non-Cancer Acute Hazard Index:** "The potential non-cancer health impacts resulting from a 1-hour exposure to toxic substances. The total hazard index includes the sum of hazard indices for pollutants with non-cancer health effects that have the same or similar adverse health effects (endpoints). An acute hazard index is calculated by dividing the 1-hour concentration of a toxic pollutant by the acute reference exposure level for that pollutant."

As shown in this report, the Project will result in local air quality impacts that are below the risk levels and hazard indices defined by the VCAPCD and are not anticipated to cause an impact to human health and welfare at the Point of Maximum Impact, nearby school, or residential units.

1.1 Purpose of Health Risk Assessment

CMWD is working with VCAPCD to obtain an Authority to Construct and, as part of the permitting process, VCAPCD has requested CMWD perform an HRA for the Project. The HRA is limited to DPM emissions that may occur from the diesel-fueled engine.

The Air Toxics "Hot Spots" Information and Assessment Act (AB2588) was enacted in September 1987. The goal of AB2588 is to collect emissions data, identify facilities having localized impacts, ascertain health risks, notify nearby residents of significant risks, and reduce significant risks. The Air Toxic "Hot Spots" program is managed by CARB. VCAPCD works in conjunction with CARB to ensure source-emitting regulated air pollutants in Ventura County meet the applicable requirements of this program. To ensure the requirements of AB2588 are satisfied, VCAPCD developed their air toxic Policy.

The Policy developed by VCAPCD indicates that any required HRAs shall be prepared in accordance with AB2588's current guidelines, and includes the following thresholds and resulting actions:

- If potential cancer risk of the proposed emissions is less than one in one million and the non-cancer chronic and acute hazard indices are less than 0.5, no further action is required by the applicant to evaluate air toxic emissions.
- If potential cancer risk is greater than one in one million, or the chronic or acute hazard indices are greater than 0.5, then VCAPCD staff will work with the applicant to reduce risk to an acceptable level.
- If potential cancer risk is greater than ten in one million or chronic or acute hazard indices exceed 1.0, then the Authority to Construct permit may be issued with a requirement for the facility to develop and implement a health risk reduction plan (VCAPCD 2002). The health risk reduction plan would target and reduce potential emissions and ultimately lower the cancer risk below the ten in one million threshold or non-cancer risk below the 1.0 threshold.

- If the potential cancer risk is greater than 100 in one million or the chronic or acute hazard indices are greater than 10, the application will be denied based on failure to demonstrate compliance with Rule 51 – Nuisance.

As part of the application for an Authority to Construct for the Project, this HRA was performed to evaluate emissions of DPM from the combustion of diesel fuel in the Project's genset to ensure the emissions of air toxics will not result in a health risk exceeding thresholds for cancer risk, chronic hazard index, or acute hazard index. The Project utilized CARB's Air Toxic Hot Spot program to determine health risk values.

1.2 Evaluation Tools and Methods

This HRA was developed for emissions of DPM for the Project. As shown in this Report, potential emissions of DPM from the diesel-fueled engine, supporting the genset, will not cause an unacceptable cancer or non-cancer health risk. This assessment was performed using tools and procedures developed by U.S. Environmental Protection Agency (EPA) and CARB. The tool used to perform air quality impact evaluations is referred to as an air dispersion model. For purposes of this assessment, the most sophisticated air dispersion model (i.e., AERMOD) developed to date and recommended as the preferred modeling tool for conducting air quality impact evaluations by EPA was utilized. In conjunction with this air dispersion modeling tool, five years of hourly meteorological conditions representative of the Project site were incorporated and evaluated. The concentration results from the dispersion model are entered in the CARB Hotspots Analysis Reporting Program Version 2 (HARP 2) Risk Assessment Standalone Tool (RAST) to calculate cancer and non-cancer risk values.

The AERMOD air dispersion model is a computerized program that requires information about the sources (i.e., air pollutant emission rates and stack release parameters) and meteorological conditions present in the area. The model utilizes the source information and meteorological conditions to simulate the potential impacts on ambient air quality. Potential impacts are expressed in micrograms per cubic meter ($\mu g/m^3$) which corresponds to the standard units in which air quality regulations are established.

Section 2: Air Dispersion Model Used in the Health Risk Assessment

2.1 Description of the Air Dispersion Model

To perform the health risk assessment, the most recent version of AERMOD View (Version 9.9.0), developed by Lakes Environmental Software, was utilized. AERMOD View incorporates the latest available version of EPA regulatory models AERMOD Version 19191, AERMET Version 14134, ISCST3, and ISC-PRIME, developed by The American Meteorological Society/EPA Regulatory Model Improvement Committee, into a single interface. The EPA's approved regulatory AERMOD code, used to predict ambient and ground level concentrations, is unaltered by AERMOD View and accompanying software packages.

The AERMOD View software suite consists of several applications supporting pre-processing model input requirements and post-processing model results in addition to those mentioned above. The following list summarizes the versions of AERMOD View software that were used for this air dispersion modeling analysis:

- AERMOD View 9.9.0 (AERMOD 19191)
- AERMAP 18081
- Building Profile Input Program for Prime (BPIPPRM) 04274
- POST View 9.9.0.

2.1.1 Model Parameters

The regulatory default options in AERMOD View were utilized for this air dispersion modeling analysis. The fugitive emission source function of AERMOD (i.e., point source algorithm) in conjunction with the hourly meteorological surface data and upper air data was used to predict short-term (1-hour averaging period) and long-term (annual averaging period) potential ambient air concentrations at discrete receptor locations around the Project site.

Several data elements are required as inputs to support the air dispersion model, including:

- Representative hourly meteorological surface and upper air data
- Locations at which the model will calculate potential predicted concentrations, referred to as discrete receptors
- Terrain elevations for each discrete receptor, building and source
- Emission data specific to each source onsite

Each of these data elements is discussed further below.

2.1.1.1 Meteorological Data

The representative hourly meteorological data used to support the air dispersion modeling analysis is comprised of surface data from the Camarillo Airport Surface Met Station WBAN: 23136, Camarillo, California, and upper air data from Met Station WBAN: 93214, Vandenberg, California. The surface meteorological station is considered representative of the Project site based on distance to the site, proximity to the coast, and similar land use classification and industry in the surrounding area. Pre-processed AERMOD-ready meteorological data was provided by the CARB Website. CARB staff acquired and processed the raw meteorological data using AERMET. The most recent 5 years of meteorological data available (1 January 2009 thru 31 December 2013) were used in the air dispersion modeling analysis.

On 3 August 2016, the VCAPCD approved the above meteorological data set, via email, for use in HRAs to address the potential impacts of DPM emissions from projects in the area.

2.1.1.2 Coordinate System

The air dispersion model uses the 1983 North American Datum (NAD83) with the Universal Transverse Mercator (UTM) Zone 11 North projection. Emission sources, buildings, and discrete receptors were located using this coordinate system.

2.1.1.3 Receptor Network

The receptor network includes a dense array of discrete receptors and is designed to identify the maximum ambient concentration that could occur from potential onsite air pollutant emission sources. Specifically, discrete receptors are spaced at 25 meters along the site boundary and extend outward to 1,000 meters in a fence line grid array with a fence line spacing and tier spacing of 25 meters. Additionally, a multi-tier grid, with two tiers, was established with discrete receptors spaced at 100 meters to a distance of two kilometers in the first tier and spaced at 500 meters to a distance of five kilometers in the second tier. The selection of a 1,000-meter dense fence line array and a 5-kilometer total downwind distance is a conservative estimation for potential maximum ambient air concentrations, as maximum airborne emissions will likely occur within a short distance of the onsite air pollutant emission sources with short release heights, such as the genset exhaust stack (i.e., 20.3 feet above grade). EPA guidance recommends a discrete receptor spacing of 100 meters to capture maximum concentrations in support of analysis performed using the AERMOD dispersion model. The dense array of receptors includes numerous receptors throughout the nearby school property and residences to thoroughly evaluate potential impacts.

The maximum 1-hour and maximum annual model-predicted concentrations occurring on the receptor network were used in the cancer risk and non-cancer chronic and acute hazard indices calculations. More precisely, the maximum cancer risk and maximum chronic and acute hazard indices were estimated by assuming a residence was located at the discrete receptor location of the maximum potential concentration.

A general vicinity map is provided on Figure 1 and shows the nearby school and residential units. A site map is provided on Figure 2 and depicts the proposed exhaust stack location relative to the building and site features. Proposed stack parameters and building dimensions are included on Figure 2. Figure 3 shows an overview of the receptor network and locations relative to the surrounding residential development and open space.

2.1.1.4 Terrain Data

Terrain elevation data was assigned to the discrete receptors using the latest version of AERMAP, a utility in AERMOD View. AERMAP obtains national elevation data (NED) files at 1 arc second resolution from the United States Geological Survey data server and can populate elevations for receptors, buildings, and emission sources. The specific terrain data files used in the model are NED GEOTIFF 1 (~USA 30 m). Discrete receptor base, emission stack and building base elevations were provided by AERMAP.

2.1.1.5 Buildings

One existing building with a single tier was included in the model to capture any potential down-washing effects that the building may have on the genset emission source. The existing building has a height of 13 feet.

2.1.1.6 Land Use Dispersion Coefficients

The EPA's Auer Land use method is used to determine whether rural or urban dispersion coefficients should be used in the ambient air quality impact evaluation using air dispersion modeling. The land use method involves circumscribing a 3-kilometer circle about the emission source and classifying the land use within the circle as rural or urban. If more than 50 percent of the land use is classified as urban, then urban dispersion coefficients will be used. Otherwise, rural dispersion coefficients will be used.

Based on visual inspection of aerial photography, it was determined the majority of the land use surrounding the site is comprised of Undeveloped land and Common Residential, which is classified as rural land use, and therefore, rural dispersion coefficients were selected for use within AERMOD View.

2.1.1.7 Emissions Inventory

The inventory of emission sources included in the HRA air dispersion analysis for emissions of DPM is provided in Table 1. As shown in the table, emissions of DPM were evaluated for a single potential DPM emission source. For this Project, a single genset, KOHLER KD3000, is proposed for installation.

To determine the potential 1-hour and annual impacts of DPM from the proposed emission source, emission rates, expressed in grams per horsepower-hour on the manufacturer's equipment specification sheets (Appendix A), were converted to grams per second for direct input in the AERMOD View model. For the annual averaging period, the average annual emission rate was based on 20 operating hours per year. Detailed calculation methodologies are described below.

One-hour impacts were calculated by multiplying the emission rate (grams/horsepower-hour) by the engine power at 100 percent load (brake horsepower) and dividing by 3,600 (seconds/hour) to convert to grams per second. The annual impacts were calculated by multiplying the emission rate by the engine power at 100 percent load and 20 total operating hours (hours/year), then dividing by 8,760 total hours (hours in a year) and 3,600 (seconds/hour) to convert to grams per second.

The model was comprised of one source location with a single source. As shown in the emissions inventory (Table 1), the genset exhaust stack will have a release height of 6.2 meters (20.3 feet) above grade, a diameter of 0.5 meters (20 inches), an exhaust gas temperature of 751.2 Kelvin (892.4 degrees Fahrenheit), and a gas exit velocity of 51.6 meters per second (169.3 feet per second). The exhaust stack discharges vertically through a hinged, counter-weighted, rain cap with no restriction to flow. The location of the emission source is depicted on Figure 2.

2.1.2 Results

The air dispersion modeling results for 1-hour and annual averaging periods are provided in Tables 2 and 3, respectively. The maximum potential and school property 1-hour concentrations from the genset were predicted to be 33.6 µg/m^3 and 5.78 µg/m^3 respectively. The maximum potential and school property annual concentrations from the genset were predicted to be 0.00161 µg/m^3 and 0.00038 µg/m^3 respectively. These values represent worst case predictions for 1-hour and annual concentration scenarios. Refer to the results provided in Tables 2 and 3 for the predicted concentrations obtained from the genset.

Concentration isopleths for the 1-hour and annual averaging periods are provided on Figures 4 and 5, respectively. Additionally, sections of the 1-hour model output and annual model output files are included in Appendices B and C, respectively.

Section 3: Health Risk Assessment

3.1 Set Up Procedure

This HRA was performed in accordance with the CARB Hot Spots Analysis and Reporting Program (HARP 2). HARP 2 includes an Air Dispersion Modeling and Risk Tool (ADMRT) to perform air dispersion modeling and risk calculations; however, air dispersion modeling was performed using AERMOD View, while the HARP 2 Risk Assessment Standalone Tool (RAST) was utilized to calculate risk values. The following discussion provides a basic overview of how RAST was configured.

- **Step 1:** Determine the maximum potential 1-hour DPM concentration for the diesel-fueled engine supporting a genset operating and maximum potential annual average DPM concentration for the diesel-fueled engine supporting the genset operating from the air dispersion model; and

- **Step 2:** Enter the pollutant identification number and modeled maximum 1-hour and average annual concentrations. Select the risk scenario analysis type, receptor type, exposure duration, and intake rate percentile. Select the exposure pathway. Initiate the RAST program to calculate cancer risk and non-cancer chronic and acute hazard index values.

For purposes of this Project, to support the HRA for emissions of DPM from the diesel-fueled engine, the selected risk scenario analysis included cancer, chronic, and acute types for an individual resident, over a 70-year duration using the Office of Environmental Health Hazard Assessment (OEHHA) derived method of intake rate percentile. The assessment focused on the inhalation pathway as the sole exposure pathway. The *Consolidated Table of OEHHA/ARB Approved Risk Assessment Health Values* indicates the cancer potency factor should only be used for impacts from the inhalation pathway (CARB 2015). Conservatively, no fraction of time at home was selected, nor was an 8-hour or Tier 2 breathing rate applied to the exposure pathway.

The HRA output files are provided in Appendix D.

3.2 Results

The cancer risk and non-cancer chronic hazard index values account for potential emissions occurring over a 70-year period and are based on the assumptions that the diesel-fueled engine supporting the genset will be exercised monthly and tested annually and will operate in test mode no more than 20 hours a year. The non-cancer acute hazard index is based upon the maximum 1-hour concentration from the diesel-fueled engine operating at any during the day. The HRA analysis, at the maximum point of impact, results in a cancer risk of 1.69E-06 or 1.69 in one million, a respiratory non-cancer chronic hazard index of 3.00E-04, and a non-cancer acute hazard index of 0.0. The HRA analysis, at the school property, results in a cancer risk of 4.0 E-05 or 0.4 in one million, a respiratory non-cancer chronic hazard index of 1.00E-04, and a non-cancer acute hazard index of 0.0. The cancer risk reflects limiting operation of the diesel-fueled engines to operating no more than 20 hours during a given 12-month period.

Results of the HRA analyses are provided in Table 4 and RAST output files are provided in Appendix D. As shown in Table 4, the non-cancer chronic hazard index corresponding to the Point of Maximum Impact and School Property Impact annual predicted concentrations of DPM emissions from the proposed genset is below the non-cancer chronic threshold of 0.5. Similarly, the non-cancer acute hazard index of 0.0, corresponding to the maximum 1-hour predicted concentration, is below the 0.5 threshold as well. As such, the predicted impact meets the health standard for non-cancer risks established by CARB.

The Point of Maximum Impact and the School Property annual concentrations obtained from AERMOD were entered into the RAST and resulted in a potential cancer risk of 1.7 in one million and 0.4 in one million, respectively. The Point of Maximum Impact potential cancer risk is above the non-action threshold of one in one million. However, since the potential cancer risk of 1.7 in one million is less than ten in one million, the VCAPCD Policy suggests no further action is required and the potential risk of less than ten in one million is acceptable. The School Property Impact cancer risk is below one in one million and no further action is required. An Authority to Construct permit can be issued with no requirement to further reduce the air toxic pollutant of concern for the proposed Project.

References

Air Toxics “Hot Spots” Information and Assessment Act (AB2588). 1987. September.

State of California, California Environmental Protection Agency, Air Resources Board, 2013. *Emission Inventory and Risk Glossary* dated 13 March 2013.

State of California, California Environmental Protection Agency, Air Resources Board. 2015. *User Manual for the Hotspots Analysis and Reporting Program Health Risk Assessment Standalone Tool Version 2* dated 17 March 2015.

Ventura County Air Pollution Control District. 2002. Engineering Division, Policies and Procedures, Air Toxics Review of Permit Applications dated 10 July 2002.

Appendix B

CalEEMod Emissions Calculations

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Calleguas Lindero Pump Station Project AQ

Ventura County APCD Air District, Winter

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	0.66	Acre	0.66	28,749.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project is in Thousand Oaks, Ventura County

Land Use - Site area is approximately 0.66-acres

Construction Phase - Applicant provided construction schedule. Construction would occur from May 2022-May 2023 BUT the schedule is shorter since it excludes time for obtaining equipment and startup/testing

Off-road Equipment - Applicant provided equipment

Off-road Equipment - Applicant provided equipment

Off-road Equipment - Applicant provided equipment

Off-road Equipment - Applicant provided equipment

Off-road Equipment - Applicant provided equipment

Off-road Equipment - Applicant provided equipment

Trips and VMT -

Demolition - Approximated building sf and pump removal area using google earth

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading - Import and export 1,000 cubic yards

Architectural Coating - Included the entire area of the pump station for architectural coating

Area Coating - Included entire area of pump station for architectural coating

Construction Off-road Equipment Mitigation - Applicant provided BMPs

Stationary Sources - Emergency Generators and Fire Pumps - Diesel engine would be tested for a total of 20 hours per year. For daily usage, the maximum 20 hours was divided by 365 days.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	1,725.00	19,870.00
tblAreaCoating	Area_Parking	1725	19870
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	5.00	15.00
tblConstructionPhase	NumDays	100.00	150.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	NumDays	5.00	15.00
tblConstructionPhase	NumDays	1.00	15.00
tblGrading	MaterialExported	0.00	1,000.00
tblGrading	MaterialImported	0.00	1,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	4,332.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.05
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	20.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00

2.0 Emissions Summary

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2022	2.5066	21.4780	24.0354	0.0456	0.5713	1.1042	1.2366	0.1521	1.0557	1.0916	0.0000	4,327.0334	4,327.0334	0.8446	0.2641	4,353.6440
2023	6.4333	19.8941	23.9198	0.0455	0.2054	0.9791	1.1116	0.0545	0.9355	0.9714	0.0000	4,322.3936	4,322.3936	0.8353	0.0176	4,348.5105
Maximum	**6.4333**	**21.4780**	**24.0354**	**0.0456**	**0.5713**	**1.1042**	**1.2366**	**0.1521**	**1.0557**	**1.0916**	**0.0000**	**4,327.0334**	**4,327.0334**	**0.8446**	**0.2641**	**4,353.6440**

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					
2022	2.5066	21.4780	24.0354	0.0456	0.5558	1.1042	1.2366	0.1498	1.0557	1.0916	0.0000	4,327.0334	4,327.0334	0.8446	0.2641	4,353.6440
2023	6.4333	19.8941	23.9198	0.0455	0.2054	0.9791	1.1116	0.0545	0.9355	0.9714	0.0000	4,322.3936	4,322.3936	0.8353	0.0176	4,348.5105
Maximum	**6.4333**	**21.4780**	**24.0354**	**0.0456**	**0.5558**	**1.1042**	**1.2366**	**0.1498**	**1.0557**	**1.0916**	**0.0000**	**4,327.0334**	**4,327.0334**	**0.8446**	**0.2641**	**4,353.6440**

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**1.99**	**0.00**	**0.00**	**1.13**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	0.0354	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.4000e-004	1.4000e-004	0.0000		1.5000e-004
Energy	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
Mobile	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
Stationary	0.3838	1.7167	0.9788	1.8400e-003		0.0565	0.0565		0.0565	0.0565		196.3859	196.3859	0.0275		197.0742
Total	**0.4193**	**1.7167**	**0.9789**	**1.8400e-003**	**0.0000**	**0.0565**	**0.0565**	**0.0000**	**0.0565**	**0.0565**		**196.3860**	**196.3860**	**0.0275**	**0.0000**	**197.0744**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.0354	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.4000e-004	1.4000e-004	0.0000		1.5000e-004
Energy	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
Mobile	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
Stationary	0.3838	1.7167	0.9788	1.8400e-003		0.0565	0.0565		0.0565	0.0565		196.3859	196.3859	0.0275		197.0742
Total	**0.4193**	**1.7167**	**0.9789**	**1.8400e-003**	**0.0000**	**0.0565**	**0.0565**	**0.0000**	**0.0565**	**0.0565**		**196.3860**	**196.3860**	**0.0275**	**0.0000**	**197.0744**

	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	N20	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	Demolition	Demolition	5/2/2022	5/20/2022	5	15	
2	Site Preparation	Site Preparation	5/21/2022	6/10/2022	5	15	
3	Grading	Grading	6/11/2022	6/24/2022	5	10	
4	Building Construction	Building Construction	6/25/2022	1/20/2023	5	150	

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5	Paving	Paving	1/21/2023	2/10/2023	5	15	
6	Architectural Coating	Architectural Coating	2/11/2023	3/3/2023	5	15	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.66

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 19,870 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Aerial Lifts	1	6.00	63	0.31
Demolition	Concrete/Industrial Saws	1	6.00	81	0.73
Demolition	Excavators	1	6.00	158	0.38
Demolition	Generator Sets	1	6.00	84	0.74
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Site Preparation	Aerial Lifts	1	6.00	63	0.31
Site Preparation	Concrete/Industrial Saws	1	6.00	81	0.73
Site Preparation	Generator Sets	1	6.00	84	0.74
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Generator Sets	1	6.00	84	0.74
Grading	Graders	0	6.00	187	0.41
Grading	Plate Compactors	1	6.00	8	0.43
Grading	Rollers	1	6.00	80	0.38
Grading	Rubber Tired Dozers	0	6.00	247	0.40
Grading	Sweepers/Scrubbers	1	6.00	64	0.46
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Aerial Lifts	1	6.00	63	0.31
Building Construction	Air Compressors	1	6.00	78	0.48
Building Construction	Bore/Drill Rigs	1	6.00	221	0.50
Building Construction	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Concrete/Industrial Saws	1	6.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Excavators	1	6.00	158	0.38
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	6.00	84	0.74
Building Construction	Plate Compactors	1	6.00	8	0.43
Building Construction	Pressure Washers	1	6.00	13	0.30
Building Construction	Pumps	1	6.00	84	0.74
Building Construction	Sweepers/Scrubbers	1	6.00	64	0.46
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Trenchers	1	6.00	78	0.50
Building Construction	Welders	1	6.00	46	0.45
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Concrete/Industrial Saws	1	6.00	81	0.73
Paving	Generator Sets	1	6.00	84	0.74
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	6.00	132	0.36
Paving	Plate Compactors	1	6.00	8	0.43
Paving	Rollers	1	6.00	80	0.38
Paving	Rubber Tired Loaders	1	6.00	203	0.36
Paving	Surfacing Equipment	1	6.00	263	0.30
Paving	Sweepers/Scrubbers	1	6.00	64	0.46
Paving	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Architectural Coating	Aerial Lifts	1	6.00	63	0.31
Architectural Coating	Air Compressors	0	6.00	78	0.48

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating	Generator Sets	1	6.00	84	0.74
Architectural Coating	Pressure Washers	1	6.00	13	0.30

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
Demolition	5	13.00	0.00	20.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	0.00	250.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	16	12.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	10	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

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					0.2884	0.0000	0.2884	0.0437	0.0000	0.0437			0.0000			0.0000
Off-Road	0.8182	7.3067	10.4458	0.0171		0.3626	0.3626		0.3515	0.3515		1,634.6800	1,634.6800	0.2803		1,641.6862
Total	**0.8182**	**7.3067**	**10.4458**	**0.0171**	**0.2884**	**0.3626**	**0.6510**	**0.0437**	**0.3515**	**0.3951**		**1,634.6800**	**1,634.6800**	**0.2803**		**1,641.6862**

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	4.5800e-003	0.2093	0.0496	7.9000e-004	0.0233	1.7100e-003	0.0250	6.3800e-003	1.6300e-003	8.0100e-003		87.5374	87.5374	5.5800e-003	0.0139	91.8272
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
Worker	0.0433	0.0304	0.3540	9.0000e-004	0.1068	6.1000e-004	0.1074	0.0283	5.6000e-004	0.0289		91.6124	91.6124	3.2900e-003	2.9200e-003	92.5649
Total	**0.0479**	**0.2397**	**0.4036**	**1.6900e-003**	**0.1301**	**2.3200e-003**	**0.1324**	**0.0347**	**2.1900e-003**	**0.0369**		**179.1498**	**179.1498**	**8.8700e-003**	**0.0169**	**184.3920**

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

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					0.1298	0.0000	0.1298	0.0197	0.0000	0.0197			0.0000			0.0000
Off-Road	0.8182	7.3067	10.4458	0.0171		0.3626	0.3626		0.3515	0.3515	0.0000	1,634.6800	1,634.6800	0.2803		1,641.6862
Total	**0.8182**	**7.3067**	**10.4458**	**0.0171**	**0.1298**	**0.3626**	**0.4924**	**0.0197**	**0.3515**	**0.3711**	**0.0000**	**1,634.6800**	**1,634.6800**	**0.2803**		**1,641.6862**

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	4.5800e-003	0.2093	0.0496	7.9000e-004	0.0233	1.7100e-003	0.0250	6.3800e-003	1.6300e-003	8.0100e-003		87.5374	87.5374	5.5800e-003	0.0139	91.8272
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
Worker	0.0433	0.0304	0.3540	9.0000e-004	0.1068	6.1000e-004	0.1074	0.0283	5.6000e-004	0.0289		91.6124	91.6124	3.2900e-003	2.9200e-003	92.5649
Total	**0.0479**	**0.2397**	**0.4036**	**1.6900e-003**	**0.1301**	**2.3200e-003**	**0.1324**	**0.0347**	**2.1900e-003**	**0.0369**		**179.1498**	**179.1498**	**8.8700e-003**	**0.0169**	**184.3920**

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6664	5.9740	8.0044	0.0132		0.2982	0.2982		0.2922	0.2922		1,259.6685	1,259.6685	0.1590		1,263.6426
Total	**0.6664**	**5.9740**	**8.0044**	**0.0132**	**0.0000**	**0.2982**	**0.2982**	**0.0000**	**0.2922**	**0.2922**		**1,259.6685**	**1,259.6685**	**0.1590**		**1,263.6426**

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	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
Worker	0.0333	0.0234	0.2723	6.9000e-004	0.0822	4.7000e-004	0.0826	0.0218	4.3000e-004	0.0222		70.4711	70.4711	2.5300e-003	2.2500e-003	71.2037
Total	**0.0333**	**0.0234**	**0.2723**	**6.9000e-004**	**0.0822**	**4.7000e-004**	**0.0826**	**0.0218**	**4.3000e-004**	**0.0222**		**70.4711**	**70.4711**	**2.5300e-003**	**2.2500e-003**	**71.2037**

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6664	5.9740	8.0044	0.0132		0.2982	0.2982		0.2922	0.2922	0.0000	1,259.6685	1,259.6685	0.1590		1,263.6426
Total	**0.6664**	**5.9740**	**8.0044**	**0.0132**	**0.0000**	**0.2982**	**0.2982**	**0.0000**	**0.2922**	**0.2922**	**0.0000**	**1,259.6685**	**1,259.6685**	**0.1590**		**1,263.6426**

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	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
Worker	0.0333	0.0234	0.2723	6.9000e-004	0.0822	4.7000e-004	0.0826	0.0218	4.3000e-004	0.0222		70.4711	70.4711	2.5300e-003	2.2500e-003	71.2037
Total	**0.0333**	**0.0234**	**0.2723**	**6.9000e-004**	**0.0822**	**4.7000e-004**	**0.0826**	**0.0218**	**4.3000e-004**	**0.0222**		**70.4711**	**70.4711**	**2.5300e-003**	**2.2500e-003**	**71.2037**

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

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					0.0281	0.0000	0.0281	4.2600e-003	0.0000	4.2600e-003			0.0000			0.0000
Off-Road	0.6709	6.2880	7.4263	0.0115		0.3501	0.3501		0.3315	0.3315		1,094.2749	1,094.2749	0.2193		1,099.7575
Total	**0.6709**	**6.2880**	**7.4263**	**0.0115**	**0.0281**	**0.3501**	**0.3782**	**4.2600e-003**	**0.3315**	**0.3357**		**1,094.2749**	**1,094.2749**	**0.2193**		**1,099.7575**

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	0.0860	3.9235	0.9299	0.0149	0.4364	0.0320	0.4684	0.1195	0.0307	0.1502		1,641.3253	1,641.3253	0.1046	0.2611	1,721.7593
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
Worker	0.0433	0.0304	0.3540	9.0000e-004	0.1068	6.1000e-004	0.1074	0.0283	5.6000e-004	0.0289		91.6124	91.6124	3.2900e-003	2.9200e-003	92.5649
Total	**0.1293**	**3.9540**	**1.2839**	**0.0158**	**0.5432**	**0.0326**	**0.5758**	**0.1479**	**0.0312**	**0.1791**		**1,732.9377**	**1,732.9377**	**0.1079**	**0.2641**	**1,814.3242**

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

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					0.0127	0.0000	0.0127	1.9200e-003	0.0000	1.9200e-003			0.0000			0.0000
Off-Road	0.6709	6.2880	7.4263	0.0115		0.3501	0.3501		0.3315	0.3315	0.0000	1,094.2749	1,094.2749	0.2193		1,099.7575
Total	**0.6709**	**6.2880**	**7.4263**	**0.0115**	**0.0127**	**0.3501**	**0.3627**	**1.9200e-003**	**0.3315**	**0.3334**	**0.0000**	**1,094.2749**	**1,094.2749**	**0.2193**		**1,099.7575**

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	0.0860	3.9235	0.9299	0.0149	0.4364	0.0320	0.4684	0.1195	0.0307	0.1502		1,641.3253	1,641.3253	0.1046	0.2611	1,721.7593
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
Worker	0.0433	0.0304	0.3540	9.0000e-004	0.1068	6.1000e-004	0.1074	0.0283	5.6000e-004	0.0289		91.6124	91.6124	3.2900e-003	2.9200e-003	92.5649
Total	**0.1293**	**3.9540**	**1.2839**	**0.0158**	**0.5432**	**0.0326**	**0.5758**	**0.1479**	**0.0312**	**0.1791**		**1,732.9377**	**1,732.9377**	**0.1079**	**0.2641**	**1,814.3242**

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

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	2.4583	21.2001	23.6301	0.0438		1.1009	1.1009		1.0526	1.0526		4,137.5298	4,137.5298	0.8374		4,158.4658
Total	**2.4583**	**21.2001**	**23.6301**	**0.0438**		**1.1009**	**1.1009**		**1.0526**	**1.0526**		**4,137.5298**	**4,137.5298**	**0.8374**		**4,158.4658**

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	0.0000
Vendor	8.2300e-003	0.2498	0.0786	9.7000e-004	0.0338	2.7500e-003	0.0366	9.7400e-003	2.6300e-003	0.0124		104.9383	104.9383	4.1500e-003	0.0157	109.7337
Worker	0.0400	0.0281	0.3267	8.3000e-004	0.0986	5.7000e-004	0.0991	0.0262	5.2000e-004	0.0267		84.5653	84.5653	3.0300e-003	2.7000e-003	85.4445
Total	**0.0482**	**0.2779**	**0.4053**	**1.8000e-003**	**0.1324**	**3.3200e-003**	**0.1357**	**0.0359**	**3.1500e-003**	**0.0390**		**189.5036**	**189.5036**	**7.1800e-003**	**0.0184**	**195.1782**

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

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	2.4583	21.2001	23.6301	0.0438		1.1009	1.1009		1.0526	1.0526	0.0000	4,137.5298	4,137.5298	0.8374		4,158.4658
Total	**2.4583**	**21.2001**	**23.6301**	**0.0438**		**1.1009**	**1.1009**		**1.0526**	**1.0526**	**0.0000**	**4,137.5298**	**4,137.5298**	**0.8374**		**4,158.4658**

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	0.0000
Vendor	8.2300e-003	0.2498	0.0786	9.7000e-004	0.0338	2.7500e-003	0.0366	9.7400e-003	2.6300e-003	0.0124		104.9383	104.9383	4.1500e-003	0.0157	109.7337
Worker	0.0400	0.0281	0.3267	8.3000e-004	0.0986	5.7000e-004	0.0991	0.0262	5.2000e-004	0.0267		84.5653	84.5653	3.0300e-003	2.7000e-003	85.4445
Total	**0.0482**	**0.2779**	**0.4053**	**1.8000e-003**	**0.1324**	**3.3200e-003**	**0.1357**	**0.0359**	**3.1500e-003**	**0.0390**		**189.5036**	**189.5036**	**7.1800e-003**	**0.0184**	**195.1782**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

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	2.3056	19.6713	23.5479	0.0438		0.9775	0.9775		0.9340	0.9340		4,139.4156	4,139.4156	0.8284		4,160.1259
Total	**2.3056**	**19.6713**	**23.5479**	**0.0438**		**0.9775**	**0.9775**		**0.9340**	**0.9340**		**4,139.4156**	**4,139.4156**	**0.8284**		**4,160.1259**

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	0.0000
Vendor	4.7800e-003	0.1978	0.0695	9.3000e-004	0.0338	1.1300e-003	0.0350	9.7400e-003	1.0800e-003	0.0108		100.6212	100.6212	4.1200e-003	0.0151	105.2142
Worker	0.0373	0.0250	0.3025	8.0000e-004	0.0986	5.3000e-004	0.0991	0.0262	4.9000e-004	0.0266		82.3568	82.3568	2.7500e-003	2.5000e-003	83.1704
Total	**0.0421**	**0.2228**	**0.3719**	**1.7300e-003**	**0.1324**	**1.6600e-003**	**0.1341**	**0.0359**	**1.5700e-003**	**0.0375**		**182.9780**	**182.9780**	**6.8700e-003**	**0.0176**	**188.3846**

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

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	2.3056	19.6713	23.5479	0.0438		0.9775	0.9775		0.9340	0.9340	0.0000	4,139.4156	4,139.4156	0.8284		4,160.1259
Total	**2.3056**	**19.6713**	**23.5479**	**0.0438**		**0.9775**	**0.9775**		**0.9340**	**0.9340**	**0.0000**	**4,139.4156**	**4,139.4156**	**0.8284**		**4,160.1259**

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	0.0000
Vendor	4.7800e-003	0.1978	0.0695	9.3000e-004	0.0338	1.1300e-003	0.0350	9.7400e-003	1.0800e-003	0.0108		100.6212	100.6212	4.1200e-003	0.0151	105.2142
Worker	0.0373	0.0250	0.3025	8.0000e-004	0.0986	5.3000e-004	0.0991	0.0262	4.9000e-004	0.0266		82.3568	82.3568	2.7500e-003	2.5000e-003	83.1704
Total	**0.0421**	**0.2228**	**0.3719**	**1.7300e-003**	**0.1324**	**1.6600e-003**	**0.1341**	**0.0359**	**1.5700e-003**	**0.0375**		**182.9780**	**182.9780**	**6.8700e-003**	**0.0176**	**188.3846**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

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	1.4872	13.9474	16.5808	0.0326		0.6542	0.6542		0.6179	0.6179		3,121.3794	3,121.3794	0.7514		3,140.1646
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4872**	**13.9474**	**16.5808**	**0.0326**		**0.6542**	**0.6542**		**0.6179**	**0.6179**		**3,121.3794**	**3,121.3794**	**0.7514**		**3,140.1646**

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	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
Worker	0.0777	0.0521	0.6301	1.6800e-003	0.2054	1.1100e-003	0.2065	0.0545	1.0200e-003	0.0555		171.5767	171.5767	5.7300e-003	5.2100e-003	173.2718
Total	**0.0777**	**0.0521**	**0.6301**	**1.6800e-003**	**0.2054**	**1.1100e-003**	**0.2065**	**0.0545**	**1.0200e-003**	**0.0555**		**171.5767**	**171.5767**	**5.7300e-003**	**5.2100e-003**	**173.2718**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

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	1.4872	13.9474	16.5808	0.0326		0.6542	0.6542		0.6179	0.6179	0.0000	3,121.3794	3,121.3794	0.7514		3,140.1646
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4872**	**13.9474**	**16.5808**	**0.0326**		**0.6542**	**0.6542**		**0.6179**	**0.6179**	**0.0000**	**3,121.3794**	**3,121.3794**	**0.7514**		**3,140.1646**

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	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
Worker	0.0777	0.0521	0.6301	1.6800e-003	0.2054	1.1100e-003	0.2065	0.0545	1.0200e-003	0.0555		171.5767	171.5767	5.7300e-003	5.2100e-003	173.2718
Total	**0.0777**	**0.0521**	**0.6301**	**1.6800e-003**	**0.2054**	**1.1100e-003**	**0.2065**	**0.0545**	**1.0200e-003**	**0.0555**		**171.5767**	**171.5767**	**5.7300e-003**	**5.2100e-003**	**173.2718**

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

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					
Archit. Coating	6.1398					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2873	2.6608	3.7520	6.6100e-003		0.1127	0.1127		0.1122	0.1122		618.5583	618.5583	0.0628		620.1293
Total	**6.4271**	**2.6608**	**3.7520**	**6.6100e-003**		**0.1127**	**0.1127**		**0.1122**	**0.1122**		**618.5583**	**618.5583**	**0.0628**		**620.1293**

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	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
Worker	6.2100e-003	4.1700e-003	0.0504	1.3000e-004	0.0164	9.0000e-005	0.0165	4.3600e-003	8.0000e-005	4.4400e-003		13.7261	13.7261	4.6000e-004	4.2000e-004	13.8617
Total	**6.2100e-003**	**4.1700e-003**	**0.0504**	**1.3000e-004**	**0.0164**	**9.0000e-005**	**0.0165**	**4.3600e-003**	**8.0000e-005**	**4.4400e-003**		**13.7261**	**13.7261**	**4.6000e-004**	**4.2000e-004**	**13.8617**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

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					
Archit. Coating	6.1398					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2873	2.6608	3.7520	6.6100e-003		0.1127	0.1127		0.1122	0.1122	0.0000	618.5583	618.5583	0.0628		620.1293
Total	**6.4271**	**2.6608**	**3.7520**	**6.6100e-003**		**0.1127**	**0.1127**		**0.1122**	**0.1122**	**0.0000**	**618.5583**	**618.5583**	**0.0628**		**620.1293**

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	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
Worker	6.2100e-003	4.1700e-003	0.0504	1.3000e-004	0.0164	9.0000e-005	0.0165	4.3600e-003	8.0000e-005	4.4400e-003		13.7261	13.7261	4.6000e-004	4.2000e-004	13.8617
Total	**6.2100e-003**	**4.1700e-003**	**0.0504**	**1.3000e-004**	**0.0164**	**9.0000e-005**	**0.0165**	**4.3600e-003**	**8.0000e-005**	**4.4400e-003**		**13.7261**	**13.7261**	**4.6000e-004**	**4.2000e-004**	**13.8617**

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	0.0000	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.543528	0.058189	0.173108	0.133952	0.027894	0.007577	0.011427	0.006062	0.000688	0.000393	0.029232	0.000646	0.007304

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	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

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					
Other Non-Asphalt Surfaces	0	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		**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**

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					
Other Non-Asphalt Surfaces	0	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		**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**

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	0.0354	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.4000e-004	1.4000e-004	0.0000		1.5000e-004
Unmitigated	0.0354	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.4000e-004	1.4000e-004	0.0000		1.5000e-004

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.0252					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0102					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.4000e-004	1.4000e-004	0.0000		1.5000e-004
Total	**0.0354**	**0.0000**	**7.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.4000e-004**	**1.4000e-004**	**0.0000**		**1.5000e-004**

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

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	0.0252					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0102					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.4000e-004	1.4000e-004	0.0000		1.5000e-004
Total	**0.0354**	**0.0000**	**7.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.4000e-004**	**1.4000e-004**	**0.0000**		**1.5000e-004**

7.0 Water Detail

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Winter

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.054	20	4332	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

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 (750 - 9999 HP)	0.3838	1.7167	0.9788	1.8400e-003		0.0565	0.0565		0.0565	0.0565		196.3859	196.3859	0.0275		197.0742
Total	**0.3838**	**1.7167**	**0.9788**	**1.8400e-003**		**0.0565**	**0.0565**		**0.0565**	**0.0565**		**196.3859**	**196.3859**	**0.0275**		**197.0742**

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Calleguas Lindero Pump Station Project AQ

Ventura County APCD Air District, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	0.66	Acre	0.66	28,749.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project is in Thousand Oaks, Ventura County

Land Use - Site area is approximately 0.66-acres

Construction Phase - Applicant provided construction schedule. Construction would occur from May 2022-May 2023 BUT the schedule is shorter since it excludes time for obtaining equipment and startup/testing

Off-road Equipment - Applicant provided equipment

Off-road Equipment - Applicant provided equipment

Off-road Equipment - Applicant provided equipment

Off-road Equipment - Applicant provided equipment

Off-road Equipment - Applicant provided equipment

Off-road Equipment - Applicant provided equipment

Trips and VMT -

Demolition - Approximated building sf and pump removal area using google earth

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading - Import and export 1,000 cubic yards

Architectural Coating - Included the entire area of the pump station for architectural coating

Area Coating - Included entire area of pump station for architectural coating

Construction Off-road Equipment Mitigation - Applicant provided BMPs

Stationary Sources - Emergency Generators and Fire Pumps - Diesel engine would be tested for a total of 20 hours per year. For daily usage, the maximum 20 hours was divided by 365 days.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	1,725.00	19,870.00
tblAreaCoating	Area_Parking	1725	19870
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	5.00	15.00
tblConstructionPhase	NumDays	100.00	150.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	NumDays	5.00	15.00
tblConstructionPhase	NumDays	1.00	15.00
tblGrading	MaterialExported	0.00	1,000.00
tblGrading	MaterialImported	0.00	1,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	4,332.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.05
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	20.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00

2.0 Emissions Summary

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2022	2.5038	21.4644	24.0397	0.0456	0.5713	1.1042	1.2366	0.1521	1.0557	1.0916	0.0000	4,330.8189	4,330.8189	0.8444	0.2637	4,357.3369
2023	6.4328	19.8821	23.9233	0.0456	0.2054	0.9791	1.1116	0.0545	0.9355	0.9714	0.0000	4,325.9748	4,325.9748	0.8351	0.0173	4,352.0017
Maximum	**6.4328**	**21.4644**	**24.0397**	**0.0456**	**0.5713**	**1.1042**	**1.2366**	**0.1521**	**1.0557**	**1.0916**	**0.0000**	**4,330.8189**	**4,330.8189**	**0.8444**	**0.2637**	**4,357.3369**

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					
2022	2.5038	21.4644	24.0397	0.0456	0.5558	1.1042	1.2366	0.1498	1.0557	1.0916	0.0000	4,330.8189	4,330.8189	0.8444	0.2637	4,357.3369
2023	6.4328	19.8821	23.9233	0.0456	0.2054	0.9791	1.1116	0.0545	0.9355	0.9714	0.0000	4,325.9748	4,325.9748	0.8351	0.0173	4,352.0016
Maximum	**6.4328**	**21.4644**	**24.0397**	**0.0456**	**0.5558**	**1.1042**	**1.2366**	**0.1498**	**1.0557**	**1.0916**	**0.0000**	**4,330.8189**	**4,330.8189**	**0.8444**	**0.2637**	**4,357.3369**

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**1.99**	**0.00**	**0.00**	**1.13**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

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	0.0354	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.4000e-004	1.4000e-004	0.0000		1.5000e-004
Energy	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
Mobile	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
Stationary	0.3838	1.7167	0.9788	1.8400e-003		0.0565	0.0565		0.0565	0.0565		196.3859	196.3859	0.0275		197.0742
Total	**0.4193**	**1.7167**	**0.9789**	**1.8400e-003**	**0.0000**	**0.0565**	**0.0565**	**0.0000**	**0.0565**	**0.0565**		**196.3860**	**196.3860**	**0.0275**	**0.0000**	**197.0744**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.0354	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.4000e-004	1.4000e-004	0.0000		1.5000e-004
Energy	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
Mobile	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
Stationary	0.3838	1.7167	0.9788	1.8400e-003		0.0565	0.0565		0.0565	0.0565		196.3859	196.3859	0.0275		197.0742
Total	**0.4193**	**1.7167**	**0.9789**	**1.8400e-003**	**0.0000**	**0.0565**	**0.0565**	**0.0000**	**0.0565**	**0.0565**		**196.3860**	**196.3860**	**0.0275**	**0.0000**	**197.0744**

	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	N20	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	Demolition	Demolition	5/2/2022	5/20/2022	5	15	
2	Site Preparation	Site Preparation	5/21/2022	6/10/2022	5	15	
3	Grading	Grading	6/11/2022	6/24/2022	5	10	
4	Building Construction	Building Construction	6/25/2022	1/20/2023	5	150	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5	Paving	Paving	1/21/2023	2/10/2023	5	15	
6	Architectural Coating	Architectural Coating	2/11/2023	3/3/2023	5	15	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.66

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 19,870 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Aerial Lifts	1	6.00	63	0.31
Demolition	Concrete/Industrial Saws	1	6.00	81	0.73
Demolition	Excavators	1	6.00	158	0.38
Demolition	Generator Sets	1	6.00	84	0.74
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Site Preparation	Aerial Lifts	1	6.00	63	0.31
Site Preparation	Concrete/Industrial Saws	1	6.00	81	0.73
Site Preparation	Generator Sets	1	6.00	84	0.74
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Generator Sets	1	6.00	84	0.74
Grading	Graders	0	6.00	187	0.41
Grading	Plate Compactors	1	6.00	8	0.43
Grading	Rollers	1	6.00	80	0.38
Grading	Rubber Tired Dozers	0	6.00	247	0.40
Grading	Sweepers/Scrubbers	1	6.00	64	0.46
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Building Construction	Aerial Lifts	1	6.00	63	0.31
Building Construction	Air Compressors	1	6.00	78	0.48
Building Construction	Bore/Drill Rigs	1	6.00	221	0.50
Building Construction	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Concrete/Industrial Saws	1	6.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Excavators	1	6.00	158	0.38
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	6.00	84	0.74
Building Construction	Plate Compactors	1	6.00	8	0.43
Building Construction	Pressure Washers	1	6.00	13	0.30
Building Construction	Pumps	1	6.00	84	0.74
Building Construction	Sweepers/Scrubbers	1	6.00	64	0.46
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Trenchers	1	6.00	78	0.50
Building Construction	Welders	1	6.00	46	0.45
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Concrete/Industrial Saws	1	6.00	81	0.73
Paving	Generator Sets	1	6.00	84	0.74
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	6.00	132	0.36
Paving	Plate Compactors	1	6.00	8	0.43
Paving	Rollers	1	6.00	80	0.38
Paving	Rubber Tired Loaders	1	6.00	203	0.36
Paving	Surfacing Equipment	1	6.00	263	0.30
Paving	Sweepers/Scrubbers	1	6.00	64	0.46
Paving	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Architectural Coating	Aerial Lifts	1	6.00	63	0.31
Architectural Coating	Air Compressors	0	6.00	78	0.48

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Architectural Coating	Generator Sets	1	6.00	84	0.74
Architectural Coating	Pressure Washers	1	6.00	13	0.30

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
Demolition	5	13.00	0.00	20.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	0.00	250.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	16	12.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	10	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

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					0.2884	0.0000	0.2884	0.0437	0.0000	0.0437			0.0000			0.0000
Off-Road	0.8182	7.3067	10.4458	0.0171		0.3626	0.3626		0.3515	0.3515		1,634.6800	1,634.6800	0.2803		1,641.6862
Total	**0.8182**	**7.3067**	**10.4458**	**0.0171**	**0.2884**	**0.3626**	**0.6510**	**0.0437**	**0.3515**	**0.3951**		**1,634.6800**	**1,634.6800**	**0.2803**		**1,641.6862**

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	4.7300e-003	0.2012	0.0488	7.9000e-004	0.0233	1.7000e-003	0.0250	6.3800e-003	1.6300e-003	8.0100e-003		87.5056	87.5056	5.5900e-003	0.0139	91.7939
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
Worker	0.0402	0.0260	0.3614	9.4000e-004	0.1068	6.1000e-004	0.1074	0.0283	5.6000e-004	0.0289		95.7670	95.7670	3.0200e-003	2.6300e-003	96.6251
Total	**0.0449**	**0.2272**	**0.4102**	**1.7300e-003**	**0.1301**	**2.3100e-003**	**0.1324**	**0.0347**	**2.1900e-003**	**0.0369**		**183.2725**	**183.2725**	**8.6100e-003**	**0.0166**	**188.4190**

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

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					0.1298	0.0000	0.1298	0.0197	0.0000	0.0197			0.0000			0.0000
Off-Road	0.8182	7.3067	10.4458	0.0171		0.3626	0.3626		0.3515	0.3515	0.0000	1,634.6800	1,634.6800	0.2803		1,641.6862
Total	**0.8182**	**7.3067**	**10.4458**	**0.0171**	**0.1298**	**0.3626**	**0.4924**	**0.0197**	**0.3515**	**0.3711**	**0.0000**	**1,634.6800**	**1,634.6800**	**0.2803**		**1,641.6862**

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	4.7300e-003	0.2012	0.0488	7.9000e-004	0.0233	1.7000e-003	0.0250	6.3800e-003	1.6300e-003	8.0100e-003		87.5056	87.5056	5.5900e-003	0.0139	91.7939
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
Worker	0.0402	0.0260	0.3614	9.4000e-004	0.1068	6.1000e-004	0.1074	0.0283	5.6000e-004	0.0289		95.7670	95.7670	3.0200e-003	2.6300e-003	96.6251
Total	**0.0449**	**0.2272**	**0.4102**	**1.7300e-003**	**0.1301**	**2.3100e-003**	**0.1324**	**0.0347**	**2.1900e-003**	**0.0369**		**183.2725**	**183.2725**	**8.6100e-003**	**0.0166**	**188.4190**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6664	5.9740	8.0044	0.0132		0.2982	0.2982		0.2922	0.2922		1,259.6685	1,259.6685	0.1590		1,263.6426
Total	**0.6664**	**5.9740**	**8.0044**	**0.0132**	**0.0000**	**0.2982**	**0.2982**	**0.0000**	**0.2922**	**0.2922**		**1,259.6685**	**1,259.6685**	**0.1590**		**1,263.6426**

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	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
Worker	0.0309	0.0200	0.2780	7.2000e-004	0.0822	4.7000e-004	0.0826	0.0218	4.3000e-004	0.0222		73.6669	73.6669	2.3300e-003	2.0200e-003	74.3270
Total	**0.0309**	**0.0200**	**0.2780**	**7.2000e-004**	**0.0822**	**4.7000e-004**	**0.0826**	**0.0218**	**4.3000e-004**	**0.0222**		**73.6669**	**73.6669**	**2.3300e-003**	**2.0200e-003**	**74.3270**

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000			0.0000			0.0000
Off-Road	0.6664	5.9740	8.0044	0.0132		0.2982	0.2982		0.2922	0.2922	0.0000	1,259.6685	1,259.6685	0.1590		1,263.6426
Total	**0.6664**	**5.9740**	**8.0044**	**0.0132**	**0.0000**	**0.2982**	**0.2982**	**0.0000**	**0.2922**	**0.2922**	**0.0000**	**1,259.6685**	**1,259.6685**	**0.1590**		**1,263.6426**

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	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
Worker	0.0309	0.0200	0.2780	7.2000e-004	0.0822	4.7000e-004	0.0826	0.0218	4.3000e-004	0.0222		73.6669	73.6669	2.3300e-003	2.0200e-003	74.3270
Total	**0.0309**	**0.0200**	**0.2780**	**7.2000e-004**	**0.0822**	**4.7000e-004**	**0.0826**	**0.0218**	**4.3000e-004**	**0.0222**		**73.6669**	**73.6669**	**2.3300e-003**	**2.0200e-003**	**74.3270**

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

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					0.0281	0.0000	0.0281	4.2600e-003	0.0000	4.2600e-003			0.0000			0.0000
Off-Road	0.6709	6.2880	7.4263	0.0115		0.3501	0.3501		0.3315	0.3315		1,094.2749	1,094.2749	0.2193		1,099.7575
Total	**0.6709**	**6.2880**	**7.4263**	**0.0115**	**0.0281**	**0.3501**	**0.3782**	**4.2600e-003**	**0.3315**	**0.3357**		**1,094.2749**	**1,094.2749**	**0.2193**		**1,099.7575**

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	0.0886	3.7732	0.9149	0.0149	0.4364	0.0320	0.4684	0.1195	0.0306	0.1501		1,640.7290	1,640.7290	0.1048	0.2610	1,721.1359
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
Worker	0.0402	0.0260	0.3614	9.4000e-004	0.1068	6.1000e-004	0.1074	0.0283	5.6000e-004	0.0289		95.7670	95.7670	3.0200e-003	2.6300e-003	96.6251
Total	**0.1288**	**3.7992**	**1.2763**	**0.0158**	**0.5432**	**0.0326**	**0.5758**	**0.1479**	**0.0311**	**0.1790**		**1,736.4960**	**1,736.4960**	**0.1078**	**0.2637**	**1,817.7610**

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

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					0.0127	0.0000	0.0127	1.9200e-003	0.0000	1.9200e-003			0.0000			0.0000
Off-Road	0.6709	6.2880	7.4263	0.0115		0.3501	0.3501		0.3315	0.3315	0.0000	1,094.2749	1,094.2749	0.2193		1,099.7575
Total	**0.6709**	**6.2880**	**7.4263**	**0.0115**	**0.0127**	**0.3501**	**0.3627**	**1.9200e-003**	**0.3315**	**0.3334**	**0.0000**	**1,094.2749**	**1,094.2749**	**0.2193**		**1,099.7575**

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	0.0886	3.7732	0.9149	0.0149	0.4364	0.0320	0.4684	0.1195	0.0306	0.1501		1,640.7290	1,640.7290	0.1048	0.2610	1,721.1359
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
Worker	0.0402	0.0260	0.3614	9.4000e-004	0.1068	6.1000e-004	0.1074	0.0283	5.6000e-004	0.0289		95.7670	95.7670	3.0200e-003	2.6300e-003	96.6251
Total	**0.1288**	**3.7992**	**1.2763**	**0.0158**	**0.5432**	**0.0326**	**0.5758**	**0.1479**	**0.0311**	**0.1790**		**1,736.4960**	**1,736.4960**	**0.1078**	**0.2637**	**1,817.7610**

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

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	2.4583	21.2001	23.6301	0.0438		1.1009	1.1009		1.0526	1.0526		4,137.5298	4,137.5298	0.8374		4,158.4658
Total	**2.4583**	**21.2001**	**23.6301**	**0.0438**		**1.1009**	**1.1009**		**1.0526**	**1.0526**		**4,137.5298**	**4,137.5298**	**0.8374**		**4,158.4658**

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	0.0000
Vendor	8.3500e-003	0.2403	0.0760	9.7000e-004	0.0338	2.7400e-003	0.0366	9.7400e-003	2.6200e-003	0.0124		104.8888	104.8888	4.1600e-003	0.0157	109.6788
Worker	0.0371	0.0240	0.3336	8.7000e-004	0.0986	5.7000e-004	0.0991	0.0262	5.2000e-004	0.0267		88.4003	88.4003	2.7900e-003	2.4200e-003	89.1924
Total	**0.0455**	**0.2642**	**0.4096**	**1.8400e-003**	**0.1324**	**3.3100e-003**	**0.1357**	**0.0359**	**3.1400e-003**	**0.0390**		**193.2891**	**193.2891**	**6.9500e-003**	**0.0181**	**198.8712**

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2022

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	2.4583	21.2001	23.6301	0.0438		1.1009	1.1009		1.0526	1.0526	0.0000	4,137.5298	4,137.5298	0.8374		4,158.4658
Total	**2.4583**	**21.2001**	**23.6301**	**0.0438**		**1.1009**	**1.1009**		**1.0526**	**1.0526**	**0.0000**	**4,137.5298**	**4,137.5298**	**0.8374**		**4,158.4658**

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	0.0000
Vendor	8.3500e-003	0.2403	0.0760	9.7000e-004	0.0338	2.7400e-003	0.0366	9.7400e-003	2.6200e-003	0.0124		104.8888	104.8888	4.1600e-003	0.0157	109.6788
Worker	0.0371	0.0240	0.3336	8.7000e-004	0.0986	5.7000e-004	0.0991	0.0262	5.2000e-004	0.0267		88.4003	88.4003	2.7900e-003	2.4200e-003	89.1924
Total	**0.0455**	**0.2642**	**0.4096**	**1.8400e-003**	**0.1324**	**3.3100e-003**	**0.1357**	**0.0359**	**3.1400e-003**	**0.0390**		**193.2891**	**193.2891**	**6.9500e-003**	**0.0181**	**198.8712**

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

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	2.3056	19.6713	23.5479	0.0438		0.9775	0.9775		0.9340	0.9340		4,139.4156	4,139.4156	0.8284		4,160.1259
Total	**2.3056**	**19.6713**	**23.5479**	**0.0438**		**0.9775**	**0.9775**		**0.9340**	**0.9340**		**4,139.4156**	**4,139.4156**	**0.8284**		**4,160.1259**

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	0.0000
Vendor	4.9600e-003	0.1894	0.0673	9.3000e-004	0.0338	1.1300e-003	0.0350	9.7400e-003	1.0800e-003	0.0108		100.4773	100.4773	4.1300e-003	0.0150	105.0608
Worker	0.0345	0.0213	0.3081	8.4000e-004	0.0986	5.3000e-004	0.0991	0.0262	4.9000e-004	0.0266		86.0818	86.0818	2.5300e-003	2.2500e-003	86.8150
Total	**0.0395**	**0.2108**	**0.3754**	**1.7700e-003**	**0.1324**	**1.6600e-003**	**0.1341**	**0.0359**	**1.5700e-003**	**0.0375**		**186.5591**	**186.5591**	**6.6600e-003**	**0.0173**	**191.8758**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

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	2.3056	19.6713	23.5479	0.0438		0.9775	0.9775		0.9340	0.9340	0.0000	4,139.4156	4,139.4156	0.8284		4,160.1259
Total	**2.3056**	**19.6713**	**23.5479**	**0.0438**		**0.9775**	**0.9775**		**0.9340**	**0.9340**	**0.0000**	**4,139.4156**	**4,139.4156**	**0.8284**		**4,160.1259**

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	0.0000
Vendor	4.9600e-003	0.1894	0.0673	9.3000e-004	0.0338	1.1300e-003	0.0350	9.7400e-003	1.0800e-003	0.0108		100.4773	100.4773	4.1300e-003	0.0150	105.0608
Worker	0.0345	0.0213	0.3081	8.4000e-004	0.0986	5.3000e-004	0.0991	0.0262	4.9000e-004	0.0266		86.0818	86.0818	2.5300e-003	2.2500e-003	86.8150
Total	**0.0395**	**0.2108**	**0.3754**	**1.7700e-003**	**0.1324**	**1.6600e-003**	**0.1341**	**0.0359**	**1.5700e-003**	**0.0375**		**186.5591**	**186.5591**	**6.6600e-003**	**0.0173**	**191.8758**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

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	1.4872	13.9474	16.5808	0.0326		0.6542	0.6542		0.6179	0.6179		3,121.3794	3,121.3794	0.7514		3,140.1646
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4872**	**13.9474**	**16.5808**	**0.0326**		**0.6542**	**0.6542**		**0.6179**	**0.6179**		**3,121.3794**	**3,121.3794**	**0.7514**		**3,140.1646**

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	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
Worker	0.0719	0.0445	0.6419	1.7500e-003	0.2054	1.1100e-003	0.2065	0.0545	1.0200e-003	0.0555		179.3371	179.3371	5.2600e-003	4.6800e-003	180.8645
Total	**0.0719**	**0.0445**	**0.6419**	**1.7500e-003**	**0.2054**	**1.1100e-003**	**0.2065**	**0.0545**	**1.0200e-003**	**0.0555**		**179.3371**	**179.3371**	**5.2600e-003**	**4.6800e-003**	**180.8645**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

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	1.4872	13.9474	16.5808	0.0326		0.6542	0.6542		0.6179	0.6179	0.0000	3,121.3794	3,121.3794	0.7514		3,140.1646
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.4872**	**13.9474**	**16.5808**	**0.0326**		**0.6542**	**0.6542**		**0.6179**	**0.6179**	**0.0000**	**3,121.3794**	**3,121.3794**	**0.7514**		**3,140.1646**

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	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
Worker	0.0719	0.0445	0.6419	1.7500e-003	0.2054	1.1100e-003	0.2065	0.0545	1.0200e-003	0.0555		179.3371	179.3371	5.2600e-003	4.6800e-003	180.8645
Total	**0.0719**	**0.0445**	**0.6419**	**1.7500e-003**	**0.2054**	**1.1100e-003**	**0.2065**	**0.0545**	**1.0200e-003**	**0.0555**		**179.3371**	**179.3371**	**5.2600e-003**	**4.6800e-003**	**180.8645**

Calleguas Lindero Pump Station Project AQ - Ventura County APCD Air District, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

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					
Archit. Coating	6.1398					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2873	2.6608	3.7520	6.6100e-003		0.1127	0.1127		0.1122	0.1122		618.5583	618.5583	0.0628		620.1293
Total	**6.4271**	**2.6608**	**3.7520**	**6.6100e-003**		**0.1127**	**0.1127**		**0.1122**	**0.1122**		**618.5583**	**618.5583**	**0.0628**		**620.1293**

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	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
Worker	5.7500e-003	3.5600e-003	0.0514	1.4000e-004	0.0164	9.0000e-005	0.0165	4.3600e-003	8.0000e-005	4.4400e-003		14.3470	14.3470	4.2000e-004	3.7000e-004	14.4692
Total	**5.7500e-003**	**3.5600e-003**	**0.0514**	**1.4000e-004**	**0.0164**	**9.0000e-005**	**0.0165**	**4.3600e-003**	**8.0000e-005**	**4.4400e-003**		**14.3470**	**14.3470**	**4.2000e-004**	**3.7000e-004**	**14.4692**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

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					
Archit. Coating	6.1398					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.2873	2.6608	3.7520	6.6100e-003		0.1127	0.1127		0.1122	0.1122	0.0000	618.5583	618.5583	0.0628		620.1293
Total	**6.4271**	**2.6608**	**3.7520**	**6.6100e-003**		**0.1127**	**0.1127**		**0.1122**	**0.1122**	**0.0000**	**618.5583**	**618.5583**	**0.0628**		**620.1293**

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	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
Worker	5.7500e-003	3.5600e-003	0.0514	1.4000e-004	0.0164	9.0000e-005	0.0165	4.3600e-003	8.0000e-005	4.4400e-003		14.3470	14.3470	4.2000e-004	3.7000e-004	14.4692
Total	**5.7500e-003**	**3.5600e-003**	**0.0514**	**1.4000e-004**	**0.0164**	**9.0000e-005**	**0.0165**	**4.3600e-003**	**8.0000e-005**	**4.4400e-003**		**14.3470**	**14.3470**	**4.2000e-004**	**3.7000e-004**	**14.4692**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	0.0000	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.543528	0.058189	0.173108	0.133952	0.027894	0.007577	0.011427	0.006062	0.000688	0.000393	0.029232	0.000646	0.007304

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

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	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Unmitigated	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

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					
Other Non-Asphalt Surfaces	0	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		**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**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
Other Non-Asphalt Surfaces	0	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		**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**

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	0.0354	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.4000e-004	1.4000e-004	0.0000		1.5000e-004
Unmitigated	0.0354	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.4000e-004	1.4000e-004	0.0000		1.5000e-004

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.0252					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0102					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.4000e-004	1.4000e-004	0.0000		1.5000e-004
Total	**0.0354**	**0.0000**	**7.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.4000e-004**	**1.4000e-004**	**0.0000**		**1.5000e-004**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

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	0.0252					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	0.0102					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	1.0000e-005	0.0000	7.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000		1.4000e-004	1.4000e-004	0.0000		1.5000e-004
Total	**0.0354**	**0.0000**	**7.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**		**1.4000e-004**	**1.4000e-004**	**0.0000**		**1.5000e-004**

7.0 Water Detail

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

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type
Emergency Generator	1	0.054	20	4332	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

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 (750 - 9999 HP)	0.3838	1.7167	0.9788	1.8400e-003		0.0565	0.0565		0.0565	0.0565		196.3859	196.3859	0.0275		197.0742
Total	**0.3838**	**1.7167**	**0.9788**	**1.8400e-003**		**0.0565**	**0.0565**		**0.0565**	**0.0565**		**196.3859**	**196.3859**	**0.0275**		**197.0742**

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Calleguas Lindero Pump Station Project AQ

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1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Other Non-Asphalt Surfaces	0.66	Acre	0.66	28,749.60	0

1.2 Other Project Characteristics

Urbanization	Urban	**Wind Speed (m/s)**	2.6	**Precipitation Freq (Days)**	31
Climate Zone	8			**Operational Year**	2023
Utility Company	Southern California Edison				
CO2 Intensity (lb/MWhr)	390.98	**CH4 Intensity (lb/MWhr)**	0.033	**N2O Intensity (lb/MWhr)**	0.004

1.3 User Entered Comments & Non-Default Data

Project Characteristics - Project is in Thousand Oaks, Ventura County

Land Use - Site area is approximately 0.66-acres

Construction Phase - Applicant provided construction schedule. Construction would occur from May 2022-May 2023 BUT the schedule is shorter since it excludes time for obtaining equipment and startup/testing

Off-road Equipment - Applicant provided equipment

Off-road Equipment - Applicant provided equipment

Off-road Equipment - Applicant provided equipment

Off-road Equipment - Applicant provided equipment

Off-road Equipment - Applicant provided equipment

Off-road Equipment - Applicant provided equipment

Trips and VMT -

Demolition - Approximated building sf and pump removal area using google earth

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Grading - Import and export 1,000 cubic yards

Architectural Coating - Included the entire area of the pump station for architectural coating

Area Coating - Included entire area of pump station for architectural coating

Construction Off-road Equipment Mitigation - Applicant provided BMPs

Stationary Sources - Emergency Generators and Fire Pumps - Diesel engine would be tested for a total of 20 hours per year. For daily usage, the maximum 20 hours was divided by 365 days.

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	ConstArea_Parking	1,725.00	19,870.00
tblAreaCoating	Area_Parking	1725	19870
tblConstDustMitigation	WaterUnpavedRoadVehicleSpeed	0	15
tblConstructionPhase	NumDays	5.00	15.00
tblConstructionPhase	NumDays	100.00	150.00
tblConstructionPhase	NumDays	10.00	15.00
tblConstructionPhase	NumDays	2.00	10.00
tblConstructionPhase	NumDays	5.00	15.00
tblConstructionPhase	NumDays	1.00	15.00
tblGrading	MaterialExported	0.00	1,000.00
tblGrading	MaterialImported	0.00	1,000.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	4.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	1.00	0.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	OffRoadEquipmentUnitAmount	2.00	1.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00

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tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	7.00	6.00
tblOffRoadEquipment	UsageHours	8.00	6.00
tblStationaryGeneratorsPumpsEF	CH4_EF	0.07	0.07
tblStationaryGeneratorsPumpsEF	ROG_EF	2.2480e-003	2.2477e-003
tblStationaryGeneratorsPumpsUse	HorsePowerValue	0.00	4,332.00
tblStationaryGeneratorsPumpsUse	HoursPerDay	0.00	0.05
tblStationaryGeneratorsPumpsUse	HoursPerYear	0.00	20.00
tblStationaryGeneratorsPumpsUse	NumberOfEquipment	0.00	1.00

2.0 Emissions Summary

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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					
2022	0.1847	1.6025	1.8089	3.4600e-003	0.0153	0.0814	0.0967	3.8800e-003	0.0779	0.0818	0.0000	299.2253	299.2253	0.0563	2.4500e-003	301.3621
2023	0.0775	0.2742	0.3369	6.5000e-004	2.6100e-003	0.0131	0.0157	7.0000e-004	0.0125	0.0132	0.0000	56.1283	56.1283	0.0113	1.6000e-004	56.4565
Maximum	**0.1847**	**1.6025**	**1.8089**	**3.4600e-003**	**0.0153**	**0.0814**	**0.0967**	**3.8800e-003**	**0.0779**	**0.0818**	**0.0000**	**299.2253**	**299.2253**	**0.0563**	**2.4500e-003**	**301.3621**

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					
2022	0.1847	1.6025	1.8089	3.4600e-003	0.0141	0.0814	0.0955	3.6900e-003	0.0779	0.0816	0.0000	299.2249	299.2249	0.0563	2.4500e-003	301.3618
2023	0.0775	0.2742	0.3369	6.5000e-004	2.6100e-003	0.0131	0.0157	7.0000e-004	0.0125	0.0132	0.0000	56.1283	56.1283	0.0113	1.6000e-004	56.4564
Maximum	**0.1847**	**1.6025**	**1.8089**	**3.4600e-003**	**0.0141**	**0.0814**	**0.0955**	**3.6900e-003**	**0.0779**	**0.0816**	**0.0000**	**299.2249**	**299.2249**	**0.0563**	**2.4500e-003**	**301.3618**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	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	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**7.08**	**0.00**	**1.13**	**4.15**	**0.00**	**0.20**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**5-2-2022**	**8-1-2022**	0.4869	0.4869
2	**8-2-2022**	**11-1-2022**	0.7877	0.7877
3	**11-2-2022**	**2-1-2023**	0.7395	0.7395
4	**2-2-2023**	**5-1-2023**	0.1183	0.1183
		Highest	0.7877	0.7877

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	6.4600e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	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
Mobile	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
Stationary	0.0711	0.3179	0.1813	3.4000e-004		0.0105	0.0105		0.0105	0.0105	0.0000	32.9923	32.9923	4.6300e-003	0.0000	33.1079
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0775**	**0.3179**	**0.1813**	**3.4000e-004**	**0.0000**	**0.0105**	**0.0105**	**0.0000**	**0.0105**	**0.0105**	**0.0000**	**32.9923**	**32.9923**	**4.6300e-003**	**0.0000**	**33.1079**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	6.4600e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Energy	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
Mobile	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
Stationary	0.0711	0.3179	0.1813	3.4000e-004		0.0105	0.0105		0.0105	0.0105	0.0000	32.9923	32.9923	4.6300e-003	0.0000	33.1079
Waste						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Water						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0775**	**0.3179**	**0.1813**	**3.4000e-004**	**0.0000**	**0.0105**	**0.0105**	**0.0000**	**0.0105**	**0.0105**	**0.0000**	**32.9923**	**32.9923**	**4.6300e-003**	**0.0000**	**33.1079**

	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	N20	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	Demolition	Demolition	5/2/2022	5/20/2022	5	15	
2	Site Preparation	Site Preparation	5/21/2022	6/10/2022	5	15	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3	Grading	Grading	6/11/2022	6/24/2022	5	10	
4	Building Construction	Building Construction	6/25/2022	1/20/2023	5	150	
5	Paving	Paving	1/21/2023	2/10/2023	5	15	
6	Architectural Coating	Architectural Coating	2/11/2023	3/3/2023	5	15	

Acres of Grading (Site Preparation Phase): 0

Acres of Grading (Grading Phase): 0

Acres of Paving: 0.66

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 0; Non-Residential Outdoor: 0; Striped Parking Area: 19,870 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Aerial Lifts	1	6.00	63	0.31
Demolition	Concrete/Industrial Saws	1	6.00	81	0.73
Demolition	Excavators	1	6.00	158	0.38
Demolition	Generator Sets	1	6.00	84	0.74
Demolition	Rubber Tired Dozers	0	1.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Site Preparation	Aerial Lifts	1	6.00	63	0.31
Site Preparation	Concrete/Industrial Saws	1	6.00	81	0.73
Site Preparation	Generator Sets	1	6.00	84	0.74
Site Preparation	Graders	0	8.00	187	0.41
Site Preparation	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Grading	Generator Sets	1	6.00	84	0.74
Grading	Graders	0	6.00	187	0.41
Grading	Plate Compactors	1	6.00	8	0.43
Grading	Rollers	1	6.00	80	0.38
Grading	Rubber Tired Dozers	0	6.00	247	0.40

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Grading	Sweepers/Scrubbers	1	6.00	64	0.46
Grading	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Aerial Lifts	1	6.00	63	0.31
Building Construction	Air Compressors	1	6.00	78	0.48
Building Construction	Bore/Drill Rigs	1	6.00	221	0.50
Building Construction	Cement and Mortar Mixers	1	6.00	9	0.56
Building Construction	Concrete/Industrial Saws	1	6.00	81	0.73
Building Construction	Cranes	1	4.00	231	0.29
Building Construction	Excavators	1	6.00	158	0.38
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	6.00	84	0.74
Building Construction	Plate Compactors	1	6.00	8	0.43
Building Construction	Pressure Washers	1	6.00	13	0.30
Building Construction	Pumps	1	6.00	84	0.74
Building Construction	Sweepers/Scrubbers	1	6.00	64	0.46
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Trenchers	1	6.00	78	0.50
Building Construction	Welders	1	6.00	46	0.45
Paving	Cement and Mortar Mixers	0	6.00	9	0.56
Paving	Concrete/Industrial Saws	1	6.00	81	0.73
Paving	Generator Sets	1	6.00	84	0.74
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	6.00	132	0.36
Paving	Plate Compactors	1	6.00	8	0.43
Paving	Rollers	1	6.00	80	0.38
Paving	Rubber Tired Loaders	1	6.00	203	0.36
Paving	Surfacing Equipment	1	6.00	263	0.30
Paving	Sweepers/Scrubbers	1	6.00	64	0.46
Paving	Tractors/Loaders/Backhoes	1	6.00	97	0.37

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Architectural Coating	Aerial Lifts	1	6.00	63	0.31
Architectural Coating	Air Compressors	0	6.00	78	0.48
Architectural Coating	Generator Sets	1	6.00	84	0.74
Architectural Coating	Pressure Washers	1	6.00	13	0.30

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
Demolition	5	13.00	0.00	20.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	4	10.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Grading	5	13.00	0.00	250.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	16	12.00	5.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Paving	10	25.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	3	2.00	0.00	0.00	10.80	7.30	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

Water Exposed Area

Reduce Vehicle Speed on Unpaved Roads

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3.2 Demolition - 2022

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					2.1600e-003	0.0000	2.1600e-003	3.3000e-004	0.0000	3.3000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.1400e-003	0.0548	0.0783	1.3000e-004		2.7200e-003	2.7200e-003		2.6400e-003	2.6400e-003	0.0000	11.1222	11.1222	1.9100e-003	0.0000	11.1698
Total	**6.1400e-003**	**0.0548**	**0.0783**	**1.3000e-004**	**2.1600e-003**	**2.7200e-003**	**4.8800e-003**	**3.3000e-004**	**2.6400e-003**	**2.9700e-003**	**0.0000**	**11.1222**	**11.1222**	**1.9100e-003**	**0.0000**	**11.1698**

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	3.0000e-005	1.5700e-003	3.7000e-004	1.0000e-005	1.7000e-004	1.0000e-005	1.8000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.5955	0.5955	4.0000e-005	9.0000e-005	0.6247
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	3.0000e-004	2.2000e-004	2.6200e-003	1.0000e-005	7.9000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.6278	0.6278	2.0000e-005	2.0000e-005	0.6341
Total	**3.3000e-004**	**1.7900e-003**	**2.9900e-003**	**2.0000e-005**	**9.6000e-004**	**1.0000e-005**	**9.7000e-004**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**1.2232**	**1.2232**	**6.0000e-005**	**1.1000e-004**	**1.2587**

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3.2 Demolition - 2022

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					9.7000e-004	0.0000	9.7000e-004	1.5000e-004	0.0000	1.5000e-004	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.1400e-003	0.0548	0.0783	1.3000e-004		2.7200e-003	2.7200e-003		2.6400e-003	2.6400e-003	0.0000	11.1222	11.1222	1.9100e-003	0.0000	11.1698
Total	**6.1400e-003**	**0.0548**	**0.0783**	**1.3000e-004**	**9.7000e-004**	**2.7200e-003**	**3.6900e-003**	**1.5000e-004**	**2.6400e-003**	**2.7900e-003**	**0.0000**	**11.1222**	**11.1222**	**1.9100e-003**	**0.0000**	**11.1698**

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	3.0000e-005	1.5700e-003	3.7000e-004	1.0000e-005	1.7000e-004	1.0000e-005	1.8000e-004	5.0000e-005	1.0000e-005	6.0000e-005	0.0000	0.5955	0.5955	4.0000e-005	9.0000e-005	0.6247
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	3.0000e-004	2.2000e-004	2.6200e-003	1.0000e-005	7.9000e-004	0.0000	7.9000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.6278	0.6278	2.0000e-005	2.0000e-005	0.6341
Total	**3.3000e-004**	**1.7900e-003**	**2.9900e-003**	**2.0000e-005**	**9.6000e-004**	**1.0000e-005**	**9.7000e-004**	**2.6000e-004**	**1.0000e-005**	**2.7000e-004**	**0.0000**	**1.2232**	**1.2232**	**6.0000e-005**	**1.1000e-004**	**1.2587**

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3.3 Site Preparation - 2022

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.0000e-003	0.0448	0.0600	1.0000e-004		2.2400e-003	2.2400e-003		2.1900e-003	2.1900e-003	0.0000	8.5706	8.5706	1.0800e-003	0.0000	8.5977
Total	**5.0000e-003**	**0.0448**	**0.0600**	**1.0000e-004**	**0.0000**	**2.2400e-003**	**2.2400e-003**	**0.0000**	**2.1900e-003**	**2.1900e-003**	**0.0000**	**8.5706**	**8.5706**	**1.0800e-003**	**0.0000**	**8.5977**

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	2.3000e-004	1.7000e-004	2.0200e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4829	0.4829	2.0000e-005	1.0000e-005	0.4878
Total	**2.3000e-004**	**1.7000e-004**	**2.0200e-003**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**6.1000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4829**	**0.4829**	**2.0000e-005**	**1.0000e-005**	**0.4878**

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3.3 Site Preparation - 2022

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					0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	5.0000e-003	0.0448	0.0600	1.0000e-004		2.2400e-003	2.2400e-003		2.1900e-003	2.1900e-003	0.0000	8.5706	8.5706	1.0800e-003	0.0000	8.5977
Total	**5.0000e-003**	**0.0448**	**0.0600**	**1.0000e-004**	**0.0000**	**2.2400e-003**	**2.2400e-003**	**0.0000**	**2.1900e-003**	**2.1900e-003**	**0.0000**	**8.5706**	**8.5706**	**1.0800e-003**	**0.0000**	**8.5977**

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	2.3000e-004	1.7000e-004	2.0200e-003	1.0000e-005	6.0000e-004	0.0000	6.1000e-004	1.6000e-004	0.0000	1.6000e-004	0.0000	0.4829	0.4829	2.0000e-005	1.0000e-005	0.4878
Total	**2.3000e-004**	**1.7000e-004**	**2.0200e-003**	**1.0000e-005**	**6.0000e-004**	**0.0000**	**6.1000e-004**	**1.6000e-004**	**0.0000**	**1.6000e-004**	**0.0000**	**0.4829**	**0.4829**	**2.0000e-005**	**1.0000e-005**	**0.4878**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

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					1.4000e-004	0.0000	1.4000e-004	2.0000e-005	0.0000	2.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3500e-003	0.0314	0.0371	6.0000e-005		1.7500e-003	1.7500e-003		1.6600e-003	1.6600e-003	0.0000	4.9636	4.9636	9.9000e-004	0.0000	4.9884
Total	**3.3500e-003**	**0.0314**	**0.0371**	**6.0000e-005**	**1.4000e-004**	**1.7500e-003**	**1.8900e-003**	**2.0000e-005**	**1.6600e-003**	**1.6800e-003**	**0.0000**	**4.9636**	**4.9636**	**9.9000e-004**	**0.0000**	**4.9884**

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	4.4000e-004	0.0197	4.6000e-003	7.0000e-005	2.1500e-003	1.6000e-004	2.3100e-003	5.9000e-004	1.5000e-004	7.4000e-004	0.0000	7.4434	7.4434	4.7000e-004	1.1800e-003	7.8081
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	2.0000e-004	1.5000e-004	1.7500e-003	0.0000	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4185	0.4185	1.0000e-005	1.0000e-005	0.4227
Total	**6.4000e-004**	**0.0198**	**6.3500e-003**	**7.0000e-005**	**2.6700e-003**	**1.6000e-004**	**2.8400e-003**	**7.3000e-004**	**1.5000e-004**	**8.8000e-004**	**0.0000**	**7.8619**	**7.8619**	**4.8000e-004**	**1.1900e-003**	**8.2308**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

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					6.0000e-005	0.0000	6.0000e-005	1.0000e-005	0.0000	1.0000e-005	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.3500e-003	0.0314	0.0371	6.0000e-005		1.7500e-003	1.7500e-003		1.6600e-003	1.6600e-003	0.0000	4.9635	4.9635	9.9000e-004	0.0000	4.9884
Total	**3.3500e-003**	**0.0314**	**0.0371**	**6.0000e-005**	**6.0000e-005**	**1.7500e-003**	**1.8100e-003**	**1.0000e-005**	**1.6600e-003**	**1.6700e-003**	**0.0000**	**4.9635**	**4.9635**	**9.9000e-004**	**0.0000**	**4.9884**

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	4.4000e-004	0.0197	4.6000e-003	7.0000e-005	2.1500e-003	1.6000e-004	2.3100e-003	5.9000e-004	1.5000e-004	7.4000e-004	0.0000	7.4434	7.4434	4.7000e-004	1.1800e-003	7.8081
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	2.0000e-004	1.5000e-004	1.7500e-003	0.0000	5.2000e-004	0.0000	5.3000e-004	1.4000e-004	0.0000	1.4000e-004	0.0000	0.4185	0.4185	1.0000e-005	1.0000e-005	0.4227
Total	**6.4000e-004**	**0.0198**	**6.3500e-003**	**7.0000e-005**	**2.6700e-003**	**1.6000e-004**	**2.8400e-003**	**7.3000e-004**	**1.5000e-004**	**8.8000e-004**	**0.0000**	**7.8619**	**7.8619**	**4.8000e-004**	**1.1900e-003**	**8.2308**

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3.5 Building Construction - 2022

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	0.1659	1.4310	1.5950	2.9500e-003		0.0743	0.0743		0.0711	0.0711	0.0000	253.3615	253.3615	0.0513	0.0000	254.6435
Total	**0.1659**	**1.4310**	**1.5950**	**2.9500e-003**		**0.0743**	**0.0743**		**0.0711**	**0.0711**	**0.0000**	**253.3615**	**253.3615**	**0.0513**	**0.0000**	**254.6435**

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	5.6000e-004	0.0169	5.2000e-003	7.0000e-005	2.2500e-003	1.9000e-004	2.4300e-003	6.5000e-004	1.8000e-004	8.3000e-004	0.0000	6.4241	6.4241	2.5000e-004	9.6000e-004	6.7177
Worker	2.4900e-003	1.8300e-003	0.0218	6.0000e-005	6.5300e-003	4.0000e-005	6.5700e-003	1.7300e-003	4.0000e-005	1.7700e-003	0.0000	5.2153	5.2153	1.8000e-004	1.6000e-004	5.2677
Total	**3.0500e-003**	**0.0187**	**0.0270**	**1.3000e-004**	**8.7800e-003**	**2.3000e-004**	**9.0000e-003**	**2.3800e-003**	**2.2000e-004**	**2.6000e-003**	**0.0000**	**11.6394**	**11.6394**	**4.3000e-004**	**1.1200e-003**	**11.9854**

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3.5 Building Construction - 2022

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	0.1659	1.4310	1.5950	2.9500e-003		0.0743	0.0743		0.0711	0.0711	0.0000	253.3612	253.3612	0.0513	0.0000	254.6432
Total	**0.1659**	**1.4310**	**1.5950**	**2.9500e-003**		**0.0743**	**0.0743**		**0.0711**	**0.0711**	**0.0000**	**253.3612**	**253.3612**	**0.0513**	**0.0000**	**254.6432**

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	5.6000e-004	0.0169	5.2000e-003	7.0000e-005	2.2500e-003	1.9000e-004	2.4300e-003	6.5000e-004	1.8000e-004	8.3000e-004	0.0000	6.4241	6.4241	2.5000e-004	9.6000e-004	6.7177
Worker	2.4900e-003	1.8300e-003	0.0218	6.0000e-005	6.5300e-003	4.0000e-005	6.5700e-003	1.7300e-003	4.0000e-005	1.7700e-003	0.0000	5.2153	5.2153	1.8000e-004	1.6000e-004	5.2677
Total	**3.0500e-003**	**0.0187**	**0.0270**	**1.3000e-004**	**8.7800e-003**	**2.3000e-004**	**9.0000e-003**	**2.3800e-003**	**2.2000e-004**	**2.6000e-003**	**0.0000**	**11.6394**	**11.6394**	**4.3000e-004**	**1.1200e-003**	**11.9854**

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3.5 Building Construction - 2023

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	0.0173	0.1475	0.1766	3.3000e-004		7.3300e-003	7.3300e-003		7.0000e-003	7.0000e-003	0.0000	28.1641	28.1641	5.6400e-003	0.0000	28.3050
Total	**0.0173**	**0.1475**	**0.1766**	**3.3000e-004**		**7.3300e-003**	**7.3300e-003**		**7.0000e-003**	**7.0000e-003**	**0.0000**	**28.1641**	**28.1641**	**5.6400e-003**	**0.0000**	**28.3050**

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	4.0000e-005	1.4800e-003	5.1000e-004	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.6841	0.6841	3.0000e-005	1.0000e-004	0.7153
Worker	2.6000e-004	1.8000e-004	2.2400e-003	1.0000e-005	7.3000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.5643	0.5643	2.0000e-005	2.0000e-005	0.5697
Total	**3.0000e-004**	**1.6600e-003**	**2.7500e-003**	**2.0000e-005**	**9.8000e-004**	**1.0000e-005**	**9.9000e-004**	**2.6000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**1.2484**	**1.2484**	**5.0000e-005**	**1.2000e-004**	**1.2850**

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3.5 Building Construction - 2023

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	0.0173	0.1475	0.1766	3.3000e-004		7.3300e-003	7.3300e-003		7.0000e-003	7.0000e-003	0.0000	28.1641	28.1641	5.6400e-003	0.0000	28.3050
Total	**0.0173**	**0.1475**	**0.1766**	**3.3000e-004**		**7.3300e-003**	**7.3300e-003**		**7.0000e-003**	**7.0000e-003**	**0.0000**	**28.1641**	**28.1641**	**5.6400e-003**	**0.0000**	**28.3050**

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	4.0000e-005	1.4800e-003	5.1000e-004	1.0000e-005	2.5000e-004	1.0000e-005	2.6000e-004	7.0000e-005	1.0000e-005	8.0000e-005	0.0000	0.6841	0.6841	3.0000e-005	1.0000e-004	0.7153
Worker	2.6000e-004	1.8000e-004	2.2400e-003	1.0000e-005	7.3000e-004	0.0000	7.3000e-004	1.9000e-004	0.0000	2.0000e-004	0.0000	0.5643	0.5643	2.0000e-005	2.0000e-005	0.5697
Total	**3.0000e-004**	**1.6600e-003**	**2.7500e-003**	**2.0000e-005**	**9.8000e-004**	**1.0000e-005**	**9.9000e-004**	**2.6000e-004**	**1.0000e-005**	**2.8000e-004**	**0.0000**	**1.2484**	**1.2484**	**5.0000e-005**	**1.2000e-004**	**1.2850**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

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	0.0112	0.1046	0.1244	2.4000e-004		4.9100e-003	4.9100e-003		4.6300e-003	4.6300e-003	0.0000	21.2375	21.2375	5.1100e-003	0.0000	21.3653
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0112**	**0.1046**	**0.1244**	**2.4000e-004**		**4.9100e-003**	**4.9100e-003**		**4.6300e-003**	**4.6300e-003**	**0.0000**	**21.2375**	**21.2375**	**5.1100e-003**	**0.0000**	**21.3653**

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	5.4000e-004	3.8000e-004	4.6700e-003	1.0000e-005	1.5100e-003	1.0000e-005	1.5200e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.1757	1.1757	4.0000e-005	3.0000e-005	1.1869
Total	**5.4000e-004**	**3.8000e-004**	**4.6700e-003**	**1.0000e-005**	**1.5100e-003**	**1.0000e-005**	**1.5200e-003**	**4.0000e-004**	**1.0000e-005**	**4.1000e-004**	**0.0000**	**1.1757**	**1.1757**	**4.0000e-005**	**3.0000e-005**	**1.1869**

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3.6 Paving - 2023

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	0.0112	0.1046	0.1244	2.4000e-004		4.9100e-003	4.9100e-003		4.6300e-003	4.6300e-003	0.0000	21.2375	21.2375	5.1100e-003	0.0000	21.3653
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0112**	**0.1046**	**0.1244**	**2.4000e-004**		**4.9100e-003**	**4.9100e-003**		**4.6300e-003**	**4.6300e-003**	**0.0000**	**21.2375**	**21.2375**	**5.1100e-003**	**0.0000**	**21.3653**

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	5.4000e-004	3.8000e-004	4.6700e-003	1.0000e-005	1.5100e-003	1.0000e-005	1.5200e-003	4.0000e-004	1.0000e-005	4.1000e-004	0.0000	1.1757	1.1757	4.0000e-005	3.0000e-005	1.1869
Total	**5.4000e-004**	**3.8000e-004**	**4.6700e-003**	**1.0000e-005**	**1.5100e-003**	**1.0000e-005**	**1.5200e-003**	**4.0000e-004**	**1.0000e-005**	**4.1000e-004**	**0.0000**	**1.1757**	**1.1757**	**4.0000e-005**	**3.0000e-005**	**1.1869**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

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					
Archit. Coating	0.0461					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1500e-003	0.0200	0.0281	5.0000e-005		8.5000e-004	8.5000e-004		8.4000e-004	8.4000e-004	0.0000	4.2086	4.2086	4.3000e-004	0.0000	4.2193
Total	**0.0482**	**0.0200**	**0.0281**	**5.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.4000e-004**	**8.4000e-004**	**0.0000**	**4.2086**	**4.2086**	**4.3000e-004**	**0.0000**	**4.2193**

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	4.0000e-005	3.0000e-005	3.7000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0941	0.0941	0.0000	0.0000	0.0950
Total	**4.0000e-005**	**3.0000e-005**	**3.7000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0941**	**0.0941**	**0.0000**	**0.0000**	**0.0950**

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3.7 Architectural Coating - 2023

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					
Archit. Coating	0.0461					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.1500e-003	0.0200	0.0281	5.0000e-005		8.5000e-004	8.5000e-004		8.4000e-004	8.4000e-004	0.0000	4.2086	4.2086	4.3000e-004	0.0000	4.2193
Total	**0.0482**	**0.0200**	**0.0281**	**5.0000e-005**		**8.5000e-004**	**8.5000e-004**		**8.4000e-004**	**8.4000e-004**	**0.0000**	**4.2086**	**4.2086**	**4.3000e-004**	**0.0000**	**4.2193**

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	4.0000e-005	3.0000e-005	3.7000e-004	0.0000	1.2000e-004	0.0000	1.2000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0941	0.0941	0.0000	0.0000	0.0950
Total	**4.0000e-005**	**3.0000e-005**	**3.7000e-004**	**0.0000**	**1.2000e-004**	**0.0000**	**1.2000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0941**	**0.0941**	**0.0000**	**0.0000**	**0.0950**

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4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	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	0.0000	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
Unmitigated	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

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Other Non-Asphalt Surfaces	0.00	0.00	0.00		
Total	0.00	0.00	0.00		

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	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
Other Non-Asphalt Surfaces	9.50	7.30	7.30	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Other Non-Asphalt Surfaces	0.543528	0.058189	0.173108	0.133952	0.027894	0.007577	0.011427	0.006062	0.000688	0.000393	0.029232	0.000646	0.007304

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.0 Energy Detail

Historical Energy Use: N

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	0.0000	0.0000	0.0000	0.0000	0.0000
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
NaturalGas Mitigated	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
NaturalGas Unmitigated	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

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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					
Other Non-Asphalt Surfaces	0	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		**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**

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					
Other Non-Asphalt Surfaces	0	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		**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**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	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	6.4600e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Unmitigated	6.4600e-003	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005

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	4.6000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.8600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	**6.4600e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

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	4.6000e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	1.8600e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	0.0000	0.0000	1.0000e-005	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.0000e-005	1.0000e-005	0.0000	0.0000	1.0000e-005
Total	**6.4600e-003**	**0.0000**	**1.0000e-005**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.0000e-005**	**1.0000e-005**	**0.0000**	**0.0000**	**1.0000e-005**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Other Non-Asphalt Surfaces	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	0.0000	0.0000	0.0000	0.0000
Unmitigated	0.0000	0.0000	0.0000	0.0000

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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Other Non-Asphalt Surfaces	0	0.0000	0.0000	0.0000	0.0000
Total		**0.0000**	**0.0000**	**0.0000**	**0.0000**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

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	0.054	20	4332	0.73	Diesel

Boilers

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

User Defined Equipment

Equipment Type	Number

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 (750 - 9999 HP)	0.0711	0.3179	0.1813	3.4000e-004		0.0105	0.0105		0.0105	0.0105	0.0000	32.9923	32.9923	4.6300e-003	0.0000	33.1079
Total	**0.0711**	**0.3179**	**0.1813**	**3.4000e-004**		**0.0105**	**0.0105**		**0.0105**	**0.0105**	**0.0000**	**32.9923**	**32.9923**	**4.6300e-003**	**0.0000**	**33.1079**

11.0 Vegetation

Appendix C

Special Status Species Tables

21-11194: Lindero Pump Station Rehabilitation Project

Scientific Name Common Name	Status	Habitat Requirements	Potential to Occur in Study Area	Habitat Suitability/ Observations
Plants and Lichens				
Abronia maritima red sand-verbena	None/None G4/S3? 4.2	Perennial herb. Blooms Feb-Nov. Occurs in coastal dunes of central and southern California, as well as the Channel Islands. Formerly fairly widespread, but available habitat has decreased, especially in Southern California. Under 100m (330ft).	Not Expected.	No coastal dune habitat occurs within the Study Area. No occurrence of the species has been documented within 5 miles of the Study Area. (CNDDB, Calflora).
Asplenium vespertinum western spleenwort	None/None G4/S4 4.2	Chaparral, cismontane woodland, coastal scrub. Rocky sites. 180-1000 m. - m. . Blooms	Low Potential.	Woodland and coastal scrub habitat are present. No occurrence of the species has been documented within 5 miles of the Study Area (CNDDB, Calflora).
Astragalus brauntonii Braunton's milk-vetch	FE/None G2/S2 1B.1	Perennial herb. Blooms January to August. Closed-cone coniferous forest, chaparral, coast scrub, valley and foothill grassland. Recent burns or disturbed areas; in saline, somewhat alkaline soils high in Ca, Mg, with some K. Soil specialist; requires shallow soils to defeat pocket gophers and open areas, preferably on hilltops, saddles or bowls between hills. 200-650m (655-2130ft).	High Potential	No suitable habitat available in the Project Area; Coastal Scrub habitat is present in the Study Area. Multiple CNDDB records including one approximately 0.6 mile northeast of Study Area.
Atriplex coulteri Coulter's saltbush	None/None G3/S1S2 1B.2	Coastal bluff scrub, coastal dunes, coastal scrub, valley and foothill grassland. Ocean bluffs, ridgetops, as well as alkaline low places. Alkaline or clay soils. 2-460 m. - m. . Blooms	Low Potential.	Coastal scrub, ridgetop, and clay soils are present. No occurrence of the species has been documented within 5 miles of the Study Area (CNNDB, Calflora).
Atriplex serenana var. *davidsonii* Davidson's saltscale	None/None G5T1/S1 1B.2	Annual herb. Blooms April to October. Coastal bluff scrub, coastal scrub. Alkaline soil. 3-250m (10-820ft).	Not Expected.	Coastal scrub habitat is present. The Study Area is outside of the species elevation range.
Baccharis malibuensis Malibu baccharis	None/None G1/S1 1B.1	Perennial deciduous shrub. Blooms August. Coastal scrub, chaparral, cismontane woodland. In Conejo volcanic substrates, often on exposed roadcuts. Sometimes occupies oak woodland habitat. 150-260m (490-855ft).	Low Potential.	Coastal scrub and woodland habitat are present. One CNDDB record approximately 1.7 miles east of the Study Area, however, this conspicuous species was not observed during the reconnaissance survey.
Baccharis plummerae ssp. *plummerae* Plummer's baccharis	None/None G3T3/S3 4.3	Broadleafed upland forest, cismontane woodland, coastal scrub, chaparral. Brushy canyons and mountainsides near the sea; usually shaded north-facing slopes. Rocky substrates. 5-425 m. - m. . Blooms	Low Potential.	Woodland and coastal scrub are present. No occurrences of the species have been documented within 5 miles of the Study Area (CNDDB, Calflora).
Calandrinia breweri Brewer's calandrinia	None/None G4/S4 4.2	Chaparral, coastal scrub. Sandy or loamy soils. Disturbed sites, burns. 10-1200 m. - m. . Blooms	Moderate Potential.	Coastal scrub habitat is present with sandy and loamy soils.
Calochortus catalinae Catalina mariposa-lily	None/None G3G4/S3S4 4.2	Valley and foothill grassland, chaparral, coastal scrub, cismontane woodland. In heavy soils, open slopes, openings in brush. 15-700 m. - m. . Blooms	Moderate Potential.	Coastal scrub and woodland habitat are present.
Calochortus clavatus var. *clavatus* club-haired mariposa-lily	None/None G4T3/S3 4.3 USFS S	Chapparal, cismontane woodland, valley and foothill grassland, coastal scrub. Generally on serpentine clay, rocky soils. 75-1300 m. - m. . Blooms	Moderate Potential.	Woodland and coastal scrub habitat are present.
Calochortus clavatus var. *gracilis* slender mariposa-lily	None/None G4T2T3/S2S3 1B.2 USFS S	Perennial bulbiferous herb. Blooms March to June. Chaparral, coastal scrub. Shaded foothill canyons; often on grassy slopes within other habitat. 420-760m (1380-2495ft).	High Potential	Coastal scrub is present. CNDDB record of occurrence within one mile of the Study Area.
Calochortus fimbriatus late-flowered mariposa-lily	None/None G3/S3 1B.3 USFS S	Chaparral, cismontane woodland, riparian woodland. Dry, open coastal woodland, chaparral; on serpentine. 270-1645 m. - m. . Blooms	Not Expected.	Woodland and ripariand woodland habitat are present, however, no serpentine soils are present within the Study Area.
Calochortus plummerae Plummer's mariposa-lily	None/None G4/S4 4.2	Coastal scrub, chaparral, valley and foothill grassland, cismontane woodland, lower montane coniferous forest. Occurs on rocky and sandy sites, usually of granitic or alluvial material. Can be very common after fire. 60-2500 m. - m. . Blooms	High Potential	Coastal scrub and woodland habitat are present. One CNDDB record approximately 1.4 miles north of the Study Area.
Calystegia peirsonii Peirson's morning-glory	None/None G4/S4 4.2	Chaparral, coastal scrub, chenopod scrub, cismontane woodland, lower montane coniferous forest, valley and foothill grassland. Often in disturbed areas or along roadsides or in grassy, open areas. 30-1500 m. - m. . Blooms	Low Potential.	Coastal scrub and woodland habitat are present. No occurrence of the species has been documented within 5 miles of the Study Area (CNDDB, Calflora).
Camissoniopsis lewisii Lewis' evening-primrose	None/None G4/S4 3	Valley and foothill grassland, coastal bluff scrub, cismontane woodland, coastal dunes, coastal scrub. Sandy or clay soil. 0-300 m. - m. . Blooms	Low Potential.	Woodland and coastal scrub habitat are present. One occurrence recorded in Calflora from 2001 approximately 3.8 miles east. No occurrences of the species have been documented within 5 miles in CNDDB or
Centromadia parryi ssp. *australis* southern tarplant	None/None G3T2/S2 1B.1	Marshes and swamps (margins), valley and foothill grassland, vernal pools. Often in disturbed sites near the coast at marsh edges; also in alkaline soils sometimes with saltgrass. Sometimes on vernal pool margins. 0-975 m. - m. . Blooms	Not Expected.	No habitat present within the Study Area.

Cercocarpus betuloides var. *blancheae* island mountain-mahogany	None/None G5T4/S4 4.3	Chaparral, closed-cone coniferous forest. 30-600 m. - m. . Blooms	Not Expected.	No habitat present within the Study Area.
Chaenactis glabriuscula var. *orcuttiana* Orcutt's pincushion	None/None G5T1T2/S1 1B.1	Coastal bluff scrub, coastal dunes. Sandy sites. 3-80 m. - m. . Blooms	Not Expected	No habitat present within the Study Area.
Chorizanthe parryi var. *fernandina* San Fernando Valley spineflower	None/SE G2T1/S1 1B.1 USFS S	Annual herb. Blooms April to July. Found in washes and sandy areas (alluvial scrub), in the hills and on mesas. Poorly developed soils, mostly in loam or silty clay loam. 3-1035m (10-3395ft).	Low Potential.	Suitable substrate is present on hills within the Study Area. No occurrence of the species has been documented within 5 miles of the Study Area (CNDDB, Calflora).
Chorizanthe parryi var. *parryi* Parry's spineflower	None/None G3T2/S2 1B.1 BLM S USFS S	Coastal scrub, chaparral, cismontane woodland, valley and foothill grassland. Dry slopes and flats; sometimes at interface of 2 vegetation types, such as chaparral and oak woodland. Dry, sandy soils. 90-1220 m. - m. . Blooms	Low Potential.	Coastal scrub and woodland habitat present. No occurrence of the species has been documented within 5 miles of the Study Area (CNDDB, Calflora).
Convolvulus simulans small-flowered morning-glory	None/None G4/S4 4.2	Chaparral, coastal scrub, valley and foothill grassland. Wet clay, serpentine ridges. 30-700 m. - m. . Blooms	Moderate Potential.	Coastal scrub habitat is present with suitable substrate.
Deinandra minthornii Santa Susana tarplant	None/SR G2/S2 1B.2	Perennial deciduous shrub. Blooms July to November. Chaparral, coastal scrub. On sandstone outcrops and crevices, in shrubland. 280-760m (1920-2495ft).	Not Expected.	Coastal scrub habitat present. Sandstone outcrops and crevices were not observed within the Study Area. The Study Area is outside of the species elevation range.
Delphinium parryi ssp. *blochmaniae* dune larkspur	None/None G4T2/S2 1B.2 BLM S	Chaparral, coastal dunes (maritime). On rocky areas and dunes. 18-305 m. - m. . Blooms	Not Expected.	No habitat present within the Study Area.
Delphinium parryi ssp. *purpureum* Mt. Pinos larkspur	None/None G4T4/S4 4.3 USFS S	Pinyon and juniper woodland, Mojavean desert scrub, chaparral. 1000-2600 m. - m. . Blooms	Not Expected.	No habitat present within the Study Area.
Dichondra occidentalis western dichondra	None/None G3G4/S3S4 4.2	Chaparral, cismontane woodland, coastal scrub, valley and foothill grassland. On sandy loam, clay, and rocky soils. 50-500 m. - m. . Blooms	Low Potential.	Woodland and coastal scrub are present. No CNDDB occurrences within 5 miles of the Study Area. One Calflora occurrence approximately 3.7 miles west of the Study Area.
Dudleya blochmaniae ssp. *blochmaniae* Blochman's dudleya	None/None G3T2/S2 1B.1	Occurs in rocky, often clay or serpentinite substrates within coastal bluff scrub, chaparral, coastal scrub, and valley and foothill grassland. This species blooms between April and June, and typically occurs at elevations ranging from 5-450 meters.	Low Potential.	Coastal habitat present. This perennial species was not observed during the reconnassaince survey. No occurrence of this species has been documented within 5 miles of the Study Area (CNDDB, Calflora).
Dudleya cymosa ssp. *agourensis* Agoura Hills dudleya	FT/None G5T1/S1 1B.2	Perennial herb. Blooms May to June. Chaparral, cismontane woodland. Rocky, volcanic breccia. 200-500m (655-1640ft).	Not Expected.	No rocky, volcanic breccia is present within the Study Area.
Dudleya cymosa ssp. *marcescens* marcescent dudleya	FT/SR G5T2/S2 1B.2	Perennial herb. Blooms April to July. Chaparral. On sheer rock surfaces and rocky volcanic cliffs. 150-520m (490-1705ft).	Not Expected.	No sheer rock or volcanic cliff habitat is present within the Study Area.
Dudleya cymosa ssp. *ovatifolia* Santa Monica dudleya	FT/None G5T1/S1 1B.1	Perennial herb. Blooms March to June. Chaparral, coastal scrub. In canyons on sedimentary conglomerates; primarily north-facing slopes. 210-500m (690-1640ft).	Not Expected.	No canyon habitat is present within the Study Area.
Dudleya multicaulis many-stemmed dudleya	None/None G2/S2 1B.2 USFS S	Chaparral, coastal scrub, valley and foothill grassland. In heavy, often clayey soils or grassy slopes. 1-910 m. - m. . Blooms	Low Potential	Coastal scrub is present within the Study Area. This perennial species was not observed during the reconnassaince survey.
Dudleya parva Conejo dudleya	FT/None G1/S1 1B.2	Coastal scrub, valley and foothill grassland. In clay or volcanic soils on rocky slopes and grassy hillsides. 90-380 m. - m. . Blooms	Low Potential	Coastal scrub is present within the Study Area. This perennial species was not observed during the reconnassaince survey.
Dudleya verityi Verity's dudleya	FT/None G1/S1 1B.1	Chaparral, cismontane woodland, coastal scrub. On volcanic rock outcrops in the Santa Monica Mountains. 60-305 m. - m. . Blooms	Not Expected	Volcanic outcrop habitat is not present within the Study Area.
Eriogonum crocatum conejo buckwheat	None/SR G1/S1 1B.2	Chaparral, coastal scrub, valley and foothill grassland. Conejo volcanic outcrops; rocky sites. 90-580 m. - m. . Blooms	Low Potential	No volcanic outcrops, marginal substrate habitat. This perennial species was not observed during the reconnassaince survey.
Galium cliftonsmithii Santa Barbara bedstraw	None/None G4/S4 4.3	Cismontane woodland, chaparral. Light shade, coastal canyons, dry banks. 200-1220 m. - m. . Blooms	Low Potential	Woodland habitat is present, however no canyons are present within the Study Area. No occurrence of this species has been documented within 5 miles of the Study Area (CNDDB, Calflora).

Harpagonella palmeri Palmer's grapplinghook	None/None G4/S3 4.2	Chaparral, coastal scrub, valley and foothill grassland. Clay soils; open grassy areas within shrubland. 20-955 m. - m. . Blooms	Not expected.	Coastal scrub habitat is present. No occurrence of this species has been documented within 5 miles of the Study Area (CNDDB, Calflora).
Hordeum intercedens vernal barley	None/None G3G4/S3S4 3.2	Valley and foothill grassland, vernal pools, coastal dunes, coastal scrub. Vernal pools, dry, saline streambeds, alkaline flats. 5-1000 m. - m. . Blooms	Not Expected.	No suitable substrate habitat is present within the Study Area.
Horkelia cuneata var. *puberula* mesa horkelia	None/None G4T1/S1 1B.1 USFS S	Perennial herb. Blooms February to September. Chaparral, cismontane woodland, coastal scrub. Sandy or gravelly sites. 70-810m (230-2655ft).	Low Potential	Woodland and coastal scrub habitat are present. Marginal sandy substrate occurs within the Study Area. No occurrence of this species has been documented within 5 miles of the Study Area (CNDDB, Calflora).
Isocoma menziesii var. *decumbens* decumbent goldenbush	None/None G3G5T2T3/S2 1B.2 BLM S	Perennial shrub. Blooms April to November. Coastal scrub. Sandy soils; often in disturbed sites. 10-910m (30-2985ft).	Low Potential	Coastal scrub is present. Marginal sandy substrate occurs within the Study Area. No occurrence of this species has been documented within 5 miles of the Study Area (CNDDB, Calflora).
Juglans californica southern California black walnut	None/None G4/S4 4.2	Chaparral, coastal scrub, cismontane woodland, riparian woodland. Slopes, canyons, alluvial habitats. 50-900 m. - m. . Blooms	Present.	This species was observed within the riparian habitat in the Study Area.
Juncus acutus ssp. *leopoldii* southwestern spiny rush	None/None G5T5/S4 4.2	Salt marshes, alkaline seeps, coastal dunes (mesic sites). Moist saline places. 3-900 m. - m. . Blooms	Not Expected.	No marsh, alkaline seep, or coastal dune habitat is present within the Study Area.
Lasthenia glabrata ssp. *coulteri* Coulter's goldfields	None/None G4T2/S2 1B.1 BLM S	Annual herb. Blooms February to June. Coastal salt marshes, playas, valley and foothill grassland, vernal pools. Usually found on alkaline soils in playas, sinks, and grasslands. 1-1400m (3-4595ft).	Not Expected.	No marsh, playa, grassland, or vernal pool habitat is present within the Study Area.
Lepechinia fragrans fragrant pitcher sage	None/None G3/S3 4.2 USFS S	Chaparral. 20-1310 m. - m. . Blooms	Not Expected.	No chaparral habitat is present within the Study Area.
Lepidium virginicum var. *robinsonii* Robinson's pepper-grass	None/None G5T3/S3 4.3	Chaparral, coastal scrub. Dry soils, shrubland. 4-1435 m. - m. . Blooms	Low Potential.	Coastal scrub habitat is present. No occurrence of this species has been documented within 5 miles of the Study Area (CNDDB, Calflora).
Lilium humboldtii ssp. *humboldtii* Humboldt lily	None/None G4T3/S3 4.2	Chaparral, lower montane coniferous forest, cismontane woodland. Yellow-pine forest, openings or open forest. 90-1280 m. - m. . Blooms	Low Potential.	Woodland habitat is present. No occurrence of this species has been documented within 5 miles of the Study Area (CNDDB, Calflora).
Lilium humboldtii ssp. *ocellatum* ocellated Humboldt lily	None/None G4T4?/S4? 4.2	Chaparral, coastal scrub, cismontane woodland, lower montane coniferous forest, riparian forest. Yellow-pine forest or openings, oak canyons. 30-1800 m. - m. . Blooms	Not expected.	Coastal scrub and woodland habitat are present. No occurrence of this species has been documented within 5 miles of the Study Area (CNDDB, Calflora).
Lupinus paynei Payne's bush lupine	None/None G1Q/S1 1B.1	Coastal scrub, riparian scrub, valley and foothill grassland. Sandy. 220-425 m. - m. . Blooms	Not expected.	Coastal scrub is present within the Study Area. This perennial shrub was not observed during the reconnassaince survey.
Monardella hypoleuca ssp. *hypoleuca* white-veined monardella	None/None G4T3/S3 1B.3	Perennial herb. Blooms April to December. Chaparral, cismontane woodland. Dry slopes. 50-1525m (165-5005ft).	Not expected.	Woodland habitat is present. No occurrence of this species has been documented within 5 miles of the Study Area (CNDDB, Calflora).
Monardella sinuata ssp. *gerryi* Gerry's curly-leaved monardella	None/None G3T1/S1 1B.1	Coastal scrub. Sandy openings. 180-215 m. - m. . Blooms	Not Expected.	No sandy openings are present within the Study Area.
Navarretia ojaiensis Ojai navarretia	None/None G2/S2 1B.1 USFS S	Annual herb. Blooms May to July. Chaparral, coastal scrub, valley and foothill grassland. Openings in shrublands or grasslands. Typically occurs on clay soils. 275-620m (900-2035ft).	Low Potential.	Coastal scrub habitat is present. No occurrence of this species has been documented within 5 miles of the Study Area (CNDDB, Calflora).
Nolina cismontana chaparral nolina	None/None G3/S3 1B.2 USFS S	Chaparral, coastal scrub. Primarily on sandstone and shale substrates; also known from gabbro. 140-1100 m. - m. . Blooms	Low Potential.	Coastal scrub is present. This perennial shrub was not observed during the reconnassaince survey.
Orcuttia californica California Orcutt grass	FE/SE G1/S1 1B.1	Vernal pools. 10-660 m. - m. . Blooms	Not Expected.	No vernal pool habitat is present within the Study Area.
Pentachaeta lyonii Lyon's pentachaeta	FE/SE G1/S1 1B.1	Annual herb. Blooms March to August. Chaparral, valley and foothill grassland, coastal scrub. Edges of clearing in chaparral, usually at the ecotone between grassland and chaparral or edges of firebreaks. 30-630m (100-2065ft).	Low Potential	Coastal scrub habitat is present. No chaparral or grassland ecotone habitat is present within the Study Area.

Phacelia hubbyi Hubby's phacelia	None/None G4/S4 4.2	Chaparral, coastal scrub, valley and foothill grassland. Gravelly, rocky areas and talus slopes. 0-1000 m. - m. . Blooms	Not Expected.	The Study Area lacks suitable gravelly, rocky substrates on talus slopes.
Piperia michaelii Michael's rein orchid	None/None G3/S3 4.2	Coastal bluff scrub, coastal scrub, cismontane woodland, chaparral, closed-cone coniferous forest, lower montane coniferous forest. Mudstone and humus, generally dry sites. 3-915 m. - m. . Blooms	Low Potential.	Coastal scrub and woodland habitat are present. No occurrence of this species has been documented within 5 miles of the Study Area (CNDDB, Calflora).
Polygala cornuta var. *fishiae* Fish's milkwort	None/None G5T4/S4 4.3	Cismontane woodland, riparian woodland, chaparral. Scree slopes, brushy ridges, and along creeks; often with oaks. 100-1000 m. - m. . Blooms	Low Potential.	Woodland and riparian woodland habitat are present within the Study Area. No occurrence of this species has been documented within 5 miles of the Study Area (CNDDB, Calflora).
Quercus dumosa Nuttall's scrub oak	None/None G3/S3 1B.1 BLM S USFS S	Closed-cone coniferous forest, chaparral, coastal scrub. Generally on sandy soils near the coast; sometimes on clay loam. 15-640 m. - m. . Blooms	Low Potential.	Coastal scrub is present within the Study Area. This perennial shrub was not observed during the reconnassaince survey.
Romneya coulteri Coulter's matilija poppy	None/None G4/S4 4.2	Coastal scrub, chaparral. In washes and on slopes; also after burns. 20-1200 m. - m. . Blooms	Low Potential	Coastal scrub habitat is present. No occurrence of this species has been documented within 5 miles of the Study Area (CNDDB, Calflora).
Senecio aphanactis chaparral ragwort	None/None G3/S2 2B.2	Chaparral, cismontane woodland, coastal scrub. Drying alkaline flats. 20-1020 m. - m. . Blooms	Not Expected	Alkaline flat habitat is not present within the Study Area.
Suaeda taxifolia woolly seablite	None/None G4/S4 4.2	Coastal bluff scrub, coastal dunes, marshes and swamps. Margins of salt marshes. 0-50 m. - m. . Blooms	Not Expected	No coastal bluff, coastal dune, marsh, or swamp habitat are present within the Study Area.
Thelypteris puberula var. *sonorensis* Sonoran maiden fern	None/None G5T3/S2 2B.2 USFS S	Meadows and seeps. Along streams, seepage areas. 60-930 m. - m. . Blooms	Not Expected.	No meadow or seep habitat are present within the Study Area.
Tortula californica California screw moss	None/None G2G3/S2? 1B.2 BLM S	Chenopod scrub, valley and foothill grassland. Moss growing on sandy soil. 45-750 m. - m. . Blooms	Not Expected.	No chenopod scrub or grassland habitat are within the Study Area.
Invertebrates				
Bombus crotchii Crotch bumble bee	None/SCE G3G4/S1S2	Coastal California east to the Sierra-Cascade crest and south into Mexico. Food plant genera include Antirrhinum, Phacelia, Clarkia, Dendromecon, Eschscholzia, and Eriogonum.	Low Potential.	
Streptocephalus woottoni Riverside fairy shrimp	FE/None G1G2/S1S2	Endemic to Western Riverside, Orange, and San Diego counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.	Not Expected.	Seasonal pool habitat does not occur within the Study Area.
Fish				
Gila orcuttii arroyo chub	None/None G2/S2 SSC USFS S	Native to streams from Malibu Creek to San Luis Rey River basin. Introduced into streams in Santa Clara, Ventura, Santa Ynez, Mojave & San Diego river basins. Slow water stream sections with mud or sand bottoms. Feeds heavily on aquatic vegetation and associated invertebrates.	Low Potential.	Stream habitat occurs within the Study Area. One CNDDB occurrence 3.5 miles east of transplant outside of native habitat range.
Reptiles				
Anniella spp. California legless lizard	None/None G3G4/S3S4 SSC	Contra Costa County south to San Diego, within a variety of open habitats.This element represents California records of Anniella not yet assigned to new species within the Anniella pulchra complex. Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	Moderate Potential.	Suitable substrate is present within the Study Area. One CNDDB record approximately 3.2 miles northwest of the Study Area.
Anniella stebbinsi Southern California legless lizard	None/None G3/S3 SSC USFS S	Generally south of the Transverse Range, extending to northwestern Baja California. Occurs in sandy or loose loamy soils under sparse vegetation. Disjunct populations in the Tehachapi and Piute Mountains in Kern County. Variety of habitats; generally in moist, loose soil. They prefer soils with a high moisture content.	Moderate Potential.	Suitable habitat and substrate are present within the Study Area. Two CNDDB records, one approximately 2.8 miles southwest and the other is historic (1952) and approximately 2.2 miles southwest of the Study Area.
Aspidoscelis tigris stejnegeri coastal whiptail	None/None G5T5/S3 SSC	Found in deserts and semi-arid areas with sparse vegetation and open areas. Also found in woodland & riparian areas. Ground may be firm soil, sandy, or rocky.	High Potential.	Woodland and riparian habitat are present with suitable substrates. Multile CNDDB records within 5 miles with one approximately 1.1 miles east of the Study Area.

Emys marmorata western pond turtle	None/None G3G4/S3 SSC BLM S USFS S	A thoroughly aquatic turtle of ponds, marshes, rivers, streams and irrigation ditches, usually with aquatic vegetation, below 6000 ft elevation. Needs basking sites and suitable (sandy banks or grassy open fields) upland habitat up to 0.5 km from water for egg-laying.	Moderate Potential.	Suitable aquatic and upland habitat are present within the Study Area. Multiple CNDDB records within 5 miles with multiple presumed extirpated. Two occurrences presumed extant greater than 3.5 miles east of the Study Area and mapped with non-specific area.
Thamnophis hammondii two-striped gartersnake	None/None G4/S3S4 SSC BLM S USFS S	Coastal California from vicinity of Salinas to northwest Baja California from sea level to about 7,000 feet in elevation. Highly aquatic, found in or near permanent fresh water. Often along streams with rocky beds and riparian growth.	Moderate Potential.	Suitable sources of permanent fresh water may be present within the Study Area when the creek has flowing water due to irrigation runoff. However, there are no CNDDB records within 5 miles of the Study Area.
Birds				
Agelaius tricolor tricolored blackbird	None/ST G1G2/S1S2 SSC BLM S USFWS BCC	Highly colonial species, most numerous in Central Valley & vicinity. Largely endemic to California. Requires open water, protected nesting substrate, and foraging area with insect prey within a few km of the colony.	Not Expected (nesting). Low Potential (foraging).	The drainage feature within the Study Area is dense riparian habitat with no open water. One CNDDB occurrence recorded from 1995 approximately 4.7 miles south of the Study Area.
Aimophila ruficeps canescens southern California rufous-crowned sparrow	None/None G5T3/S3 WL	Resident in Southern California coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	High Potential.	Coastal sage scrub and grassy hillside habitat are present within the Study Area. One CNDDB record approximately 1.2 miles northwest of the Study Area.
Aquila chrysaetos golden eagle	None/None G5/S3 FP WL BLM S USFWS BCC	Rolling foothills, mountain areas, sage-juniper flats, and desert. Cliff-walled canyons provide nesting habitat in most parts of range; also, large trees in open areas.	Low Potential (nesting). Moderate Potential (foraging).	Rolling foothill habitat is present within the Study Area. No cliff habitat is present, however, large trees are present along the perimeter of riparian habitat.
Empidonax traillii extimus southwestern willow flycatcher	FE/SE G5T2/S1	Breeds in relatively dense riparian tree and shrub communities associated with rivers, swamps, and other wetlands including lakes and reservoirs. This species nests in native vegetation including willows, boxelder, buttonbush, cottonwood, and thickets dominated by non-native tamarisk and olive trees.	Low Potential	Marginally suitable thickets of arroyo willow are present in the Study Area. However, the exxtent of willow thickets are limited and the Study Area exhibits a lack of vegetative diversity and vertical complexity required by this species. In addition, there are no CNDDB records within 5 miles of the Study Area.
Polioptila californica californica coastal California gnatcatcher	FT/None G4G5T3Q/S2 SSC	Obligate, permanent resident of coastal sage scrub below 2500 ft in Southern California. Low, coastal sage scrub in arid washes, on mesas and slopes. Not all areas classified as coastal sage scrub are occupied.	High Potential.	Coastal sage scrub habitat is present within the Study Area. Multiple CNDDB records are within 5 miles with one approximately 1.3 miles northwest of the Study Area.
Riparia riparia bank swallow	None/ST G5/S2 BLM S	Colonial nester; nests primarily in riparian and other lowland habitats west of the desert. Requires vertical banks/cliffs with fine-textured/sandy soils near streams, rivers, lakes, ocean to dig nesting hole.	Not Expected.	No vertical bank or cliff habitat are present within the Study Area. All CNDDB occurrences within 5 miles of the Study Area are extirpated.
Vireo bellii pusillus least Bell's vireo	FE/SE G5T2/S2	Summer resident of Southern California in low riparian in vicinity of water or in dry river bottoms; below 2000 ft. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, Baccharis, mesquite.	Moderate Potential.	Riparian habitat is present within the Study Area. Multiple CNDDB records within 5 miles with one approximately 3.3 miles north of the Study Area.
Mammals				
Antrozous pallidus pallid bat	None/None G4/S3 SSC BLM S USFS S WBWG H	Found in a variety of habitats including deserts, grasslands, shrublands, woodlands, and forests. Most common in open, dry habitats with rocky areas for roosting. Roosts in crevices of rock outcrops, caves, mine tunnels, buildings, bridges, and hollows of live and dead trees which must protect bats from high temperatures. Very sensitive to disturbance of roosting sites.	Low Potential (roosting). Moderate Potential (foraging).	Shurbland and woodland habitat are present. Buildings and trees are present, however, the Study Area area is adjacent to development including Erbes Rd and residential housing and associated disturbances (e.g., noise, lighting).
Eumops perotis californicus western mastiff bat	None/None G4G5T4/S3S4 SSC BLM S WBWG H	Occurs in open, semi-arid to arid habitats, including coniferiferous and deciduous woodlands, coastal scrub, grasslands, and chaparral. Roosts in crevices in cliff faces and caves, and buildings. Roosts typically occur high above ground.	Low Potential (roosting and foraging).	Coastal scrub is present. No cliff or cave habitat present, buildings within the Study Area are single story in height. One CNDDB record approximately 3.7 miles east of the Study Area.
Myotis ciliolabrum western small-footed myotis	None/None G5/S3 BLM S WBWG M	Occurs in a wide range of arid and semiarid habitats including woodlands, open forests, riparian zones, and desert shrub. Roosts in rock crevices in caves, tunnels, and mines, also found beneath loose bark and in buildings. Forages for insects over water sources.	Low Potential (roosting). Moderate Potential (foraging).	Woodland and riparian habitat are present. Buildings are present however, are in current use by humans.
Sensitive Natural Communities				
Southern Coast Live Oak Riparian Forest	None/None G4/S4	.		

Southern Riparian Forest	None/None G4/S4	.		
Southern Sycamore Alder Riparian Woodland	None/None G4/S4	Occurs in very rocky streambeds subject to seasonally highintensity flooding. Alnus increases in abundance on more perennial streams, while Platanus favors more intermittent hydrogt-aphs.		
Valley Oak Woodland	None/None G3/S2.1	Occurs on deep, well-drained alluvial soils, usually invalley bottoms, Intergrades with Valley Oak Riparian Forest, Near rivers and on drier slopes. Also found on nonalluvial settings in the South Coast and Transverse ranges. Fire may have prevented some valley oak stands from succeeding to Ponderosa Pine or Coulter Pine forests before fire supression		

Appendix D

[DELETED]

Appendix E

Cultural Resources Report

Rincon Consultants, Inc.

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September 16, 2021
Project No: 21-11194

Jennifer Lancaster, Principal Water Resource Specialist
Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, California 91360
Via email: jlancaster@calleguas.com

Subject: Cultural Resources Assessment for Lindero Pump Station, Calleguas Municipal Water District, Thousand Oaks, California

Dear Ms. Lancaster:

This memorandum presents the findings of a cultural resources study completed in support of the Lindero Pump Station Rehabilitation project located in Thousand Oaks, California (project). Rincon Consultants, Inc. (Rincon) was retained by Calleguas Municipal Water District to support the project's compliance with the California Environmental Quality Act (CEQA). This memorandum documents the results of the tasks performed by Rincon, specifically a cultural resources records search, archival and background research, and an intensive-level field survey. All work was completed in accordance with CEQA and applicable local regulations.

Cultural Resources Assistant Project Manager Pedro Gonzalez completed the cultural resources records search request, SLF request, and field survey for the project. Cultural Resources Project Manager Matthew Gonzalez and Architectural Historian Project Manager JulieAnn Murphy authored this report. Senior Architectural Historian Steven Treffers, MHP, provided senior oversight. Principal and Senior Archaeologist Christopher A. Duran, MA, RPA, managed the archaeological analysis summarized in this report and reviewed this report for quality assurance and quality control. Mr. Treffers and Mr. Duran meet the Secretary of the Interior's Professional Qualification Standards in their respective fields (36 CFR, Part 61).

Project Description

The project site is comprised of three parcels totaling 0.87 acres located within the Calleguas Municipal Water District's Lake Bard site at 2106 Erbes Road in Thousand Oaks. The parcels (APNs 569-032-003, 569-032-004, 569-032-005) are comprised of four pump trains (1969), three surge tanks (1969) a control building (1969), and an electric substation building (1969). Lindero Pump Station occupies a rectangular lot and is accessed via a drive from Erbes Road. The rectangular lot is enclosed by a concrete masonry wall, topped with barbed security wire. The lot is paved and features two subsurface pipelines. The proposed project would include replacement of case pumps with turbine pumps, updated mechanical equipment and electrical systems, the installation of a removable canopy, and updates to the control building including a new roof and entry door.

Environmental Context

The project site is located in the eastern portion of the Thousand Oaks city limits, north of the Santa Monica Mountain Range. The project site is within a developed area situated at an elevation that ranges from approximately 906 to 1000 feet above mean sea level. Soils within the project site include a Gilroy-Topdeck-Cropley-Hambright complex consisting of shallow to very deep moderately well to well-drained soils formed in material weathered from basic igneous and metamorphic rocks; colluvium and residuum from basalt; breccia and andesite and alluvium from mixed rock sources (California Soil Resource Lab 2021). The nearest water source is an unnamed creek, located along the western and northern boundary of the project site. Vegetation within the project site consists of ornamentals, manicured grass, and mature trees including coast live oak (*Quercus agrifolia*), California sycamore (*Platanus racemosa*), valley oak (*Quercus lobata*), western redbud (*Cercis occidentalis*), Fremont cottonwood (*Populus fremontii*), coast redwood (*Sequoia sempervirens*), white alder (*Alnus rhombifolia*), and arroyo

Prehistory

During the twentieth century, many archaeologists developed chronological sequences to explain prehistoric cultural changes in all or portions of southern California (c.f., Jones and Klar 2007; Moratto 1984). Wallace (1955, 1978) devised a prehistoric chronology for the southern California coastal region that included four horizons: Early Man, Milling Stone, Intermediate, and Late Prehistoric. Wallace's chronology was based on early studies and lacked the chronological precision of absolute dates (Moratto 1984:159). Since then, Wallace's (1955) synthesis has been modified and improved using thousands of radiocarbon dates obtained by southern California researchers over recent decades (Byrd and Raab 2007:217; Koerper and Drover 1983; Koerper et al. 2002; Mason and Peterson 1994). The prehistoric chronological sequence for southern California presented below is a composite based on Wallace (1955) and Warren (1968), as well as later studies, including Koerper and Drover (1983).

Early Man Horizon (ca. 10,000–6,000 BCE)

Numerous pre-8,000 BCE sites have been identified along the mainland coast and Channel Islands of southern California (c.f., Erlandson 1991; Johnson et al. 2002; Jones and Klar 2007; Moratto 1984; Rick et al. 2001:609). One of them, the Arlington Springs site on Santa Rosa Island, produced human femurs dating to approximately 13,000 years ago (Arnold et al. 2004; Johnson et al. 2002). On San Miguel Island, human occupation at Daisy Cave (SMI-261) has also been dated to nearly 13,000 years ago. This site also included some of the earliest examples of basketry on the Pacific Coast, dating to over 12,000 years old (Arnold et al. 2004).

Although few Clovis or Folsom style fluted points have been found in southern California (e.g., Dillon 2002; Erlandson et al. 1987), Early Man Horizon sites are generally associated with a greater emphasis on hunting than later horizons. Recent data indicate that the Early Man economy was a diverse mixture of hunting and gathering, including a significant focus on aquatic resources in coastal areas (e.g., Jones et al. 2002) and on inland Pleistocene lakeshores (Moratto 1984). A warm and dry 3,000-year period called the Altithermal began around 6,000 BCE. The conditions of the Altithermal are likely responsible for the change in human subsistence patterns at this time, including a greater emphasis on plant foods and small game.

Milling Stone Horizon (6,000–3,000 BCE)

The Milling Stone Horizon is defined as "marked by extensive use of milling stones and mullers, a general lack of well-made projectile points, and burials with rock cairns" (Wallace 1955: 219). The dominance of such artifact types indicates a subsistence strategy oriented around collecting plant foods and small animals. A broad spectrum of food resources were consumed including small and large terrestrial mammals, sea mammals, birds, shellfish and other littoral and estuarine species, near-shore fishes, yucca, agave, and seeds and other plant products (Reinman 1964; Kowta 1969). Variability in artifact collections over time and from the coast to inland sites indicates Milling Stone Horizon subsistence strategies adapted to environmental conditions (Byrd and Raab 2007: 220). Locally available tool stone dominates lithic artifacts associated with Milling Stone Horizon sites; ground stone tools, such as manos and metates, and chopping, scraping, and cutting tools, are common. Kowta (1969) attributes the presence of numerous scraper-plane tools in Milling Stone Horizon collections to the processing of agave or yucca for food or fiber. The mortar and pestle, associated with acorns or other foods processed through pounding, were first used during the Milling Stone Horizon, and increased dramatically in later periods (Wallace 1955, 1978; Warren 1968).

Two types of artifacts are considered diagnostic of the Milling Stone Horizon are the cogged stone and discoidal, most of which have been found on sites dating between 4000 and 1000 BCE (Moratto 1984: 149), though possibly as far back as 5500 BCE (Couch et al. 2009). The cogged stone is a ground stone object with gear-like teeth on the perimeter and is produced from a variety of materials. The function of cogged stones is unknown, but many scholars have postulated ritualistic or ceremonial uses (c.f., Eberhart 1961: 367; Dixon 1968: 64-65) based on the materials used and their location near to burials and other established ceremonial artifacts as compared to typical habitation debris. Similar to cogged stones, discoidals are found in the archaeological record subsequent to the introduction of the cogged stone. Cogged stones and discoidals were often buried purposefully, or "cached." They are most common in sites along the coastal drainages from southern Ventura County southward and are particularly abundant at some Orange County sites, although a few specimens have been found inland as far east as Cajon Pass (Dixon 1968: 63; Moratto 1984: 149).

Intermediate Horizon (3,000 BCE–500 CE)

Wallace's Intermediate Horizon dates from approximately 3,000 BCE – Common Era (CE) 500 and is characterized by a shift toward a hunting and maritime subsistence strategy, as well as greater use of plant foods. A noticeable trend towards a greater adaptation to local resources including a broad variety of fish, land mammals, and sea mammals along the coast occurred during the Intermediate Horizon. Tool kits for hunting, fishing, and processing food and materials reflect this increased diversity, with flake scrapers, drills, various projectile points, and shell fishhooks being manufactured.

Mortars and pestles became more common during this transitional period, gradually replacing manos and metates as the dominant milling equipment. This change in milling stone technology is believed to signal a transition from the processing and consumption of hard seed resources to the increased reliance on acorns (Glassow et al. 1988; True 1993). Mortuary practices during the Intermediate Horizon typically included fully flexed burials oriented toward the west (Warren 1968:2-3).

Later Prehistoric Horizon (500 CE–Historic Contact)

During Wallace's (1955, 1978) Late Prehistoric Horizon, the diversity of plant food resources and land and sea mammal hunting increased even further than during the Intermediate Horizon. A greater variety of artifact types was observed during this period and high quality exotic lithic materials were used for

small, finely worked projectile points associated with the bow and arrow. Steatite containers were made for cooking and storage and an increased use of asphaltum for waterproofing is noted. More artistic artifacts were recovered from Late Prehistoric Horizon sites and cremation became a common mortuary custom. Larger, more permanent villages supported an increased population size and social structure (Wallace 1955). This change in material culture, burial practices, and subsistence focus coincides with the westward migration of Uto-Aztecan language speakers from the Great Basin region to Los Angeles, Orange, and western Riverside counties (Sutton 2008; Potter and White 2009).

Ethnographic Context

Ventureño Chumash

The project lies in an area historically occupied by the Ventureño Chumash, so called after their historic period association with Mission San Buenaventura (Grant 1978a). The Chumash spoke six closely related Chumashan languages, which have been divided into three branches: Northern Chumash (consisting only of Obispeño), Central Chumash (consisting of Purisimeño, Ineseño, Barbareño, and Ventureño), and Island Chumash (Jones and Klar 2007:80). Groups neighboring Chumash territory included the Salinan to the north, the Southern Valley Yokuts and Tataviam to the east, and the Gabrieleño-Tongva to the south.

Early Spanish accounts describe the Santa Barbara Channel as heavily populated at the time of contact. Estimates of the total Chumash population range from 8,000-10,000 (Kroeber 1925:551) to 18,000-22,000 (Cook and Heizer 1965: 21). Coastal Chumash lived in hemispherical dwellings made of tule reed mats, or animal skins. These dwellings could usually accommodate as many as 60 people (Brown 2001). The village of šukuw (or shuku), at Rincon Point, was encountered by Gaspar de Portola in 1769. This village had 60 dwellings and seven canoes, with an estimated population of 300 (Grant 1978b).

The tomol, or wooden plank canoe, was an especially important tool for the procurement of marine resources and for maintaining trade networks between Coastal and Island Chumash. Sea mammals were hunted with harpoons, while deep-sea fish were caught using nets and hooks and lines. Shellfish were gathered from beach sands using digging sticks, and mussels and abalone were pried from rocks using wood or bone wedges.

The acorn was an especially important resource for many California tribes. Acorn procurement and processing involved the manufacture of baskets for gathering, winnowing, and cooking as well as the production of mortars and milling stones for grinding. Bow and arrow, spears, traps, and other various methods were used for hunting (Hudson and Blackburn 1983). The Chumash also manufactured various other utilitarian and non-utilitarian items. Eating utensils, ornaments, fishhooks, harpoons, and other items were made using bone and shell. Olivella shell beads were especially important for trade.

The Chumash were heavily affected by the arrival of Europeans. The Spanish missions and later Mexican and American settlers dramatically altered traditional Chumash lifeways. Chumash populations were drastically reduced by the introduction of European diseases. Many Chumash descendants, however, still inhabit the region.

Historical Development and Context of the Project Site

Thousand Oaks is located within the area of the one of the largest land grants in California, the 113,000 Rancho San Jose de Nuestra Senora de Altagarcia y Simi was granted to the Pico family in 1795. In 1842, Don Jose de la Guerra y Noriego of Santa Barbara purchased the rancho, bringing his land holdings to

nearly a quarter million acres in two counties. Settlement of the Simi area began in the 1860s. By the 1880s rapid growth followed the Land and Water Company's subdivision of the land which was then sold to ranchers. The Janss family, Southern California developers, purchased 10,000 acres in 1919 to create a total community, including schools, churches, industrial parks, and housing eventually becoming the community of Thousand Oaks (EDAW, 2006).

Historical aerial photographs and available original plans suggest that the site of Lindero Pump Station was largely undeveloped until the pump station was constructed in 1969 (Figure 1). The subject property, formerly a portion of 3,000 acres of Rancho Conejo land was sold to John Edwards in 1893. Edwards sold the land to WJ Ralph who, in turn, sold it to EM Glass in 1915. Glass sold it to JB Stearns in 1927, who defaulted it back to EM Glass in 1931. Glass sold it to Albertson Co. in 1935. Michael and Howard Lang purchased the 3,000 acres from Albertson Co. to use the land for ranching (*Los Angeles Times* 06/25/67). During this period Thousand Oaks was unincorporated and was primarily occupied by agricultural use. The area immediately west of the Lindero Pump Station, in the area of the current adjacent park maintenance building, was a cattle feed lot at the time of the pump station's construction. In the post-World War II period, the area transitioned to accommodate residential and supportive commercial development.

By 1961, the area consisted of two shopping centers, an industrial park, schools, churches, and a four-year liberal arts college, California Lutheran University. The community voted to incorporate in 1964 and chose the name Thousand Oaks to honor the area's many oak trees. The Lang Ranch was purchased by Title Insurance and Trust Co for residential development in 1967 (*Los Angeles Times* 6/25/67). The Lindero Pump Station was constructed during this period of growth to serve Calleguas' Westlake Reservoir and customers in the North Ranch and Oak Park areas.

The city of Thousand Oaks continued to grow, and the economy prospered. Professional, scientific, and technical services, as well as manufacturing have become the largest industries in the city (DataUSA n.d.). The population now exceeds 127,000 residents and has grown to cover 56 square miles (City of Thousand Oaks n.d.).

Cultural Resources Records Search

On June 23, 2021 a search of the California Historical Resources Information System (CHRIS) was completed by in-house staff at the South Central Coastal Information Center (SCCIC) at California State University, Fullerton. The purpose of the search was to identify previously-conducted cultural resources studies and the existence of previously-recorded cultural resources within a 0.5-mile radius of the subject property.

The SCCIC records search included a review of the listings of the NRHP, the CRHR, California Points of Historical Interest, California Historical Landmarks, and the California Built Environment Resources Directory (BERD). This search confirmed there are no NRHP or CRHR listed properties, California Points of Historical Interest or Historical Landmarks, or BERD-listed resources located within or adjacent to the project site.

The SCCIC records search identified 14 previous studies within a 0.5-mile radius of the project site. Of the 14 studies, three of these were in the project site (Table 1). The results of the records search are included in Attachment 2.

Figure 1 Aerial View of Property in 1947, Prior to Development

Source: UCSB Frame Finder, Flight GM_EM, Frame 1-54

Table 1 Previous Cultural Resources Studies within 0.5 mile of the Project Site

Report Number	Author	Year	Title	Relationship to Project Site
VN-00251	King, Thomas F.	1969	*An Archaeological Survey of the Lang Ranch, Ventura County, California*	Within
VN-02515	Strauss, Monica, and Sara Dietler	2006	*Archaeological Resources Assessment and Phase II Testing Program for the Proposed Lang Ranch Community Park Project City of Thousand Oaks, California*	Within
VN-03105	King, Thomas	1969	*UCAS – 356 Salvage Survey of the Lang Ranch, Ventura County*	Within
VN-00088	Bove, Frederick J.	1977	*An Archaeological Resource Survey and Impact Assessment of Tract #2871, City of Thousand Oaks, California*	Outside
VN-00224	Simon, Joseph, Michael Drews, and Ellen L. McCann	1979	*Archaeological Assessment of Proposed Tract No. 3158 City of Thousand Oaks, Ventura County, California*	Outside
VN-00327	Singer, Clay A.	1977	*Cultural Resource Survey and Potential Impact Report for Tentative Tract No. 2582, City of Thousand Oaks, Ventura County, California*	Outside
VN-00390	Lopez, Robert	1977	*Cultural Resources Survey and Impact Assessment for the Proposed Extension and Avenida de Los Arboles Road, City of Thousand Oaks, Ventura County, California*	Outside
VN-00905	Singer, Clay A., and John E. Atwood	1990	*Cultural Resources Survey and Impact Assessment for the Proposed Lindero Feeder in Simi and Conejo Valleys, Ventura County, California*	Outside
VN-00944	Boyer, Jackie	1967	*Field Project Ucas-107*	Outside
VN-01512	Singer, Clay A.	1978	*Cultural Resource Survey and Impact Assessment for Tentative Tract No. 2818, City of Thousand Oaks: Ventura County, California*	Outside
VN-01806	Duke, Curt	1999	*Cultural Resource Assessment for Pacific Bell Mobile Services Facility La 594-02, in the County of Ventura, California*	Outside
VN-02091	Bonner, Wayne H.	2000	*Cultural Resources Survey Report for an AT&T Wireless Services Telecommunications Facility: Lang Ranch (ov68) in the City of Thousand Oaks, Ventura County, California*	Outside
VN-02362	Maki, Mary K.	2003	*Phase 1 Archaeological Survey of Approximately 2.3 Acres for the Los Cerritos Middle School Boys & Girls Club Project Thousand Oaks, Ventura County, California*	Outside
VN-02843	Amaglio, Alessandro	2005	*Conejo Fire Mitigation, Conejo Recreation and Park District, FEAM-1498-DR-CA, HMGP #1498-98-36*	Outside

Source: SCCIC 2021

The SCCIC records search identified three previously recorded resources within a 0.5-mile radius of the project site, all of which were prehistoric sites. None of these were located within the project site. A summary of the previously recorded resources can be seen in Table 2 below.

Table 2 Previously Recorded Cultural Resources within a 0.5-Mile Radius of the Project Site

Primary Number	Resource Type	Description	Recorder(s) and Year(s)	Relationship to Project Site
P-56-000504	Prehistoric	Lithic scatter	Singer, 1977	Outside
P-56-000652	Prehistoric	Lithic scatter; Habitation debris	Simon, Unknown	Outside
P-56-100194	Prehistoric	Lithic scatter	Strauss, 2015	Outside

Source: SCCIC 2021

Archival and Background Research

Archival research was conducted for this study throughout July and August 2021. Research methodology focused on the review of a variety of primary and secondary source materials relating to the history and development of the subject property and its surroundings. Sources included, but were not limited to, historical maps, aerial photographs, contemporary newspaper articles, and written histories of the area. The following is a list of sources consulted in order to conduct research pertaining to the subject property.

- Historic aerial photographs accessed digitally via Nationwide Environmental Title Research (NETR) Online, Inc., and the University of California, Santa Barbara Map & Imagery Lab
- Historic topographic maps accessed digitally via United States Geologic Survey (USGS)
- Historic maps accessed digitally via the Los Angeles Public Library
- Archived editions of local newspapers *Los Angeles Times* (accessed via newspapers.com)
- Caltrans Historic Context Statement *Water Conveyance Systems in California*

Field Survey

On August 17, 2021, Rincon Archaeologist Pedro Gonzalez, conducted a pedestrian field survey of the project site to identify archaeological and built environment resources. Areas of exposed ground were inspected for prehistoric artifacts (e.g., flaked stone tools, tool-making debris, ground stone milling tools), ecofacts (marine shell and bone), soil discoloration that might indicate the presence of a cultural midden, and features that might suggest the potential for former structures or buildings (e.g., standing exterior walls, postholes, foundations) or historic debris (e.g., metal, glass, ceramics). Ground disturbances such as burrows and drainages were also visually inspected. Under the direction of Rincon Architectural Historian JulieAnn Murphy, Mr. Gonzalez also visually inspected all buildings, structures, and landscaped features located in the project site, documenting their style, method of construction, and physical condition in detailed notes and digital photographs.

Native American Scoping

As part of the process of identifying cultural resources for this project, Rincon contacted the Native American Heritage Commission (NAHC) on June 23, 2021 and requested a Sacred Lands File (SLF) search and a list of Native American tribal organizations and individuals who may have knowledge of sensitive cultural resources in or near the project site.

On July 27, 2021, Rincon received a response from the NAHC stating the SLF search results were negative for site-specific information. As the lead agency, the City is responsible for conducting AB-52 outreach. Therefore, Rincon did not conduct any outreach so as not to interfere with the City's efforts. Attachment 3 provides documentation of communication with the NAHC and results of the SLF.

Results of Investigation

The field survey and archival research conducted for this study identified one property over 45 years of age within the project area, the Lindero Pump Station at 2106 Erbes Road (APNs 569-032-003, 569-032-004, 569-032-005). Described in further detail below, the potential resource was recorded and evaluated on California Department Parks and Recreation (DPR) 523 series forms, which are included in Attachment 4.

The CHRIS records search did not identify any archaeological resources in or adjacent to the project area, and the project site is highly disturbed from previous construction of buildings and adjacent paving and landscaping. Additionally, the SLF search results were negative for any known resources located within or near the project site. A review of historic maps revealed the nearest Chumash Village site to the project site is the Sap'wi ("house of the deer") Chumash village location, located approximately 1.5-miles east/northeast of the project site. The present-day, Chumash Indian Museum in Oakbrook Regional Park is built on this village site. During the survey, overall ground visibility ranged from approximately 15 to 100 percent due to vegetation including leaves and weeds. Where present, exposed native soil was a medium brown, medium grained sandy silt. The terrain in the property was relatively flat. Results of the field survey identified no evidence of archaeological remains or prehistoric cultural resources within the project site.

Physical Description

Located within the Calleguas Municipal Water District's Lake Bard site at 2106 Erbes Road, Ventura County, California, the Lindero Pump Station is located on the east side of Erbes Road at the western edge of the Sapwil Trails Community Park. The Lindero Pump Station is comprised of four pump trains, three surge tanks, a control building, and an electric substation building, all constructed in 1969. The Lindero Pump Station occupies a rectangular lot and is accessed via a drive from Erbes Road. The rectangular lot is enclosed by a concrete masonry wall, topped with barbed security wire. The lot is paved and features two subsurface pipelines. The eastern pipeline continues southward to outside the site and the western pipeline continues north, through a venturi tube and outside the side.

The pipelines are connected to surge tanks and pump trains, all visible above ground. There are three surge tanks at the east end of the site (Figure 2). Each surge tank rests on a concrete slab base and is secured with anchor bolts. The two southern tanks are larger, measuring 13'-6" in diameter, while the northernmost tank is smaller, measuring 9'-0" in diameter. All three tanks are reinforced concrete with ellipsoidal heads and stand 31' high. A metal catwalk extends for the length of the tanks and is

accessible via a ladder in a cage between the two larger tanks. Each tank features an access opening at its base and connects to a pipe below (Figure 3).

The area to the west of the surge tanks features four pump trains that span the width of the site. The three westernmost pump trains feature two pumps, while the easternmost pump train features a single pump (Figure 4). There is a control building north of the pump trains. The building is rectangular in plan and features a concrete foundation and a side gable asphalt shingle roof. Utilitarian in design, the building features no ornamentation and has a painted concrete masonry exterior. The east elevation has a single, rectangular opening with a fresh air intake grill. The west elevation has a central loading door with a metal roll-up door (Figure 5). The north elevation features two, small exhaust fan openings. The south elevation features four entries – a storefront entry at the eastmost bay, followed by a man door entry, a paired door entry, and a single door entry with a paired adjacent louvered section. The area to the east of the control building has a concrete pad with electric substation equipment (Figure 6). The area around the concrete pad has crushed rock fill and is enclosed with a concrete curb. The building and associated tanks and pumps appear to be in good condition.

The area to the north of the enclosed pump trains, surge tanks, and control building features a smaller enclosed area. The south portion of the enclosed area features a small, one story rectangular building with a concrete foundation and a CMU exterior. The enclosed area to the north of the building is comprised of a concrete pad with two cylindrical tanks at its east corner. The building houses Southern California Edison equipment and provides electrical service to the site. It appears to have been installed shortly following the construction of the pump station in 1969.

The area to the west of the pump station is a paved area with a prefabricated metal storage building. The paved area is surrounded by a chain link fence with automobile access available from the road, west of the pump station. The paved area and building were installed sometime between 1994 and 2002 and are unrelated park maintenance facilities, outside the subject property boundary (NETROnline, 1994;2002).

Figure 2 View of Pump Tanks and Surge Tanks, View Northeast

Figure 3 View of Surge Tanks, View Southeast

Figure 4 View of Control Building South Elevation with Pump Trains, View North

Figure 5 View of Control Building West Elevation, View East

Figure 6 View of Electric Substation Equipment, View South

Property History

The Lindero Pump Station was constructed in 1969, inclusive of the pump trains, surge tanks, control building, and the associated Southern California Edison electric substation building (1969) (Perliter & Ingalsbe, 1967).

The Lindero Pump Station was constructed to serve Calleguas' Westlake Reservoir and customers in the North Ranch and Oak Park areas. It was designed by Simon Perliter and William Ingalsbe of the Los Angeles civil engineering firm, Perliter & Ingalsbe. Founded in 1946 by Simon Perliter and Arthur Soring, the firm specialized in water engineering projects, particularly focused in the Los Angeles area. The firm became Perliter & Ingalsbe when William Ingalsbe joined the firm in the early 1960s and is still extant today. William Ingalsbe signed off on the plans for Lindero Pump Station (Perliter & Ingalsbe, 1967). One of the pump trains was removed and converted to a reserve flow bypass at an unknown date. The site has been operating continuously since it opened in 1969.

Historical Resources Evaluation

The Lindero Pump Station is recommended ineligible for listing in the NRHP, CRHR, or as a City of Thousand Oaks Landmark or Point of Historic Interest under any applicable criteria. Generally, water conveyance-related properties are eligible under NRHP Criterion A/CRHR Criterion 1 if they are associated specific important events (e.g., first long-distance transmission of hydroelectric power) or important patterns of events (e.g., development of irrigated farming) (JRP Historical Consulting Services and Caltrans 2000:93). Archival research indicates the Lindero Pump Station was part of a series of water infrastructure projects to support the development of Thousand Oaks and the expanding Calleguas Municipal Water District, which was founded in 1953 and joined the Metropolitan Water District of Southern California, a cooperative of cities and municipal water districts that supplies treated water throughout Southern California in 1960 (Calleguas, 2017). The development of the Lindero Pump facility was part of the gradual expansion of the of the District's system and was due to what could be considered an expected response to the growth of the surrounding community and the increasing need for a reliable water system. The Lindero Pump Station therefore does not appear to be significant within the context of water conveyance systems, or any other event or pattern of events in the history of the county, region, state, or nation (NRHP Criterion A/CRHR Criterion 1/City of Thousand Oaks Criterion 2).

Archival research failed to identify any individuals associated with the Lindero Pump Station which can be considered important within the history of the county, region, state, or nation. The Lindero Pump Station therefore does not appear significant for its associated with a notable person (NRHP Criterion B/CRHR Criterion 2/City of Thousand Oaks Criterion 3).

Initially developed in 1969, the Lindero Pump Station is a site inclusive of the pump trains, surge tanks, control building, and the associated Southern California Edison electric substation building. Water conveyance-features are generally found eligible under NRHP Criterion C/CRHR Criterion 3 as the earliest, sole surviving, largest, or best preserved example of a particular type of water conveyance system or a property which introduced a design innovation or evolutionary trend in engineering (JRP Historical Consulting Services and Caltrans 2000:94). Water pumping stations are common design, and there is no evidence suggesting the Lindero Pump Station represented any particular engineering achievement at the time it was constructed. There is also no evidence indicating the associated engineers Simon Perliter and William Ingalsbe can be considered masters, and regardless, as a system of pumps and a simple control building structure, Lindero Pump Station would not be considered an example of a master's work. The facility's remaining built environment features, including the control

building, pump station, and surge tanks, likewise exhibit no architectural or engineering distinction. The building is utilitarian, and no evidence suggests it is notable for its design. Therefore, Lindero Pump Station is recommended ineligible for its engineering, design, or architecture (NRHP Criterion C/CRHR Criterion 3/City of Thousand Oaks Criteria 1,5).

The results of the cultural resources records search or research conducted as part of this evaluation did not reveal anything suggesting the Lindero Pump has the potential to yield important information. It is therefore recommended ineligible for information potential (NRHP Criterion D/CRHR Criterion 4/City of Thousand Oaks Criterion 4).

Finally, the Lindero Pump Station is not eligible for listing as a City of Thousand Oaks Point of Historic Interest. It does not have significance to the City of Thousand Oaks. As outlined above, it is not significant for its developmental history or the site of a historic event, it is not associated with a person important to history, nor does it embody a distinctive architectural style.

Conclusion

As a result of this study, no archaeological resources were identified. In addition, the Lindero Pump Station is recommended ineligible for federal, state, or local designation, and therefore is not considered a historical resource as defined by CEQA. Based on these findings, Rincon recommends a finding of ***no impact to historical resources.*** Rincon presents the following measures in case of unanticipated discovery of cultural resources during project development. The project is also required to adhere to regulations regarding the unanticipated discovery of human remains, detailed below.

Unanticipated Discovery of Archaeological Resources

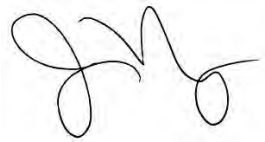
If archaeological resources are encountered during ground-disturbing activities, work in the immediate area should be halted and an archaeologist meeting the Secretary of the Interior's Professional Qualification Standards for archaeology (National Park Service 1983) should be contacted immediately to evaluate the find. If necessary, the evaluation may require preparation of a treatment plan and archaeological testing for CRHR eligibility. If the discovery proves to be significant under CEQA and cannot be avoided by the project, additional work, such as data recovery excavation, may be warranted to mitigate any significant impacts to historical resources.

Unanticipated Discovery of Human Remains

The discovery of human remains is always a possibility during ground-disturbing activities. If human remains are found, the State of California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made a determination of origin and disposition pursuant to Public Resources Code Section 5097.98. In the event of an unanticipated discovery of human remains, the County Coroner must be notified immediately. If the human remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission, which will determine and notify a most likely descendant (MLD). The MLD shall complete the inspection of the site and provide recommendations for treatment to the landowner within 48 hours of being granted access.

Should you have any questions concerning this study, please do not hesitate to contact the undersigned at (925) 326-1159 or jmurphy@rinconconsultants.com, or (805) 705-5513 or mgonzalez@rinconsulsutants.com.

Sincerely,
Rincon Consultants, Inc.



JulieAnn Murphy, MA
Architectural Historian/Project Manager

Matthew Gonzalez
Senior Archaeologist/Project Manager

Attachments

Attachment 1 Additional Figures
Attachment 2 CHRIS Records Search Results Summary
Attachment 3 SLF Search Results Summary
Attachment 4 California DPR 523 Series Forms

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Attachment 1

Additional Figures

Regional Location

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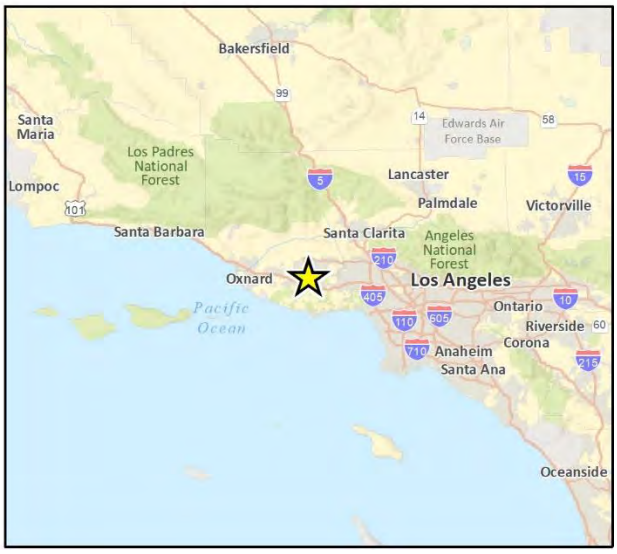
Project Location

N



Attachment 2

CHRIS Records Search Results Summary

South Central Coastal Information Center
California State University, Fullerton
Department of Anthropology MH-426
800 North State College Boulevard
Fullerton, CA 92834-6846
657.278.5395 / FAX 657.278.5542
sccic@fullerton.edu
California Historical Resources Information System
Orange, Los Angeles, and Ventura Counties

7/28/2021 Records Search File No.: 22573.8721

Pedro Gonzalez
Rincon Consultants, Inc
180 N Ashwood Avenue
Ventura CA 93003

Re: Records Search Results for the 21-11194, Lindero Pump Station Rehabilitation Project

The South Central Coastal Information Center received your records search request for the project area referenced above, located on the Thousand Oaks, CA USGS 7.5' quadrangle. Due to the COVID-19 emergency, we have temporarily implemented new records search protocols. With the exception of some reports that have not yet been scanned, we are operationally digital for Los Angeles, Orange, and Ventura Counties. See attached document for your reference on what data is available in this format. The following reflects the results of the records search for the project area and a ½-miles radius:

As indicated on the data request form, the locations of resources and reports are provided in the following format: ☐ custom GIS maps ☒ shape files ☐ hand drawn maps

Resources within project area: 0	None
Resources within ½-mile radius: 3	SEE ATTACHED LIST
Reports within project area: 3	VN-00251, VN-02515, VN-03105
Reports within ½-mile radius: 12	SEE ATTACHED LIST

Resource Database Printout (list): ☒ enclosed ☐ not requested ☐ nothing listed
Resource Database Printout (details): ☒ enclosed ☐ not requested ☐ nothing listed
Resource Digital Database (spreadsheet): ☒ enclosed ☐ not requested ☐ nothing listed
Report Database Printout (list): ☒ enclosed ☐ not requested ☐ nothing listed
Report Database Printout (details): ☒ enclosed ☐ not requested ☐ nothing listed
Report Digital Database (spreadsheet): ☒ enclosed ☐ not requested ☐ nothing listed
Resource Record Copies: ☐ enclosed ☐ not requested ☒ nothing listed
Report Copies: ☒ enclosed ☐ not requested ☐ nothing listed
OHP Built Environment Resources Directory (BERD) 2019: ☒ available online; please go to https://ohp.parks.ca.gov/?page_id=30338
Archaeo Determinations of Eligibility 2012: ☐ enclosed ☐ not requested ☒ nothing listed
Historical Maps: ☒ enclosed ☐ not requested ☐ nothing listed

Ethnographic Information: ☒ not available at SCCIC
Historical Literature: ☒ not available at SCCIC
GLO and/or Rancho Plat Maps: ☒ not available at SCCIC
Caltrans Bridge Survey: ☒ not available at SCCIC; please go to http://www.dot.ca.gov/hq/structur/strmaint/historic.htm
Shipwreck Inventory: ☒ not available at SCCIC; please go to http://shipwrecks.slc.ca.gov/ShipwrecksDatabase/Shipwrecks_Database.asp
Soil Survey Maps: (see below) ☒ not available at SCCIC; please go to http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx

Please forward a copy of any resulting reports from this project to the office as soon as possible. Due to the sensitive nature of archaeological site location data, we ask that you do not include resource location maps and resource location descriptions in your report if the report is for public distribution. If you have any questions regarding the results presented herein, please contact the office at the phone number listed above.

The provision of CHRIS Data via this records search response does not in any way constitute public disclosure of records otherwise exempt from disclosure under the California Public Records Act or any other law, including, but not limited to, records related to archeological site information maintained by or on behalf of, or in the possession of, the State of California, Department of Parks and Recreation, State Historic Preservation Officer, Office of Historic Preservation, or the State Historical Resources Commission.

Due to processing delays and other factors, not all of the historical resource reports and resource records that have been submitted to the Office of Historic Preservation are available via this records search. Additional information may be available through the federal, state, and local agencies that produced or paid for historical resource management work in the search area. Additionally, Native American tribes have historical resource information not in the CHRIS Inventory, and you should contact the California Native American Heritage Commission for information on local/regional tribal contacts.

Should you require any additional information for the above referenced project, reference the record search number listed above when making inquiries. Requests made after initial invoicing will result in the preparation of a separate invoice.

Thank you for using the California Historical Resources Information System,

Digitally signed by Michelle Galaz
Date: 2021.07.28 11:47:50 -07'00'

Michelle Galaz
Assistant Coordinator

Enclosures:

(X) Emergency Protocols for LA, Orange, and Ventura County BULK Processing Standards – 2 pages

(X) GIS Shapefiles – 18 shapes

(X) Resource Database Printout (list) – 1 page

(X) Resource Database Printout (details) – 3 pages

(X) Resource Digital Database (spreadsheet) – 3 lines

(X) Report Database Printout (list) – 2 pages

(X) Report Database Printout (details) – 17 pages

(X) Report Digital Database (spreadsheet) – 15 lines

(X) Report Copies – (within project area) – 766 pages

(X) Historical Maps – 4 pages

(X) Invoice # 22573.8721

Emergency Protocols for LA, Orange, and Ventura County BULK or SINGLE PROJECT Records Searches IF YOU HAVE A GIS PERSON ON STAFF ONLY!!

These instructions are for qualified consultants with a valid Access and Use Agreement.
WE ARE ONLY PROVIDING DATA THAT IS ALREADY DIGITAL AT THIS TIME. SAN BERNARDINO COUNTY IS NOT DIGITAL AND THESE INSTRUCTIONS DO NOT APPLY.

Some of you have a fully digital operation and have GIS staff on board who can process a fully digital deliverable from the Information Center. IF you can accept shape file data and do not require a custom map made for you by the SCCIC, and you are willing to sort the data we provide to you then these instructions are for you. Read further to be sure. You may have only one project at this time or some of you have a lot of different search locations that can be processed all at once. This may save you a lot of time getting results back and if we process your jobs in bulk, and you may enjoy significant cost savings as well. If you need individual invoice or summaries for each search location, then bulk processing is not for you and you need to submit a data request form for each search location.

Bulk processing will work for you if you have a GIS person on staff who can sort bulk data for you and make you any necessary project maps. This type of job can have as many job locations as you want but the point is that we will do them in bulk – at the same time - not one at a time. We send all the bulk data back to you and you sort it. This will work if you need searches in LA, Orange, or Ventura AND if they all have the same search radius and if all the other search criteria is the same– no exceptions. This will not work for San Bernardino County because we are not fully digital for San Bernardino County. You must submit all your shape files for each location at the same time and this will count as one search. If you have some that need a different radius, or different search criteria, then you should submit that job separately with its own set of instructions.

INSTRUCTIONS FOR BULK PROCESSING:

Please send in your requests via email using the data request form along with the associated shape files and pdf maps of the project area(s) at 1-24k scale. PDFs must be able to be printed out on 8.5X 11 paper. We check your shape file data against the pdf maps. This is where we find discrepancies between your shape files and your maps. This is required.

Please use this data request form and make sure you fill it out properly.
http://web.sonoma.edu/nwic/docs/CHRISDataRequestForm.pdf

DELIVERABLES:

1. A copy of the Built Environment Resources Directory or BERD for Los Angeles, Orange, Ventura, or San Bernardino County can now be found at the OHP Website for you to do your own research. This replaces the old Historic Properties Directory or HPD. We will not be searching this for you at this time but you can search it while you are waiting for our results to save time.

   You will only get shapefiles back, which means that you will have to make your own maps for

each project location. WARNING! If you don't request the shape files, you won't be able to tell which reports are in the project area or the search radius. Please note that you are charged for each map feature even if you opt out of receiving shape files. You cannot get secondary products such as bibliographies or pdfs of records in the project area or search radius if you don't pay for the primary products (shape files) as this is the scaffolding upon which the secondary products are derived. If you do not understand the digital fee structure, ask before we process your request and send you data. You can find the digital fee structure on the OHP website under the CHRIS tab. In order to keep costs down, you must be willing to make adjustments to the search radius or what you are expecting to receive as part of the search. Remember that some areas are loaded with data and others are sparse – our fees will reflect that.

2. You will get a bulk processed bibliographies for resources and reports as selected; you will not get individual bibliographies for each project location.

3. You will get pdfs of resources and reports if you request them, provided that they are in digital formats. We will not be scanning records or reports at this time.

4. You will get one invoice for the bulk data processing. We can't bill this as individual jobs on separate invoices for you. If there are multiple project names, we are willing to reference all the job names on the invoice if needed. If there a lot of job id's we may ask you to send them in an email so that we can copy and paste it into the invoice details. If you need to bill your clients for the data, you can refer to our fee schedule on the OHP website under the CHRIS tab and apply the fees accordingly.

5. We will be billing you at the staff rate of $150 per hour and you will be charged for all resources and report locations according to the CHRIS Fee Structure. ($12 per GIS shape file; 0.15 per pdf page, or 0.25 per excel line; quad fees will apply if your research includes more than 2 quads). Discounts offered early on in our Covid-19 response will no longer be offered on any records searched submitted after October 5th, 2020.

6. Your packet will be sent to you electronically via Dropbox. We use 7-zip to password protect the files so you will need both on your computers. We email you the password. If you can't use Dropbox for some reason, then you will need to provide us with your Fed ex account number and we will ship you a disc with the results. As a last resort, we will ship on a disc via the USPS. You may be billed for our shipping and handling costs.

I may not have been able to cover every possible contingency in this set of instructions and will update it if necessary. You can email me with questions at sccic@fullerton.edu

Thank you,

Stacy St. James
South Central Coastal Information Center

Los Angeles, Orange, Ventura, and San Bernardino Counties

Attachment 3

SLF Search Results Summary

NATIVE AMERICAN HERITAGE COMMISSION

NAHC HEADQUARTERS
1550 Harbor Boulevard
Suite 100
West Sacramento,
California 95691
(916) 373-3710
nahc@nahc.ca.gov
NAHC.ca.gov

July 15, 2021

Jennifer Lancaster
Calleguas Municipal Water District

Via Email to: jlancaster@calleguas.com

Re: Native American Tribal Consultation, Pursuant to the Assembly Bill 52 (AB 52), Amendments to the California Environmental Quality Act (CEQA) (Chapter 532, Statutes of 2014), Public Resources Code Sections 5097.94 (m), 21073, 21074, 21080.3.1, 21080.3.2, 21082.3, 21083.09, 21084.2 and 21084.3, Lindero Pump Station Rehabilitation Project, Ventura County

Dear Ms. Lancaster:

Pursuant to Public Resources Code section 21080.3.1 (c), attached is a consultation list of tribes that are traditionally and culturally affiliated with the geographic area of the above-listed project. Please note that the intent of the AB 52 amendments to CEQA is to avoid and/or mitigate impacts to tribal cultural resources, (Pub. Resources Code §21084.3 (a)) ("Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource.")

Public Resources Code sections 21080.3.1 and 21084.3(c) require CEQA lead agencies to consult with California Native American tribes that have requested notice from such agencies of proposed projects in the geographic area that are traditionally and culturally affiliated with the tribes on projects for which a Notice of Preparation or Notice of Negative Declaration or Mitigated Negative Declaration has been filed on or after July 1, 2015. Specifically, Public Resources Code section 21080.3.1 (d) provides:

Within 14 days of determining that an application for a project is complete or a decision by a public agency to undertake a project, the lead agency shall provide formal notification to the designated contact of, or a tribal representative of, traditionally and culturally affiliated California Native American tribes that have requested notice, which shall be accomplished by means of at least one written notification that includes a brief description of the proposed project and its location, the lead agency contact information, and a notification that the California Native American tribe has 30 days to request consultation pursuant to this section.

The AB 52 amendments to CEQA law does not preclude initiating consultation with the tribes that are culturally and traditionally affiliated within your jurisdiction prior to receiving requests for notification of projects in the tribe's areas of traditional and cultural affiliation. The Native American Heritage Commission (NAHC) recommends, but does not require, early consultation as a best practice to ensure that lead agencies receive sufficient information about cultural resources in a project area to avoid damaging effects to tribal cultural resources.

The NAHC also recommends, but does not require that agencies should also include with their notification letters, information regarding any cultural resources assessment that has been completed on the area of potential effect (APE), such as:

1. The results of any record search that may have been conducted at an Information Center of the California Historical Resources Information System (CHRIS), including, but not limited to:

- A listing of any and all known cultural resources that have already been recorded on or adjacent to the APE, such as known archaeological sites;
- Copies of any and all cultural resource records and study reports that may have been provided by the Information Center as part of the records search response;
- Whether the records search indicates a low, moderate, or high probability that unrecorded cultural resources are located in the APE; and
- If a survey is recommended by the Information Center to determine whether previously unrecorded cultural resources are present.

2. The results of any archaeological inventory survey that was conducted, including:

    - Any report that may contain site forms, site significance, and suggested mitigation measures.

      All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for public disclosure in accordance with Government Code section 6254.10.

3. The result of any Sacred Lands File (SLF) check conducted through the Native American Heritage Commission was negative.

4. Any ethnographic studies conducted for any area including all or part of the APE; and

5. Any geotechnical reports regarding all or part of the APE.

Lead agencies should be aware that records maintained by the NAHC and CHRIS are not exhaustive and a negative response to these searches does not preclude the existence of a tribal cultural resource. A tribe may be the only source of information regarding the existence of a tribal cultural resource.

This information will aid tribes in determining whether to request formal consultation. In the event that they do, having the information beforehand will help to facilitate the consultation process.

If you receive notification of change of addresses and phone numbers from tribes, please notify the NAHC. With your assistance, we can assure that our consultation list remains current.

If you have any questions, please contact me at my email address: Andrew.Green@nahc.ca.gov.

Sincerely,

Andrew Green

Andrew Green
Cultural Resources Analyst

Attachment

Native American Heritage Commission
Tribal Consultation List
Ventura County
7/15/2021

Barbareno/Ventureno Band of Mission Indians
Julie Tumamait-Stenslie, Chairperson
365 North Poli Ave
Ojai, CA, 93023
Phone: (805) 646 - 6214
jtumamait@hotmail.com
Chumash

Chumash Council of Bakersfield
Julio Quair, Chairperson
729 Texas Street
Bakersfield, CA, 93307
Phone: (661) 322 - 0121
chumashtribe@sbcglobal.net
Chumash

Coastal Band of the Chumash Nation
Mariza Sullivan, Chairperson
P. O. Box 4464
Santa Barbara, CA, 93140
Phone: (805) 665 - 0486
cbcntribalchair@gmail.com
Chumash

Northern Chumash Tribal Council
Fred Collins, Spokesperson
P.O. Box 6533
Los Osos, CA, 93412
Phone: (805) 801 - 0347
fcollins@northernchumash.org
Chumash

San Luis Obispo County Chumash Council
Mark Vigil, Chief
1030 Ritchie Road
Grover Beach, CA, 93433
Phone: (805) 481 - 2461
Fax: (805) 474-4729
Chumash

Santa Ynez Band of Chumash Indians
Kenneth Kahn, Chairperson
P.O. Box 517
Santa Ynez, CA, 93460
Phone: (805) 688 - 7997
Fax: (805) 686-9578
kkahn@santaynezchumash.org
Chumash

This list is current only as of the date of this document. Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and section 5097.98 of the Public Resources Code.

This list is only applicable for consultation with Native American tribes under Public Resources Code Sections 21080.3.1 for the proposed Lindero Pump Station Rehabilitation Project, Ventura County.

Attachment 4

California DPR 523 Series Forms

State of California – The Resources Agency
DEPARTMENT OF PARKS AND RECREATION

PRIMARY RECORD

Primary #
HRI #
Trinomial
NRHP Status Code 6Z

Other Listings
Review Code **Reviewer** **Date**

 ***Resource Name or #:** Lindero Pump Station

P1. Other Identifier:

***P2. Location:** ☐ **Not for Publication** ■ **Unrestricted** ***a. County:** Ventura

***b. USGS 7.5' Quad:** Thousand Oaks **Date:** 1950 (1982 update)

c. Address: 2016 Erbes Road City: Thousand Oaks, CA Zip: 91362

e. Other Locational Data: APN: 569-032-003, 569-032-004, 569-032-005

***P3a. Description:**

Located within the Calleguas Municipal Water District's Lake Bard site at 2106 Erbes Road, Ventura County, California, Lindero Pump Station is located on the east side of Erbes Road at the western edge of the Sapwil Trails Community Park. Lindero Pump Station is comprised of four pump trains (1969), three surge tanks (1969) a control building (1969), and an electric substation building (1969). Lindero Pump Station occupies a rectangular lot and is accessed via a drive from Erbes Road. The rectangular lot is enclosed by a concrete masonry wall, topped with barbed security wire. The lot is paved and features two subsurface pipelines. The eastern pipeline continues southward to outside the site and the western pipeline continues north, through a venturi tube and outside the side.

The pipelines are connected to surge tanks and pump trains, all visible above ground. There are three surge tanks at the east end of the site. Each surge tank rests on a concrete slab base and is secured with anchor bolts. The two southern tanks are larger, measuring 13'-6" in diameter, while the northernmost tank is smaller, measuring 9'-0" in diameter. All three tanks are reinforced concrete with ellipsoidal heads and stand 31' high. A metal catwalk extends for the length of the tanks and is accessible via a ladder in a cage between the two larger tanks. Each tank features an access opening at its base and connects to a pipe below.

See continuation sheet, p. 4

***P3b. Resource Attributes:** HP39. Other (Distribution reservoir)

***P4. Resources Present:** ■ Building ■ Structure ☐ Object ☐ Site ☐ District ☐ Element of District ☐ Other (Isolates, etc.)

P5a. Photo or Drawing

P5b. Description of Photo:
Lindero Pump Station, view northeast

***P6. Date Constructed/Age and Sources:**
■ Historic ☐ Prehistoric ☐ Both

***P7. Owner and Address:**
Calleguas Municipal Water District
2100 Olsen Rd.
Thousand Oaks, CA 91360

***P8. Recorded by:**
Pedro Gonzalez
Rincon Consultants
180 N Ashwood Ave
Ventura, CA 93003
August 2021

***P10. Survey Type:**
Intensive

***P11. Report Citation:**

Murphy, JulieAnn, Pedro Gonzalez, and Matt Gonzalez, 2021. *Cultural Resources Assessment for Lindero Pump Station, Calleguas Municipal Water District.* Rincon Consultants, Inc., Project No. 21-11194.

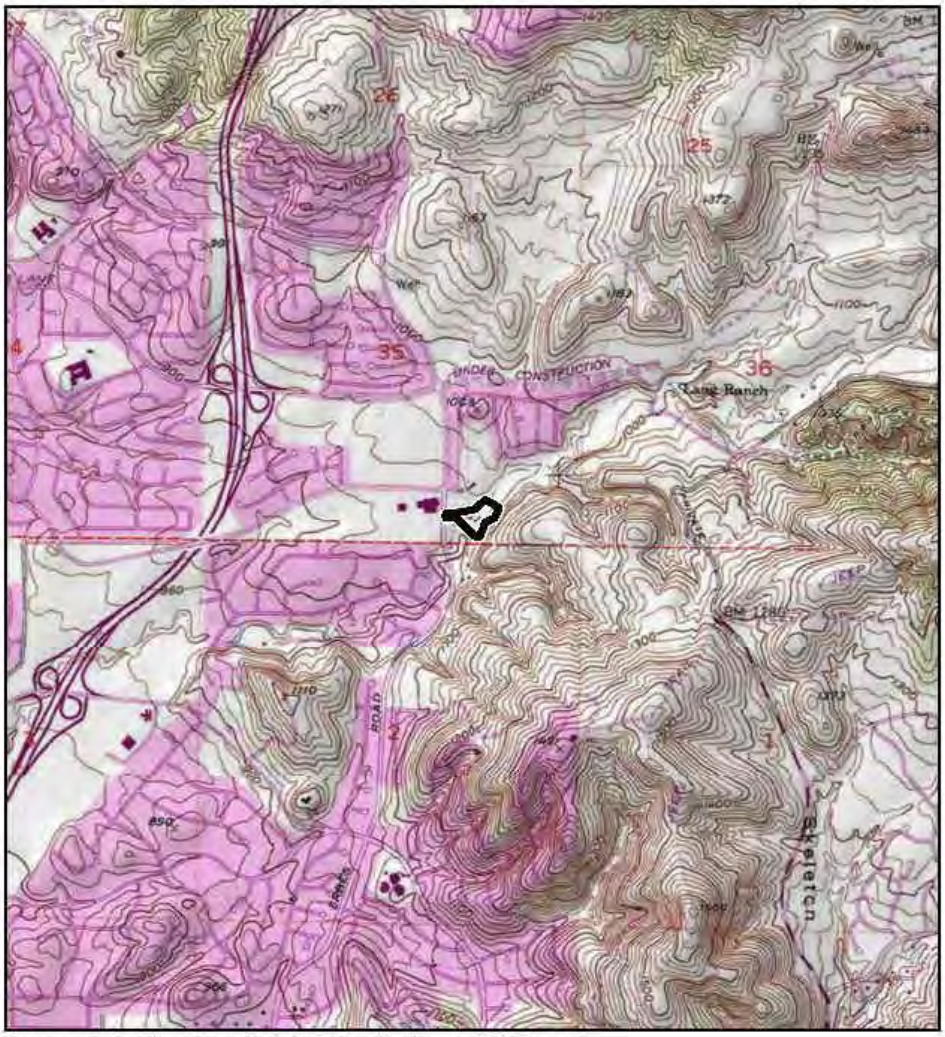
***Attachments:** ☐ NONE ■ Location Map ☐ Sketch Map ■ Continuation Sheet ■ Building, Structure, and Object Record
☐ Archaeological Record ☐ District Record ☐ Linear Feature Record ☐ Milling Station Record ☐ Rock Art Record
☐ Artifact Record ☐ Photograph Record ☐ Other (List):

State of California X Natural Resources Agency Primary #
DEPARTMENT OF PARKS AND RECREATION HRI#

LOCATION MAP

Trinomial

Page 2 **of** 5 ***Resource Name or #** Lindero Pump Station
***Map Name:** Thousand Oaks ***Scale:** 1:24,000 ***Date of map:** 1950 (1982 update)



Imagery provided by National Geographic Society, Esri, and their licensors © 2021. Thousand Oaks Quadrangle. T01N R19W S02 & T02N R19W S35. The topographic representation depicted in this map may not portray all of the features currently found in the vicinity today and/or features depicted in this map may have changed since the original topographic map was assembled.

Project Boundary

N

0 1,000 2,000 Feet

0 250 500 Meters

1:24,000

Location Map

Rincon Consultants, Inc.

BUILDING, STRUCTURE, AND OBJECT RECORD

***Resource Name or #** Lindero Pump Station ***NRHP Status Code** 6Z

B1. Historic Name: Lindero Pump Station
B2. Common Name: Lindero Pump Station
B3. Original Use: Municipal water distribution B4. Present Use: Municipal water distribution
***B5. Architectural Style:** N/A
***B6. Construction History:**
Lindero Pump Station was constructed in 1969, inclusive of the pump trains, surge tanks, control building, and the associated Southern California Edison electric substation building (1969) (Perliter & Ingalsbe, 1967).

***B7. Moved?** ■ **No** □ **Yes** □ **Unknown** **Date:** N/A **Original Location:** N/A
***B8. Related Features:** None
B9a. Architect: Perliter & Ingalsbe b. Builder: Unknown
***B10. Significance: Theme** N/A **Area** N/A
Period of Significance N/A **Property Type** N/A **Applicable Criteria** N/A

Historical aerial photographs and available original plans suggest that the site of Lindero Pump Station was largely undeveloped until the pump station was constructed in 1969. The land was previously used as ranch land, most recently the Lang Ranch founded in 1941. The area immediately west of the Lindero Pump Station, in the area of the current adjacent park maintenance building, was a cattle feed lot at the time of the pump station's construction. The Lindero Pump Station was constructed to serve Calleguas' Westlake Reservoir and customers in the North Ranch and Oak Park areas. It was designed by Simon Perliter and William Ingalsbe of the Los Angeles civil engineering firm, Perliter & Ingalsbe. Founded in 1946 by Simon Perliter and Arthur Soring, the firm specialized in water engineering projects, particularly focused in the Los Angeles area. The firm became Perliter & Ingalsbe when William Ingalsbe joined the firm in the early 1960s and is still extant today. William Ingalsbe signed off on the plans for Lindero Pump Station (Perliter & Ingalsbe, 1967).

Research for this study found no information suggesting the facility's original designers of the firm Perliter & Ingalsbe were significant in the field of engineering. Newspaper articles dating from around the pumping station's construction suggest that much of the firm's work was related to municipal water engineering projects, and was most notable for work completed in the 1970s to create the Yucaipa Dam and Recreation Area. No information of consequence regarding Simon Perliter or William Ingalsbe was uncovered as a result of research for this study.
See continuation sheet, p. 4.

B11. Additional Resource Attributes: N/A
***B12. References:**
See continuation sheet, p. 4.

B13. Remarks:
***B14. Evaluator:** JulieAnn Murphy, Rincon Consultants
***Date of Evaluation:** August 2021

(This space reserved for official comments.)

***Recorded by:** JulieAnn Murphy, Rincon Consultants ***Date:** August 2021 ■Continuation ☐Update

P3a. Description (continued):

The area to the west of the surge tanks features four pump trains that span the width of the site. The three westernmost pump trains feature two pumps, while the easternmost pump train features a single pump. There is a control building north of the pump trains. The building is rectangular in plan and features a concrete foundation and a side gable asphalt shingle roof. Utilitarian in design, the building features no ornamentation and has a painted concrete masonry exterior. The east elevation has a single, rectangular opening with a fresh air intake grill. The west elevation has a central loading door with a metal roll-up door. The north elevation features two, small exhaust fan openings. The south elevation features four entries – a storefront entry at the eastmost bay, followed by a man door entry, a paired door entry, and a single door entry with a paired adjacent louvered section. The area to the east of the control building has a concrete pad with electric substation equipment. The area around the concrete pad has crushed rock fill and is enclosed with a concrete curb. The building and associated tanks and pumps appear to be in good condition.

The area to the north of the enclosed pump trains, surge tanks, and control building features a smaller enclosed area. The south portion of the enclosed area features a small, one story rectangular building with a concrete foundation and a CMU exterior. The enclosed area to the north of the building is comprised of a concrete pad with two cylindrical tanks at its east corner. The building houses Southern California Edison equipment and provides electrical service to the site. It appears to have been installed shortly following the construction of the pump station in 1969.

The area to the west of the pump station is a paved area with a prefabricated metal storage building. The paved area is surrounded by a chain link fence with automobile access available from the road, west of the pump station. The paved area and building were installed sometime between 1994 and 2002 and are unrelated park maintenance facilities (NETROnline, 1994;2002).

B10. Significance (continued):

Lindero Pump Station is recommended ineligible for listing in the NRHP or the CRHR under any applicable criteria. Generally, water conveyance-related properties are generally eligible under NRHP Criterion A/CRHR Criterion 1 if they are associated specific important events (e.g., first long-distance transmission of hydroelectric power) or important patterns of events (e.g., development of irrigated farming) (JRP Historical Consulting Services and Caltrans 2000:93). Archival research indicates the Lindero Pump Station was part of a series of water infrastructure projects to support the development of Thousand Oaks and the expanding Calleguas Municipal Water District, which was founded in 1953 and joined the Metropolitan Water District of Southern California, a cooperative of cities and municipal water districts that supplies treated water throughout Southern California in 1960 (Calleguas, 2017). The development of the Lindero Pump facility was part of the gradual expansion of the of the District's system and was due to what could be considered an expected response to the growth of the surrounding community and the increasing need for a reliable water system. The Lindero Pump Station therefore does not appear to be significant within the context of water conveyance systems, or any other event or pattern of events in the history of the county, region, state, or nation (NRHP Criterion A/CRHR Criterion 1/City of Thousand Oaks Criterion 2).

Archival research failed to identify any individuals associated with the Lindero Pump Station which can be considered important within the history of the county, region, state, or nation. The Lindero Pump Station therefore does not appear significant for its associated with a notable person (NRHP Criterion B/CRHR Criterion 2/City of Thousand Oaks Criterion 3).

Initially developed in 1969, the Lindero Pump Station is a site inclusive of the pump trains, surge tanks, control building, and the associated Southern California Edison electric substation building. Water conveyance-features are generally found eligible under NRHP Criterion C/CRHR Criterion 3 as the earliest, sole surviving, largest, or best preserved example of a particular type of water conveyance system or a property which introduced a design innovation or evolutionary trend in engineering (JRP Historical Consulting Services and Caltrans 2000:94). Water pumping stations are common design, and there is no evidence suggesting the Lindero Pump Station represented any particular engineering achievement at the time it was constructed. There is also no evidence indicating the associated engineers Simon Perliter and William Ingalsbe can be considered masters, and regardless, as a system of pumps and a simple control building structure, Lindero Pump Station would not be considered an example of a master's work. The facility's remaining built environment features, including the control building, pump station, and surge tanks, likewise exhibit no architectural or engineering distinction. The building is utilitarian, and no evidence suggests it is notable for its design. Therefore, Lindero Pump Station is recommended ineligible for its engineering, design, or architecture (NRHP Criterion C/CRHR Criterion 3/City of Thousand Oaks Criteria 1,5).

The results of the cultural resources records search or research conducted as part of this evaluation did not reveal anything suggesting the Lindero Pump has the potential to yield important information. It is therefore recommended ineligible for information potential (NRHP Criterion D/CRHR Criterion 4/City of Thousand Oaks Criterion 4).

Finally, the Lindero Pump Station is not eligible for listing as a City of Thousand Oaks Point of Historic Interest. It does not have significance to the City of Thousand Oaks. As outlined above, it is not significant for its developmental history or the site of a historic event, it is not associated with a person important to history, nor does it embody a distinctive architectural style.

See continuation sheet, p. 5

B12. References (continued):

Calleguas Municipal Water District.
2021 "About Us." Calleguas Municipal Water District website. https://www.calleguas.com/. Accessed July 27
2017 To Ms. Pamela Riss, 2016-2017 Ventura County Ground Jury, Ventura, California, June 17

JRP Historical Consulting Services and Caltrans
2000 Water Conveyance Systems in California, Historic Context Development and Evaluation Procedures. December

Kennedy Jenks
2021 Lindero Pump Station Rehabilitation Preliminary Design Report (Project No. 592). April

National Environmental Title Research (NETRonline)
Var. "Historic Aerials." [digital photograph database]. Aerial images and topographical maps of the project area viewed online. https://www.historicaerials.com/viewer. Accessed August 2021.

Perliter & Ingalsbe Consulting Engineers
1967 Lindero Pump Station As-Built Plans. June

Appendix F

Energy Calculation Sheets

Lindero Pump Station

Last Updated: 2/10/2022

Compression-Ignition Engine Brake-Specific Fuel Consumption (BSFC) Factors **[1]**:

HP: 0 to 100	0.0588	HP: Greater than 100	0.0529

Values above are expressed in gallons per horsepower-hour/BSFC.

CONSTRUCTION EQUIPMENT

Construction Equipment	#	Hours per Day	Horsepower	Load Factor	Construction Phase	Fuel Used (gallons)
Aerial Lifts	1	6	63	0.31	Demolition	103
Concrete/Industrial Saws	1	6	81	0.73	Demolition	313
Excavators	1	6	158	0.38	Demolition	286
Generator Sets	1	6	84	0.74	Demolition	329
Tractors/Loaders/Backhoes	1	6	97	0.37	Demolition	190
Aerial Lifts	1	6	63	0.31	Site Preparation Phase	103
Concrete/Industrial Saws	1	6	81	0.73	Site Preparation Phase	313
Generator Sets	1	6	84	0.74	Site Preparation Phase	329
Tractors/Loaders/Backhoes	1	6	97	0.37	Site Preparation Phase	190
Generator Sets	1	6	84	0.74	Grading Phase	219
Plate Compactors	1	6	8	0.43	Grading Phase	12
Rollers	1	6	80	0.38	Grading Phase	107
Sweepers/Scrubbers	1	6	64	0.46	Grading Phase	104
Tractors/Loaders/Backhoes	1	6	97	0.37	Grading Phase	127
Aerial Lifts	1	6	63	0.31	Building Construction Phase	1,033
Air Compressors	1	6	78	0.48	Building Construction Phase	1,980
Bore/Drill Rigs	1	6	221	0.5	Building Construction Phase	5,257
Cement and Mortar Mixers	1	6	9	0.56	Building Construction Phase	267
Concrete/Industrial Saws	1	6	81	0.73	Building Construction Phase	3,127
Cranes	1	4	231	0.29	Building Construction Phase	2,125
Excavators	1	6	158	0.38	Building Construction Phase	2,856
Forklifts	1	6	89	0.2	Building Construction Phase	941
Generator Sets	1	6	84	0.74	Building Construction Phase	3,288
Plate Compactors	1	6	8	0.43	Building Construction Phase	182
Pressure Washers	1	6	13	0.3	Building Construction Phase	206
Pumps	1	6	84	0.74	Building Construction Phase	3,288
Sweepers/Scrubbers	1	6	64	0.46	Building Construction Phase	1,557
Tractors/Loaders/Backhoes	1	6	97	0.37	Building Construction Phase	1,898
Trenchers	1	6	78	0.5	Building Construction Phase	2,063
Welders	1	6	46	0.45	Building Construction Phase	1,095
Concrete/Industrial Saws	1	6	81	0.73	Paving	313
Generator Sets	1	6	84	0.74	Paving	329
Pavers	1	6	130	0.42	Paving	260
Paving Equipment	1	6	132	0.36	Paving	226
Plate Compactors	1	6	8	0.43	Paving	18
Rollers	1	6	80	0.38	Paving	161
Rubber Tired Loaders	1	6	203	0.36	Paving	348
Surfacing Equipment	1	6	263	0.3	Paving	375
Sweepers/Scrubbers	1	6	64	0.46	Paving	156
Tractors/Loaders/Backhoes	1	6	97	0.37	Paving	190
Aerial Lifts	1	6	63	0.31	Architectural Coating Phase	103
Generator Sets	1	6	84	0.74	Architectural Coating Phase	329
Pressure Washers	1	6	13	0.3	Architectural Coating Phase	21
					Total Fuel Used	**36,713**
						(Gallons)

Construction Phase	Days of Operation
Demolition	15
Site Preparation Phase	15
Grading Phase	10

Building Construction Phase	150
Paving	15
Architectural Coating Phase	15
Total Days	205

WORKER TRIPS

Constuction Phase	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
Demolition	24.1	13	10.8	87
Site Preparation Phase	24.1	10	10.8	67
Grading Phase	24.1	13	10.8	58
Building Construction Phase	24.1	12	10.8	807
Paving	24.1	25	10.8	168
Architectural Coating Phase	24.1	2	10.8	13
		Total		**1,201**

HAULING AND VENDOR TRIPS

Trip Class	MPG [2]	Trips	Trip Length (miles)	Fuel Used (gallons)
HAULING TRIPS				
Demolition	7.5	20	20.0	53
Site Preparation Phase	7.5	0	20.0	0
Grading Phase	7.5	250	20.0	667
Building Construction Phase	7.5	0	20.0	0
Paving	7.5	0	20.0	0
Architectural Coating Phase	7.5	0	20.0	0
		Total		**720**
VENDOR TRIPS				
Demolition	7.5	0	7.3	0
Site Preparation Phase	7.5	0	7.3	0
Grading Phase	7.5	0	7.3	0
Building Construction Phase	7.5	5	7.3	730
Paving	7.5	0	7.3	0
Architectural Coating Phase	7.5	0	7.3	0
		Total		**730**

Total Gasoline Consumption (gallons)	**1,201**
Total Diesel Consumption (gallons)	**38,163**

Sources:

[1] United States Environmental Protection Agency. 2021. *Exhaust and Crankcase Emission Factors for Nonroad Compression-Ignition Engines in MOVES3.0.2* . September. Available at: https://www.epa.gov/system/files/documents/2021-08/420r21021.pdf.

[2] United States Department of Transportation, Bureau of Transportation Statistics. 2021. *National Transportation Statistics* . Available at: https://www.bts.gov/topics/national-transportation-statistics.

Equipment	Horsepower	Load Factor
Aerial Lifts	63	0.31
Air Compressors	78	0.48
Bore/Drill Rigs	221	0.5
Cement and Mortar Mixers	9	0.56
Concrete/Industrial Saws	81	0.73
Cranes	231	0.29
Crawler Tractors	212	0.43
Crushing/Proc. Equipment	85	0.78
Dumpers/Tenders	16	0.38
Excavators	158	0.38
Forklifts	89	0.2
Generator Sets	84	0.74
Graders	187	0.41
Off-Highway Tractors	124	0.44
Off-Highway Trucks	402	0.38
Other Construction Equipment	172	0.42
Other General Industrial Equipment	88	0.34
Other Material Handling Equipment	168	0.4
Pavers	130	0.42
Paving Equipment	132	0.36
Plate Compactors	8	0.43
Pressure Washers	13	0.3
Pumps	84	0.74
Rollers	80	0.38
Rough Terrain Forklifts	100	0.4
Rubber Tired Dozers	247	0.4
Rubber Tired Loaders	203	0.36
Scrapers	367	0.48
Signal Boards	6	0.82
Skid Steer Loaders	65	0.37
Surfacing Equipment	263	0.3
Sweepers/Scrubbers	64	0.46
Tractors/Loaders/Backhoes	97	0.37
Trenchers	78	0.5
Welders	46	0.45

Energy Unit Conversion Sheet

Gasoline

Gallons (gal.)	2,148.17	Barrels (bbl.)	1.00	Btu	1.00
	2148.17 gal.		42.00 gal.		0.00 gal.
	2.15 Thousand gallons		0.04 Thousand gallons		0.00 Thousand gallons
	0.00 Million gallons		0.00 Million gallons		0.00 Million gallons
	51.15 bbl.		1.00 bbl.		0.02 bbl.
	0.05 Thousand bbl.		0.00 Thousand bbl.		0.00 Thousand bbl.
	0.00 Million bbl.		0.00 Million bbl.		0.00 Million bbl.
	2536.62 U.S. Therms		49.59 U.S. Therms		0.00 U.S. Therms
	235839351.14 British thermal units (Btu)		4611019.83 British thermal units (Btu)		1.00 British thermal units (Btu)
	235.84 Million Btu (MMBtu)		4.61 Million Btu (MMBtu)		0.00 Million Btu (MMBtu)

Diesel

Gallons (gal.)	4,010.00	Barrels (bbl.)	1.00	Btu	1.00
	4,010.00 gal.		42.00 gal.		0.00 gal.
	4.01 Thousand gallons		0.04 Thousand gallons		0.00 Thousand gallons
	0.00 Million gallons		0.00 Million gallons		0.00 Million gallons
	95.48 bbl.		1.00 bbl.		0.02 bbl.
	0.10 Thousand bbl.		0.00 Thousand bbl.		0.00 Thousand bbl.
	0.00 Million bbl.		0.00 Million bbl.		0.00 Million bbl.
	5,497.39 U.S. Therms		57.58 U.S. Therms		0.00 U.S. Therms
	511,114,600.00 British thermal units (Btu)		5,353,320.00 British thermal units (Btu)		1.00 British thermal units (Btu)
	511.11 Million Btu (MMBtu)		5.35 Million Btu (MMBtu)		0.00 Million Btu (MMBtu)

Electricity

Kilowatt-Hours (kWh)	1,974,179.00	U.S. Therm	1.00	Btu	1.00
	1,974,179.00 Kilowatt-Hours		27.25 Kilowatt-Hours		0.00 Kilowatt-Hours
	1,974.18 Megawatt-Hours		0.03 Megawatt-Hours		0.00 Megawatt-Hours
	1.97 Gigawatt-Hours		0.00 Gigawatt-Hours		0.00 Gigawatt-Hours
	72,449.27 U.S. Therms		1.00 U.S. Therms		0.00 U.S. Therms
	6,735,898,748.00 British thermal units (Btu)		92,974.00 British thermal units (Btu)		1.00 British thermal units (Btu)
	6,735.90 Million Btu (MMBtu)		0.09 Million Btu (MMBtu)		0.00 Million Btu (MMBtu)

Natural Gas

Thousand Cubic Feet (Mcf)	1.00	U.S. Therm	1.00	Btu	1.00
	1,000.00 Cubic Feet (cf)		89.66 Cubic Feet (cf)		0.00 Cubic Feet (cf)
	1.00 Thousand Cubic Feet (Mcf)		0.09 Thousand Cubic Feet (Mcf)		0.00 Thousand Cubic Feet (Mcf)
	0.00 Million Cubic Feet (MMcf)		0.00 Million Cubic Feet (MMcf)		0.00 Million Cubic Feet (MMcf)
	11.15 U.S. Therms		1.00 U.S. Therms		0.00 U.S. Therms
	1,037,000.00 British thermal units (Btu)		92,974.00 British thermal units (Btu)		1.00 British thermal units (Btu)
	1.04 Million Btu (MMBtu)		0.09 Million Btu (MMBtu)		0.00 Million Btu (MMBtu)

Sources:

U.S. Energy Information Administration (EIA). May 2017. "Frequently Asked Questions: What are Ccf, Mcf, Btu, and therms? How do I convert natural gas prices in dollars per Ccf or Mcf to dollars per Btu or therm?" https://www.eia.gov/tools/faqs/faq.php?id=45&t=8. (accessed February 5, 2018).

Schremp, Gordon. 2017. Senior Fuels Specialist, California Energy Commission. Personal communication via phone and email regarding fuel consumption in California by County and by source with Lance Park, Associate Planner, Rincon Consultants, Inc. August 22, 2017.

Table 1: California Transportation Energy Use During 2013[1]

	Gasoline MM Gallons	Fuel Ethanol MM Gallons	Diesel Fuel MM Gallons	Biodiesel MM Gallons	Renewable Diesel MM Gallons	Propane MM Gallons	Natural Gas MM Therms	Electricity Mwhs	Totals
	13,079.4	1,460.9	3,293.7	49.0	135.8	35.0	174.4	841,346	
BTUs[2]	113,927	76,330	129,488	119,550	122,887	84,250	92,974	3,412,000	
MM GGE Units	13,079.4	978.8	3,743.6	51.4	146.5	25.9	142.3	25.2	18,192.9

Source: California Energy Commission

1. Excludes fuel consumed for aviation and most marine vessel activities.

2. Units are in Btus per gallon, except for natural gas (Btus/therm) and electricity (Btus/Mwh).

2016 CA GREET 2.0 Value

1) Specifications of Fuels

Fuel	Heating Value Calculation: LHV
Liquid Fuels:	**Btu/gal**
Crude oil	129,670
Synthetic crude oil (SCO)	135,085
Dilbit	145,313
Diluent	128,449
Gasoline blendstock	116,090
CARBOB	113,300
Gasoline	112,194
CA gasoline	109,786
U.S. conventional diesel	128,450
CA conventional diesel	127,460
Diesel for non-road engines	128,450
Low-sulfur diesel	127,460
Petroleum naphtha	116,920
Conventional Jet Fuel	124,307
ULS Jet Fuel	123,041
NG-based FT naphtha	111,520
Residual oil	140,353
Bunker fuel for ocean tanker	140,353
Methanol	57,250
Ethanol	76,330
Butanol	99,837
Acetone	83,127
E-Diesel Additives	116,090
Liquefied petroleum gas (LPG)	84,950
Liquefied natural gas (LNG)	74,720
Dimethyl ether (DME)	68,930
Dimethoxy methane (DMM)	72,200
Methyl ester (biodiesel, BD)	119,550
Fischer-Tropsch diesel (FTD)	123,670
Renewable Diesel I (SuperCetane)	117,059
Renewable Diesel II (UOP-HDO)	122,887
Renewable Diesel III (PNNL-HTL)	123,542
Renewable Gasoline	115,983
SPK (FT Jet Fuel/HRJ)	119,777
Liquid hydrogen	30,500
Methyl tertiary butyl ether (MTBE)	93,540
Ethyl tertiary butyl ether (ETBE)	96,720
Tertiary amyl methyl ether (TAME)	100,480
Butane	94,970
Isobutane	90,060
Isobutylene	95,720
Propane	84,250
Natural gas liquids	83,686
n-Hexane	105,125
Still gas (in refineries)	128,590
Gaseous Fuels (at 32F and 1atm):	**Btu/ft3**
Natural gas	983
Pure Methane	962
Gaseous hydrogen	290
Carbon Dioxide	
Still gas (in refineries)	982
Solid Fuels:	**Btu/ton**
Coal Mix for Electricity Generation	19,474,169
Bituminous coal	22,639,320
Subbituminous coal	16,085,444
Lignite coal	10,805,183
Synthetic coal	22,639,320
Waste coal	9,945,646
Pet Coke	26,949,429
Tire Derived Fuel	26,664,354
Coking coal	24,599,422
Willow	15,396,000
Poplar	15,929,000
Switchgrass	14,447,000
Miscanthus	15,342,000
Corn stover	14,716,000
Forest residue	17,289,000
Sugarcane straw	13,454,049
Sugarcane bagasse	12,381,771
Bio-char	18,916,911
Grain sorghum bagasse	12,781,599
Sweet sorghum bagasse	14,409,931
Forage sorghum bagasse	14,409,931
Municipal solid waste (defined by EISA)	11,209,639
Convertible municipal solid waste	14,155,275

California GREET 2.0
Fuel Specifications

	LHV	HHV
	Btu/gal	**Btu/gal**
CA gasoline	109,786	117,852
Low-sulfur diesel	127,460	133,075
	Btu/ft3	**Btu/ft3**
Natural gas	983	1,089

Sources:

U.S. Energy Information Administration (EIA). May 2017. "Frequently Asked Questions: What are Ccf, Mcf, Btu, and therms? How do I convert natural gas prices in dollars per Ccf or Mcf to dollars per Btu or therm?" https://www.eia.gov/tools/faqs/faq.php?id=45&t=8. (accessed February 5, 2018).

Schremp, Gordon. 2017. Senior Fuels Specialist, California Energy Commission. Personal communication via phone and email regarding fuel consumption in California by County and by source with Lance Park, Associate Planner, Rincon Consultants, Inc. August 22, 2017.

Energy Unit Conversion Sheet

Gasoline

Gallons (gal.)	1.00	Barrels (bbl.)	1.00	Btu	1.00
	1.00 gal.		42.00 gal.		0.00 gal.
	0.00 Thousand gallons		0.04 Thousand gallons		0.00 Thousand gallons
	0.00 Million gallons		0.00 Million gallons		0.00 Million gallons
	0.02 bbl.		1.00 bbl.		0.02 bbl.
	0.00 Thousand bbl.		0.00 Thousand bbl.		0.00 Thousand bbl.
	0.00 Million bbl.		0.00 Million bbl.		0.00 Million bbl.
	1.18 U.S. Therms		49.59 U.S. Therms		0.00 U.S. Therms
	109786.19 British thermal units (Btu)		4611019.83 British thermal units (Btu)		1.00 British thermal units (Btu)
	0.11 Million Btu (MMBtu)		4.61 Million Btu (MMBtu)		0.00 Million Btu (MMBtu)

Diesel

Gallons (gal.)	3,820.00	Barrels (bbl.)	1.00	Btu	1.00
	3,820.00 gal.		42.00 gal.		0.00 gal.
	3.82 Thousand gallons		0.04 Thousand gallons		0.00 Thousand gallons
	0.00 Million gallons		0.00 Million gallons		0.00 Million gallons
	90.95 bbl.		1.00 bbl.		0.02 bbl.
	0.09 Thousand bbl.		0.00 Thousand bbl.		0.00 Thousand bbl.
	0.00 Million bbl.		0.00 Million bbl.		0.00 Million bbl.
	5,236.92 U.S. Therms		57.58 U.S. Therms		0.00 U.S. Therms
	486,897,200.00 British thermal units (Btu)		5,353,320.00 British thermal units (Btu)		1.00 British thermal units (Btu)
	486.90 Million Btu (MMBtu)		5.35 Million Btu (MMBtu)		0.00 Million Btu (MMBtu)

Electricity

Kilowatt-Hours (kWh)	1.00	U.S. Therm	1.00	Btu	1.00
	1.00 Kilowatt-Hours		27.25 Kilowatt-Hours		0.00 Kilowatt-Hours
	0.00 Megawatt-Hours		0.03 Megawatt-Hours		0.00 Megawatt-Hours
	0.00 Gigawatt-Hours		0.00 Gigawatt-Hours		0.00 Gigawatt-Hours
	0.04 U.S. Therms		1.00 U.S. Therms		0.00 U.S. Therms
	3,412.00 British thermal units (Btu)		92,974.00 British thermal units (Btu)		1.00 British thermal units (Btu)
	0.00 Million Btu (MMBtu)		0.09 Million Btu (MMBtu)		0.00 Million Btu (MMBtu)

Natural Gas

Thousand Cubic Feet (Mcf)	1.00	U.S. Therm	1.00	Btu	1.00
	1,000.00 Cubic Feet (cf)		89.66 Cubic Feet (cf)		0.00 Cubic Feet (cf)
	1.00 Thousand Cubic Feet (Mcf)		0.09 Thousand Cubic Feet (Mcf)		0.00 Thousand Cubic Feet (Mcf)
	0.00 Million Cubic Feet (MMcf)		0.00 Million Cubic Feet (MMcf)		0.00 Million Cubic Feet (MMcf)
	11.15 U.S. Therms		1.00 U.S. Therms		0.00 U.S. Therms
	1,037,000.00 British thermal units (Btu)		92,974.00 British thermal units (Btu)		1.00 British thermal units (Btu)
	1.04 Million Btu (MMBtu)		0.09 Million Btu (MMBtu)		0.00 Million Btu (MMBtu)

Sources:

U.S. Energy Information Administration (EIA). May 2017. "Frequently Asked Questions: What are Ccf, Mcf, Btu, and therms? How do I convert natural gas prices in dollars per Ccf or Mcf to dollars per Btu or therm?" https://www.eia.gov/tools/faqs/faq.php?id=45&t=8. (accessed February 5, 2018).

Schremp, Gordon. 2017. Senior Fuels Specialist, California Energy Commission. Personal communication via phone and email regarding fuel consumption in California by County and by source with Lance Park, Associate Planner, Rincon Consultants, Inc. August 22, 2017.

Appendix G

Operational Noise Analysis

Steve Rogers Acoustics

Calleguas Municipal Water District
Lindero Pump Station Rehabilitation Project
Thousand Oaks, CA

Noise Impact Analysis & Recommendations

May 10, 2021

Revised: June 24, 2021

Prepared for:

Kennedy Jenks
2775 North Ventura Road, Suite 100
Oxnard, CA 93036

By:

Steve Rogers Acoustics, LLC

Steve Rogers
Principal

1. Background & Context

a) The project includes replacement of existing pumps and installation of a new diesel back-up generator at the Calleguas Lindero Pump Station property in Thousand Oaks, CA.

b) Calleguas has requested that an analysis of the noise generated by the project be performed to evaluate and potentially mitigate noise impact on sensitive uses nearby, including homes on Coalfax Court and Erbes Road, as well as the Los Cerritos Middle School.

c) Existing ambient noise levels are mostly due to surface street traffic, particularly on Erbes Road and Avenida de las Flores. To establish baseline ambient noise levels, we monitored noise for a continuous 24-hour period between April 22 and 23, 2021 at two locations – selected to represent conditions at the closest sensitive uses – as shown in Figure 1. During this period, the existing pumps were not run so that pump noise would be excluded from the baseline readings.

Figure 1: Site vicinity plan showing location of ambient noise monitors

d) Data collected by the two noise monitors is presented as hourly, A-weighted Equivalent Sound Pressure Level graphs in Appendix A to this report. The measured noise level range is summarized in Table 1:

Table 1: Measured ambient noise levels (Leq, 1-hour in dBA)

Monitor Location	DAYTIME Maximum	NIGHTTIME Minimum
A	57.6	39.0
B	54.6	38.3

2. Applicable Noise Regulations

City of Thousand Oaks Noise Ordinance

Noise is regulated in the City of Thousand Oaks by Chapter 21 of the Municipal Code, also known as the City of Thousand Oaks Noise Ordinance. Emergency activities and equipment are exempt from the City's noise regulations, as stated in Section 5-21.04 which reads:

> *Sec. 5-21.04. Emergency activities exempted.*
>
> *This chapter shall not apply to any public equipment, public vehicle, or public action taken by the City needed in order to protect the public health, safety and welfare.*

While Calleguas is distinct from the City of Thousand Oaks, Lindero Pump Station serves the residents of the city and the proposed generator is needed to protect public health and welfare. We therefore infer that the emergency activities exemption would apply to the generator proposed for this project – provided that the generator is for emergency use only.

For non-emergency equipment – such as the new pumps proposed for this project – the City's noise ordinance does not provide quantifiable (decibel) noise limits. Instead, Section 5-21.02 establishes the following qualitative noise limit:

> *Sec. 5-21.02. Powered equipment in residential areas.*
>
> *Between the hours of 9:00 p.m. and 7:00 a.m. of the following day, no person shall operate any lawn mower, backpack blower, lawn edger, riding tractor, or any other machinery, equipment, or other mechanical or electrical device, or any hand tool which creates a loud, raucous or impulsive sound, within any residential zone or within any commercial zone which can be heard from any inhabited real property in a residential zone.*

Many factors determine the audibility of the noise in a given context and the City's requirement for inaudibility between the hours of 9:00 PM and 7:00 AM cannot therefore be converted into a decibel noise limit with total certainty. However, as a general rule-of-thumb, we would typically expect that mechanical noise would need to be 10 dBA below the otherwise prevailing ambient noise level in order for the mechanical noise to be inaudible. This is a very stringent noise control standard, much more so than typical noise limits imposed by other cities in Southern California. For example, the nighttime noise limit for mechanical equipment prescribed by the City of Los Angeles noise ordinance is 45 dBA (or 40 dBA if the equipment exhibits tonal or impulsive noise characteristics).

3. Calleguas' Noise Control Goals for the Project

Calleguas believes that the City noise ordinance should not be applied to critical infrastructure facilities such as pump stations. In addition, noise produced by the existing pumps is audible in the neighborhood and yet Calleguas is not aware of any complaints or concerns from the City or local residents about noise from the pump station. In keeping with Calleguas' practice of considering the impact of noise on nearby sensitive land uses – Calleguas has proposed the following noise control goals for the project:

- Noise levels produced by the replacement pumps shall not exceed noise levels produced by the existing pumps.
- Noise produced by the new generator shall be limited to 60 dBA or less at the nearest residential use.

4. Generator & Pumps - Current Design Proposals

a) Our noise evaluation is based on the description of the new emergency generator and replacement pump installations provided in the Preliminary Design Report (PDR) for the project dated April 7, 2021, which are summarized as follows:

b) A new 3 MW diesel back-up generator with fuel tank is proposed for the north eastern corner of the pump station yard. For space and budget reasons, the generator set will not be housed in a building. Instead, a weatherproof, sound-attenuating enclosure will be provided.

c) Three new 1,000 HP vertical turbine pumps are proposed. Each will replace an existing pump pair (train) and will be located in the same location – to the southwest of the pumps station building. The pumps themselves will be located in below-grade steel pump barrels, leaving only the motors exposed above grade.

d) An equipment canopy will be provided over the three new pumps, to provide some basic weather protection. The canopy will comprise a pitched roof at approximately 20-feet above grade. There will be no walls around the pumps; the canopy structure will be open on all four sides.

5. Noise Analysis & Modeling

a) The noise impact of the project has been analyzed using SoundPLAN software to create a scale 3D computer model of the project site and its surroundings, including the topography of the area and presence of existing buildings. The model has allowed us to evaluate various scenarios by inserting noise sources – including the existing pumps, new generator (with and without attenuation) and replacement pumps.

b) Noise characteristics of the existing pumps were determined by direct noise measurements made at Lindero Pump Station on April 23, 2021, with the measurement microphone positioned at various points around pump Trains C and D as each operated in turn. Results of these measurements are summarized in Table 2.

Table 2: Existing pump noise levels

	Sound Pressure Level (dB re 20 microPascals) at Octave Band Center Frequency (Hz)								
	63	125	250	500	1k	2k	4k	8k	dBA
Pump C-1 (measured at 6-ft)	61.0	67.5	62.4	61.4	68.6	64.6	59.0	47.7	71.1
Pump C-2 (measured at 6-ft)	57.5	74.7	62.3	60.8	70.5	67.2	57.5	46.5	73.0
Motor C-1 (measured at 6-ft)	60.1	70.6	65.6	65.9	78.5	75.8	69.5	59.6	81.2
Motor C-2 (measured at 6-ft)	61.2	68.9	65.8	64.8	76.6	73.5	61.6	50.7	78.9
Pump D-1 (measured at 10-ft)	73.7	78.4	71.9	70.6	71.6	71.7	65.0	59.1	76.7
Pump D-2 (measured at 10-ft)	75.8	82.1	73.5	72.4	70.7	70.7	62.4	58.8	76.5
Motor D-1 (measured at 10-ft)	75.9	83.5	75.1	72.9	76.0	76.7	68.8	61.0	80.2
Motor D-2 (measured at 10-ft)	76.9	80.0	74.4	72.2	74.9	76.2	66.5	61.3	81.1

c) We noticed a high-pitched "whine" from motor C-1, which may have been produced by a worn bearing. This resulted in elevated high-frequency noise levels (especially in the 4 kHz octave band) and overall dBA level for motor C-1.

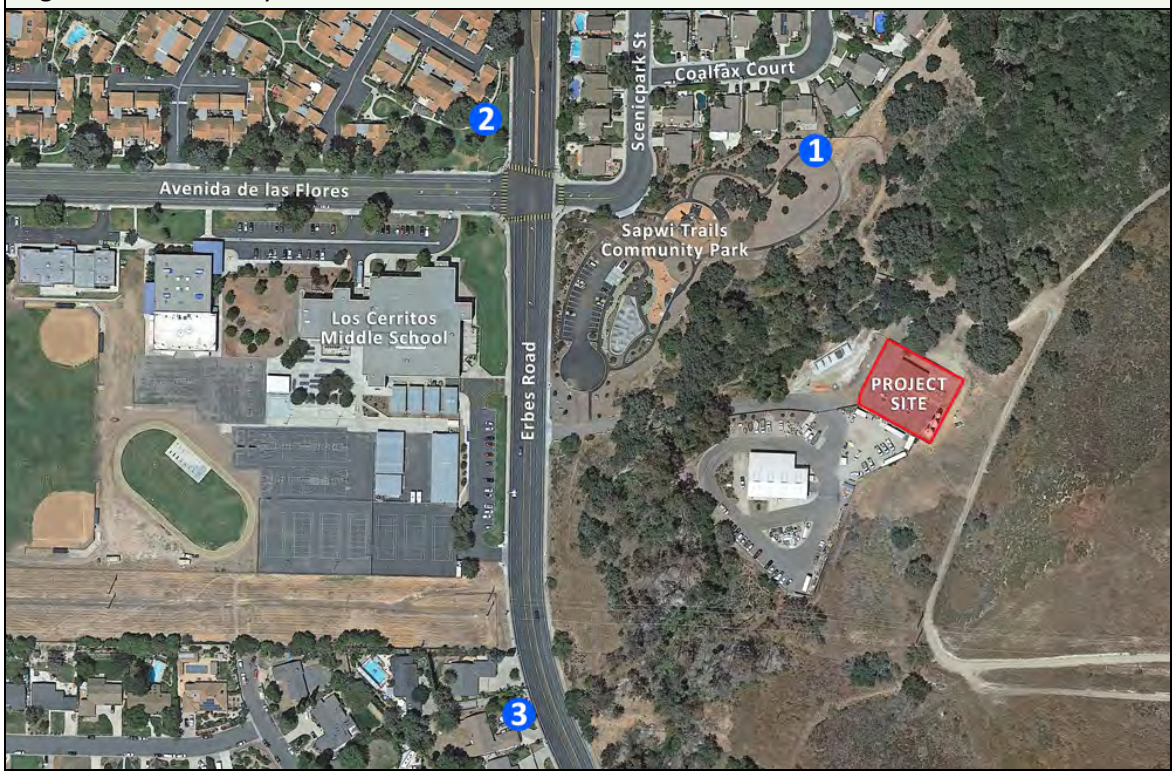
d) Existing pump Train B is currently non-operational and was not included in our noise measurements.

e) Data provided by Kohler and Caterpillar (copies of data sheets attached in Appendix C) has been used to establish composite noise spectra which are attributed to the generator engine and exhaust in the noise model. We have assumed a worst-case condition of 100% load.

f) Data provided by US Motors (copy of data sheet attached in Appendix C) has been used to represent the noise spectrum of each pump motor. For the purposes of our analysis, we have assumed that there will be no significant noise contributions from the pumps themselves, because they will be enclosed and located underground. The 3D nature of the SoundPLAN model has allowed us to accurately represent the effect of the pump canopy – with noise radiating from the open sides – rather than relying on a simple "point source" calculation. We have assumed a worst-case scenario of all three pumps operating simultaneously.

g) In our analysis, we have focused on three receiver points around the project site, selected to represent the closest residential uses, as shown in Figure 2. In each case, we have considered a receiver 5-feet above the ground. In addition, we have used the SoundPLAN software to generate noise maps for the various noise sources scenarios, which are attached as Appendix B to this report.

Figure 2: Site Vicinity Plan



6. Noise Impact of New vs Existing Pumps

a) Noise Map 1 shows noise contours calculated by SoundPLAN for a present-day scenario in which pump Trains C and D are operating simultaneously. Table 3 summarizes the received noise levels for this scenario.

Table 3: Present-day noise levels when pump Trains C & D operate simultaneously		
Receiver Location		Noise Level (dBA)
1	Homes on Coalfax Court	50.2
2	Homes at corner of Avenida de las Flores and Erbes Road	46.6
3	Homes on Erbes Road	44.3

b) Noise Map 2 shows noise contours calculated by SoundPLAN for a future scenario where all three new pumps are operating simultaneously. Table 4 summarizes the received noise levels for this scenario.

Table 4: Future noise levels when all three new pumps are operating simultaneously		
Receiver Location		Noise Level (dBA)
1	Homes on Coalfax Court	46.1
2	Homes at corner of Avenida de las Flores and Erbes Road	44.0
3	Homes on Erbes Road	42.5

c) As Table 4 shows, predicted noise levels when all three new pumps operate simultaneously are lower than those when existing pump trains C and D are operating. This is consistent with Calleguas' noise control goal for the new pumps.

7. Noise Impact of the New Generator

a) Noise Map 3 in Appendix B shows noise contours calculated by SoundPLAN for a future scenario in which the new generator and all three new pumps are operating simultaneously. In this scenario, the generator engine is exposed and there is no silencer on the exhaust. Table 5 summarizes the overall dBA levels at the closest residential receivers.

Table 5: Received noise levels due to the future generator + pumps (NO ATTENUATION)		
Receiver Location		Noise Level (dBA)
1	Homes on Coalfax Court	82.4
2	Homes at corner of Avenida de las Flores and Erbes Road	77.1
3	Homes on Erbes Road	74.7

b) As Table 6 shows, without an enclosure for the engine or a silencer on the exhaust, the generator would result in noise levels at the nearby homes that significantly exceed Calleguas' proposed 60 dBA limit.

c) Noise Map 2 shows noise contours for a scenario in which the engine of the new generator is enclosed in a sound-attenuating enclosure (including attenuated air inlet and outlet openings, sealed doors etc.) and the exhaust is fitted with a "super-critical" grade silencer. Table 6 summarizes the overall dBA levels in this scenario at the closest residential receivers and shows that the attenuated generator set meets Calleguas' self-imposed 60 dBA noise limit at all three receiver locations.

Table 6: Received noise levels due to the future generator in a sound enclosure, exhaust fitted with super-critical grade silencer

Receiver Location		Noise Level (dBA)
1	Homes on Coalfax Court	59.3
2	Homes at corner of Avenida de las Flores and Erbes Road	54.1
3	Homes on Erbes Road	52.2

d) Performance specifications for the generator enclosure are provided in the Conclusions section of this report.

8. Conclusions & Recommendations

a) Replacement Pumps

Based on the available manufacturer's noise data, we predict that the proposed pumps and open-sided equipment canopy would also result in noise levels at the neighboring homes that are lower than those produced by existing pumps. We therefore conclude that the replacement pump portion of the project – as currently designed – meets Calleguas' noise control goal and no additional noise mitigation measures are required to meet that goal.

b) New Generator

For the new back-up generator, Calleguas' has set a noise control goal of 60 dBA or less at the surrounding residential uses. In order to meet the 60 dBA goal, the new generator will require a sound-attenuating enclosure for the engine, in addition to a critical-class silencer for the exhaust.

We recommend that the generator enclosure be designed and constructed in such a way as to limit noise levels when the generator is running under 100% load to the values in Table 7. These noise limits apply at a distance of 23-feet (7 meters) from the generator in all directions – including above – and meeting them will require specially treated ventilation openings and sealed acoustical doors as well as wall and roof assemblies capable of the required level sound-attenuation.

Table 7: GENERATOR ENCLOSURE
Recommended noise limits measured at a distance of 23-feet (7m) from the enclosed generator, over a reflective plane, in all directions - including above

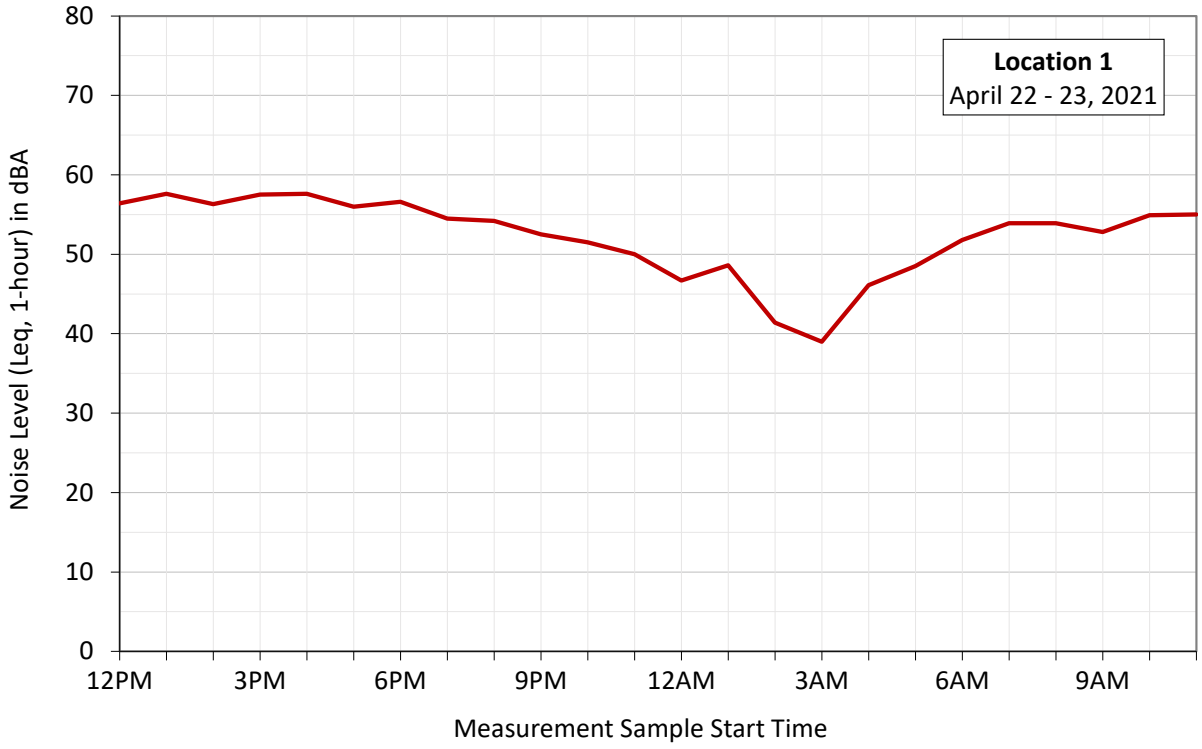
Maximum Unweighted Sound Pressure Level (dB re 20 microPascals) at Octave Band Center Frequency (Hz)								Maximum dBA Level
63	125	250	500	1k	2k	4k	8k	
87	91	86	76	71	68	67	67	81

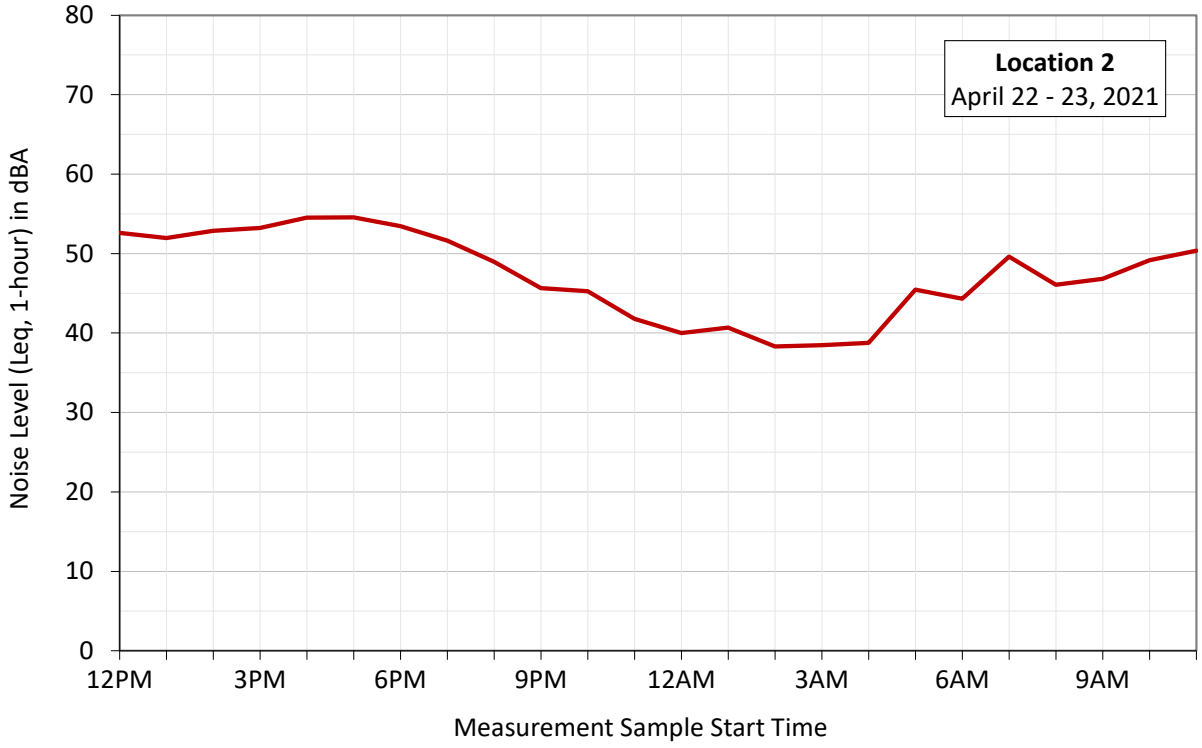
The critical-class silencer for the exhaust should deliver the minimum insertion loss values shown in Table 8. Suitable critical-class silencers are available from GT Exhaust/Silex; a data sheet for a suitable silencer selection is included in Appendix C.

Table 8: SUPER-CRITICAL EXHAUST SILENCER
Recommended insertion loss performance

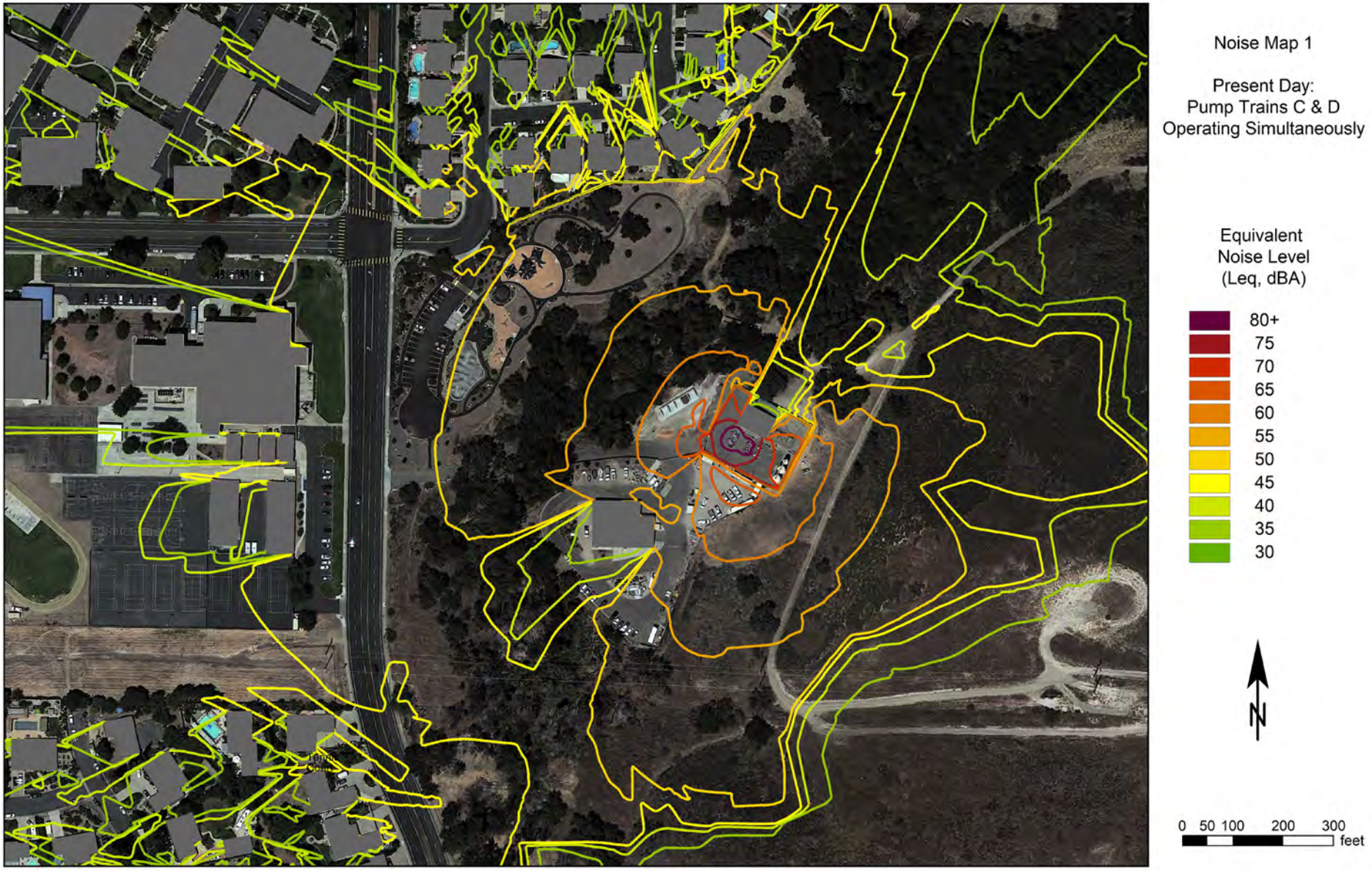
Minimum Insertion Loss (dB re 20 microPascals) at Octave Band Center Frequency (Hz)							
63	125	250	500	1k	2k	4k	8k
32	42	39	39	36	34	36	38

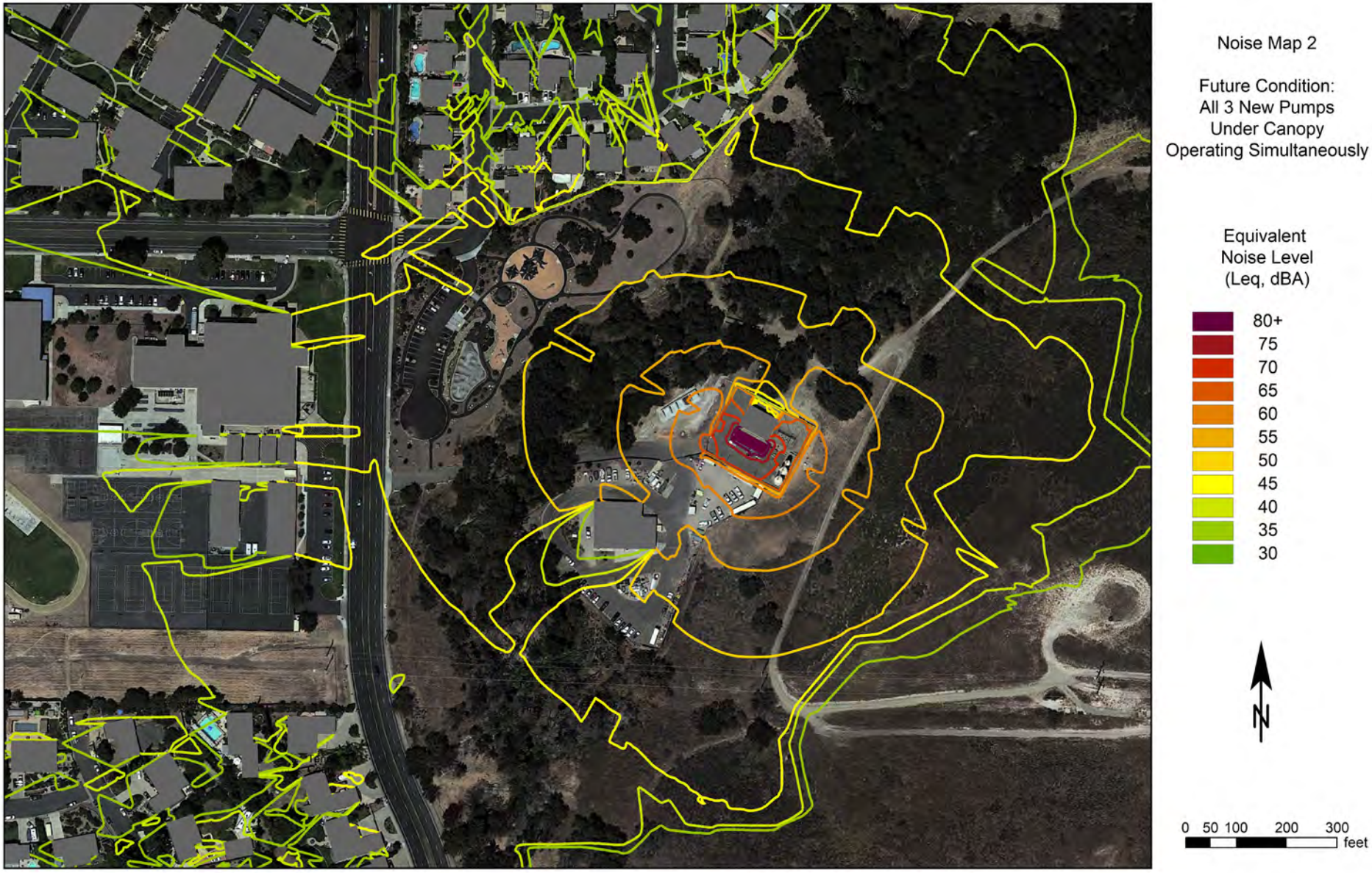
APPENDIX A: 24-hour Noise Monitoring Results





APPENDIX B: SoundPLAN Noise Maps


Noise Map 1
Present Day:
Pump Trains C & D
Operating Simultaneously
Equivalent
Noise Level
(Leq, dBA)
80+
75
70
65
60
55
50
45
40
35
30
N
0 50 100 200 300
feet


Noise Map 2
Future Condition:
All 3 New Pumps
Under Canopy
Operating Simultaneously
Equivalent
Noise Level
(Leq, dBA)
80+
75
70
65
60
55
50
45
40
35
30
N
0 50 100 200 300
feet


Noise Map 3
Future Condition:
Unattenuated
Generator & Exhaust
Plus 3 New Pumps
Equivalent
Noise Level
(Leq, dBA)
80+
75
70
65
60
55
50
45
40
35
30
N
0 50 100 200 300
feet

Feature Code:	175DRB5	**Rating Type:**	STANDBY	**Sales model Package:**	C175-16
Engine Sales Model:	C175	**Engine Arrangement Number:**	5683569	**Hertz:**	60
EKW W/F:	3000.0	**Noise Reduction:**	0 dBA	**Back Pressure:**	26.92 inH2O

Engine Package Information

Engine Package Data

Package Cooling Information

This is mechanical sound with exhaust isolated

Data not available.

Package Sound Information

Sound Comments :

Open Sound Data

Distance: 3.3 Feet

EKW W/F	% LOAD	OVERALL SOUND DB(A)	OBCF 63HZ DB	OBCF 125HZ DB	OBCF 250HZ DB	OBCF 500HZ DB	OBCF 1000HZ DB	OBCF 2000HZ DB	OBCF 4000HZ DB	OBCF 8000HZ DB
3000.0	100.0	110.69	95.36	106.1	105.58	106.5	102.86	102.07	98.02	103.38
2250.0	75.0	108.63	95.51	106.0	105.18	105.88	102.32	100.41	96.83	103.1
1500.0	50.0	107.51	95.85	105.25	105.08	106.32	101.55	99.12	95.64	96.51
750.0	25.0	106.81	95.53	106.02	104.73	105.76	101.12	98.12	94.41	94.56

Distance: 23.0 Feet

EKW W/F	% LOAD	OVERALL SOUND DB(A)	OBCF 63HZ DB	OBCF 125HZ DB	OBCF 250HZ DB	OBCF 500HZ DB	OBCF 1000HZ DB	OBCF 2000HZ DB	OBCF 4000HZ DB	OBCF 8000HZ DB
3000.0	100.0	101.44	90.21	99.76	95.51	95.02	93.98	93.82	88.22	93.74
2250.0	75.0	98.85	90.7	98.39	94.76	94.44	92.65	92.11	87.38	93.08
1500.0	50.0	97.82	91.09	98.35	94.61	94.06	92.44	91.12	86.7	85.9
750.0	25.0	96.49	90.29	98.23	94.07	93.66	91.44	88.85	84.75	82.36

Distance: 49.2 Feet

EKW W/F	% LOAD	OVERALL SOUND DB(A)	OBCF 63HZ DB	OBCF 125HZ DB	OBCF 250HZ DB	OBCF 500HZ DB	OBCF 1000HZ DB	OBCF 2000HZ DB	OBCF 4000HZ DB	OBCF 8000HZ DB
3000.0	100.0	96.43	85.81	95.82	92.07	93.5	89.1	87.21	82.28	87.89
2250.0	75.0	94.54	85.61	94.89	91.97	94.17	87.93	85.8	81.25	86.27
1500.0	50.0	93.49	85.95	93.51	91.26	93.41	87.32	84.62	80.55	80.06
750.0	25.0	92.9	85.53	93.35	91.04	93.32	86.39	83.64	79.46	76.66

This data is for exhaust only - does not include radiator

Cat 3000

PERFORMANCE DATA [DM8448]

MARCH 12, 2015

For Help Desk Phone Numbers Click here

Perf No: DM8448 **Change Level: 06**

General | Heat Rejection | Sound | Emissions | Regulatory | Altitude Derate | Cross Reference | Perf Param Ref

View PDF

SALES MODEL:	C175-16	COMBUSTION:	DI
ENGINE POWER (BHP):	4,423	ENGINE SPEED (RPM):	1,800
GEN POWER WITH FAN (EKW):	3,000.0	HERTZ:	60
COMPRESSION RATIO:	15.3	FAN POWER (HP):	187.7
RATING LEVEL:	STANDBY	ASPIRATION:	TA
PUMP QUANTITY:	2	AFTERCOOLER TYPE:	SCAC
FUEL TYPE:	DIESEL	AFTERCOOLER CIRCUIT TYPE:	JW+OC+1AC, 2AC
MANIFOLD TYPE:	DRY	AFTERCOOLER TEMP (F):	115
GOVERNOR TYPE:	ADEM4	JACKET WATER TEMP (F):	210.2
ELECTRONICS TYPE:	ADEM4	TURBO CONFIGURATION:	PARALLEL
CAMSHAFT TYPE:	STANDARD	TURBO QUANTITY:	4
IGNITION TYPE:	CI	TURBOCHARGER MODEL:	GTB6251BN-48T-1.38
INJECTOR TYPE:	CR	CERTIFICATION YEAR:	2008
FUEL INJECTOR:	3198470	CRANKCASE BLOWBY RATE (FT3/HR):	2,436.4
REF EXH STACK DIAMETER (IN):	14	FUEL RATE (RATED RPM) NO LOAD (GAL/HR):	25.1
		PISTON SPD @ RATED ENG SPD (FT/MIN):	2,598.4

INDUSTRY	SUB INDUSTRY	APPLICATION
ELECTRIC POWER	STANDARD	PACKAGED GENSET

General Performance Data Top

GENSET POWER WITH FAN	PERCENT LOAD	ENGINE POWER	BRAKE MEAN EFF PRES (BMEP)	BRAKE SPEC FUEL CONSUMPTN (BSFC)	VOL FUEL CONSUMPTN (VFC)	INLET MFLD PRES	INLET MFLD TEMP	EXH MFLD TEMP	EXH MFLD PRES	ENGINE OUTLET TEMP
EKW	%	BHP	PSI	LB/BHP-HR	GAL/HR	IN-HG	DEG F	DEG F	IN-HG	DEG F
3,000.0	100	4,423	377	0.339	214.2	91.5	131.3	1,229.8	64.3	891.9
2,700.0	90	3,999	341	0.338	192.9	81.4	129.6	1,193.4	56.5	879.2
2,400.0	80	3,576	305	0.340	173.9	73.0	128.3	1,163.0	50.0	869.4
2,250.0	75	3,364	286	0.344	165.3	69.5	127.8	1,150.7	47.5	865.8
2,100.0	70	3,152	268	0.351	158.2	67.1	127.6	1,142.6	45.8	864.2
1,800.0	60	2,729	232	0.371	144.5	62.7	127.3	1,127.7	42.8	861.6
1,500.0	50	2,305	196	0.396	130.4	57.5	126.9	1,109.9	39.5	858.0
1,200.0	40	1,882	160	0.417	112.2	46.4	125.8	1,083.9	32.9	848.4
900.0	30	1,458	124	0.440	91.6	34.8	124.5	1,041.6	25.3	834.7
750.0	25	1,246	106	0.453	80.6	29.0	123.8	1,014.2	21.3	826.5
600.0	20	1,035	88	0.467	69.1	23.2	123.2	961.6	17.6	797.3
300.0	10	611	52	0.514	44.9	11.7	122.1	752.4	10.6	649.3

GENSET POWER WITH FAN	PERCENT LOAD	ENGINE POWER	COMPRESSOR OUTLET PRES	COMPRESSOR OUTLET TEMP	WET INLET AIR VOL FLOW RATE	ENGINE OUTLET WET EXH GAS VOL FLOW RATE	WET INLET AIR MASS FLOW RATE	WET EXH GAS MASS FLOW RATE	WET EXH VOL FLOW RATE (32 DEG F AND 29.98 IN HG)	DRY EXH VOL FLOW RATE (32 DEG F AND 29.98 IN HG)
EKW	%	BHP	IN-HG	DEG F	CFM	CFM	LB/HR	LB/HR	FT3/MIN	FT3/MIN
3,000.0	100	4,423	92	451.5	9,772.2	25,620.0	42,761.1	44,259.6	9,320.0	8,667.2
2,700.0	90	3,999	82	414.6	8,943.0	23,086.1	38,888.2	40,238.8	8,477.9	7,889.0
2,400.0	80	3,576	74	384.7	8,243.6	20,980.8	35,642.2	36,860.0	7,761.6	7,230.7
2,250.0	75	3,364	70	373.0	7,953.8	20,121.0	34,304.6	35,462.7	7,463.6	6,958.6
2,100.0	70	3,152	68	366.1	7,753.3	19,531.3	33,379.1	34,486.9	7,254.0	6,770.2
1,800.0	60	2,729	65	354.0	7,382.3	18,480.5	31,695.8	32,707.6	6,876.9	6,433.3
1,500.0	50	2,305	60	339.0	6,952.0	17,314.7	29,788.0	30,700.3	6,460.8	6,059.1
1,200.0	40	1,882	50	308.0	6,076.8	15,264.4	25,920.8	26,704.4	5,737.4	5,392.5
900.0	30	1,458	39	267.2	5,160.3	12,786.8	21,909.9	22,550.1	4,857.0	4,574.5
750.0	25	1,246	33	243.5	4,701.8	11,409.7	19,919.4	20,483.0	4,361.8	4,112.2
600.0	20	1,035	27	217.8	4,243.2	9,964.4	17,938.9	18,422.6	3,897.7	3,682.5
300.0	10	611	14	160.9	3,325.6	6,901.7	14,007.7	14,322.1	3,060.0	2,917.8

Heat Rejection Data Top

Note(s)

PUMP POWER IS INCLUDED IN HEAT REJECTION BALANCE, BUT IS NOT SHOWN.

GENSET POWER WITH FAN	PERCENT LOAD	ENGINE POWER	REJECTION TO JACKET WATER	REJECTION TO ATMOSPHERE	REJECTION TO EXH	EXHUAST RECOVERY TO 350F	FROM OIL COOLER	FROM 2ND STAGE AFTERCOOLER	WORK ENERGY	LOW HEAT VALUE ENERGY	HIGH HEAT VALUE ENERGY
EKW	%	BHP	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN	BTU/MIN
3,000.0	100	4,423	78,436	8,336	179,063	101,475	24,486	28,224	187,548	459,719	489,716
2,700.0	90	3,999	70,525	7,773	161,695	89,988	22,085	23,040	169,590	414,639	441,694
2,400.0	80	3,576	63,777	7,308	147,071	80,799	19,915	18,972	151,631	373,899	398,296
2,250.0	75	3,364	60,840	7,112	140,788	77,146	18,917	17,358	142,651	355,157	378,331
2,100.0	70	3,152	58,599	6,984	136,398	74,726	18,070	16,328	133,672	339,264	361,402
1,800.0	60	2,729	54,754	6,750	128,972	70,419	16,496	14,928	115,714	309,709	329,917
1,500.0	50	2,305	50,870	6,524	120,720	65,533	14,875	13,738	97,755	279,270	297,493
1,200.0	40	1,882	45,639	6,304	106,679	55,828	12,823	11,188	79,796	240,744	256,453
900.0	30	1,458	38,952	6,092	88,655	45,754	10,475	8,227	61,838	196,664	209,497
750.0	25	1,246	35,102	5,988	78,431	40,805	9,211	6,848	52,858	172,945	184,229
600.0	20	1,035	30,773	5,789	67,509	34,336	7,896	5,681	43,879	148,253	157,927
300.0	10	611	20,277	4,828	43,873	17,588	5,132	4,028	25,920	96,361	102,649

Sound Data Top

Note(s)

SOUND DATA REPRESENTATIVE OF NOISE PRODUCED BY THE "ENGINE ONLY"

EXHAUST: Sound Power (1/3 Octave Frequencies)

GENSET POWER WITH FAN	PERCENT LOAD	ENGINE POWER	OVERALL SOUND	100 HZ	125 HZ	160 HZ	200 HZ	250 HZ	315 HZ	400 HZ	500 HZ	630 HZ	800 HZ
EKW	%	BHP	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
3,000.0	100	4,423	134.5	109.7	115.8	113.7	115.5	116.0	119.0	119.9	121.5	120.4	121.2
2,700.0	90	3,999	133.2	110.2	116.1	112.6	114.3	114.5	117.3	118.4	120.1	118.3	119.5
2,400.0	80	3,576	132.0	111.6	116.6	111.0	112.7	113.0	115.6	116.9	118.4	116.5	117.7
2,250.0	75	3,364	131.4	112.4	116.8	110.2	111.9	112.3	114.8	116.2	117.6	115.6	116.8
2,100.0	70	3,152	130.7	113.2	117.1	109.3	111.1	111.6	114.0	115.5	116.8	114.7	115.9
1,800.0	60	2,729	129.5	114.8	117.6	107.5	109.4	110.2	112.3	114.1	115.1	113.0	114.0
1,500.0	50	2,305	128.2	116.3	118.1	105.8	107.8	108.7	110.6	112.6	113.4	111.2	112.2
1,200.0	40	1,882	127.0	117.9	118.6	104.1	106.1	107.3	108.9	111.2	111.8	109.5	110.3
900.0	30	1,458	125.7	119.5	119.1	102.3	104.4	105.9	107.3	109.8	110.1	107.7	108.5
750.0	25	1,246	125.1	120.2	119.3	101.4	103.6	105.2	106.4	109.1	109.3	106.8	107.6
600.0	20	1,035	124.4	121.0	119.6	100.6	102.8	104.5	105.6	108.4	108.4	105.9	106.7
300.0	10	611	123.2	122.6	120.0	98.8	101.1	103.0	103.9	106.9	106.8	104.2	104.8

EXHAUST: Sound Power (1/3 Octave Frequencies)

GENSET POWER WITH FAN	PERCENT LOAD	ENGINE POWER	1000 HZ	1250 HZ	1600 HZ	2000 HZ	2500 HZ	3150 HZ	4000 HZ	5000 HZ	6300 HZ	8000 HZ	10000 HZ
EKW	%	BHP	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
3,000.0	100	4,423	122.2	122.6	123.5	124.9	124.7	123.1	122.4	121.6	120.1	119.0	123.4
2,700.0	90	3,999	120.7	121.0	122.2	123.5	123.2	121.5	120.8	120.0	118.7	117.8	123.8
2,400.0	80	3,576	119.4	119.7	120.8	122.5	121.9	120.4	119.8	119.0	117.7	117.1	123.5
2,250.0	75	3,364	118.8	119.1	120.1	122.0	121.3	119.9	119.4	118.6	117.2	116.8	123.3
2,100.0	70	3,152	118.1	118.5	119.4	121.5	120.6	119.3	119.0	118.2	116.7	116.5	123.1
1,800.0	60	2,729	116.9	117.3	118.0	120.4	119.4	118.3	118.1	117.3	115.6	115.9	122.6
1,500.0	50	2,305	115.6	116.2	116.6	119.4	118.1	117.3	117.2	116.4	114.6	115.3	122.1
1,200.0	40	1,882	114.3	115.0	115.1	118.4	116.8	116.3	116.4	115.6	113.6	114.7	121.6
900.0	30	1,458	113.1	113.8	113.7	117.4	115.6	115.3	115.5	114.7	112.6	114.1	121.1
750.0	25	1,246	112.4	113.2	113.0	116.9	114.9	114.8	115.1	114.3	112.1	113.8	120.9
600.0	20	1,035	111.8	112.6	112.3	116.4	114.3	114.2	114.7	113.9	111.6	113.5	120.7
300.0	10	611	110.5	111.4	110.9	115.4	113.8	113.2	113.8	113.0	110.6	112.9	120.2

106.4 110.3 117.2

MECHANICAL: Sound Power (1/3 Octave Frequencies)

GENSET POWER WITH FAN	PERCENT LOAD	ENGINE POWER	OVERALL SOUND	100 HZ	125 HZ	160 HZ	200 HZ	250 HZ	315 HZ	400 HZ	500 HZ	630 HZ	800 HZ
EKW	%	BHP	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
3,000.0	100	4,423	125.9	89.8	105.6	98.4	100.6	104.5	108.3	111.6	113.3	112.5	114.1
2,700.0	90	3,999	125.8	89.4	105.5	97.9	100.9	103.3	108.7	111.1	112.7	112.2	113.8
2,400.0	80	3,576	126.0	89.0	105.0	97.8	99.8	102.4	108.0	111.0	111.8	111.9	113.0
2,250.0	75	3,364	126.1	88.8	104.7	97.8	99.1	102.1	107.5	111.0	111.3	111.7	112.6
2,100.0	70	3,152	126.2	88.5	104.3	97.8	98.4	101.7	107.0	111.0	110.8	111.6	112.2
1,800.0	60	2,729	126.5	88.1	103.7	97.8	96.9	100.9	106.0	111.0	109.8	111.2	111.4
1,500.0	50	2,305	126.7	87.7	103.0	97.8	95.4	100.2	105.1	111.0	108.8	110.9	110.5
1,200.0	40	1,882	127.0	87.3	102.4	97.7	94.0	99.4	104.1	110.9	107.8	110.6	109.7
900.0	30	1,458	127.2	86.9	101.7	97.7	92.5	98.6	103.1	110.9	106.8	110.2	108.9
750.0	25	1,246	127.3	86.7	101.4	97.7	91.8	98.2	102.6	110.9	106.3	110.1	108.5
600.0	20	1,035	127.4	86.4	101.0	97.7	91.0	97.9	102.1	110.9	105.8	109.9	108.1
300.0	10	611	127.7	86.0	100.4	97.7	89.6	97.1	101.2	110.9	104.8	109.6	107.2

118.3 119.7 116.6 120.3

MECHANICAL: Sound Power (1/3 Octave Frequencies)

GENSET POWER WITH FAN	PERCENT LOAD	ENGINE POWER	1000 HZ	1250 HZ	1600 HZ	2000 HZ	2500 HZ	3150 HZ	4000 HZ	5000 HZ	6300 HZ	8000 HZ	10000 HZ
EKW	%	BHP	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)	dB(A)
3,000.0	100	4,423	112.7	113.9	114.6	115.3	115.0	112.7	110.9	111.9	114.3	113.4	117.8
2,700.0	90	3,999	112.5	113.7	114.5	115.0	114.5	112.3	110.4	111.1	113.6	112.9	119.2
2,400.0	80	3,576	112.2	113.2	113.8	114.4	114.2	111.9	110.0	110.7	113.2	112.6	121.4
2,250.0	75	3,364	112.0	112.9	113.4	114.0	114.2	111.7	109.8	110.5	112.9	112.6	122.6
2,100.0	70	3,152	111.8	112.6	113.0	113.7	114.1	111.4	109.6	110.3	112.7	112.5	123.8
1,800.0	60	2,729	111.3	112.1	112.2	113.1	113.9	111.0	109.3	110.0	112.3	112.3	126.2
1,500.0	50	2,305	110.9	111.5	111.4	112.4	113.7	110.6	109.0	109.6	111.9	112.1	128.6
1,200.0	40	1,882	110.5	110.9	110.5	111.7	113.5	110.2	108.6	109.3	111.5	111.9	131.0
900.0	30	1,458	110.1	110.3	109.7	111.1	113.4	109.8	108.3	109.0	111.0	111.8	133.4
750.0	25	1,246	109.9	110.0	109.3	110.7	113.3	109.6	108.1	108.8	110.8	111.7	134.6
600.0	20	1,035	109.7	109.7	108.9	110.4	113.2	109.3	107.9	108.6	110.6	111.6	135.8
300.0	10	611	109.3	109.2	108.1	109.7	113.0	108.9	107.6	108.3	110.2	111.4	138.2

Emissions Data Top

Units Filter [All Units]

RATED SPEED POTENTIAL SITE VARIATION: 1800 RPM

GENSET POWER WITH FAN / ENGINE POWER / PERCENT LOAD		EKW / BHP / %	3,000.0 / 4,423 / 100	2,250.0 / 3,364 / 75	1,500.0 / 2,305 / 50	750.0 / 1,246 / 25	300.0 / 611 / 10
TOTAL NOX (AS NO2)		G/HR	32,004	21,459	9,376	3,795	3,518
TOTAL CO		G/HR	5,743	6,479	3,534	5,489	3,566
TOTAL HC		G/HR	647	597	1,048	1,031	1,300
PART MATTER		G/HR	210.2	221.1	203.5	409.7	343.1
TOTAL NOX (AS NO2)	(CORR 5% O2)	MG/NM3	3,736.7	3,329.4	1,866.7	1,263.6	2,259.3
TOTAL CO	(CORR 5% O2)	MG/NM3	586.2	854.4	602.3	1,594.3	1,701.1
TOTAL HC	(CORR 5% O2)	MG/NM3	54.2	69.1	157.2	265.0	625.2
PART MATTER	(CORR 5% O2)	MG/NM3	18.2	25.6	31.4	103.5	158.0
TOTAL NOX (AS NO2)	(CORR 5% O2)	PPM	1,820	1,621	909	616	1,101
TOTAL CO	(CORR 5% O2)	PPM	469	684	482	1,275	1,361
TOTAL HC	(CORR 5% O2)	PPM	101	129	294	495	1,167
TOTAL NOX (AS NO2)		G/HP-HR	7.28	6.40	4.08	3.05	5.76
TOTAL CO		G/HP-HR	1.31	1.93	1.54	4.41	5.84
TOTAL HC		G/HP-HR	0.15	0.18	0.46	0.83	2.13
PART MATTER		G/HP-HR	0.05	0.07	0.09	0.33	0.56
TOTAL NOX (AS NO2)		LB/HR	70.56	47.24	20.67	8.37	7.75
TOTAL CO		LB/HR	12.66	14.28	7.79	12.10	7.86
TOTAL HC		LB/HR	1.43	1.32	2.31	2.27	2.87
PART MATTER		LB/HR	0.46	0.49	0.45	0.90	0.76

RATED SPEED NOMINAL DATA: 1800 RPM

GENSET POWER WITH FAN		EKW	3,000.0	2,250.0	1,500.0	750.0	300.0
ENGINE POWER		BHP	4,423	3,364	2,305	1,246	611
PERCENT LOAD		%	100	75	50	25	10
TOTAL NOX (AS NO2)		G/HR	26,670	17,858	7,813	3,162	2,931
TOTAL CO		G/HR	3,190	3,599	1,963	3,050	1,981
TOTAL HC		G/HR	486	449	788	776	977
TOTAL CO2		KG/HR	2,143	1,609	1,236	751	416
PART MATTER		G/HR	150.1	157.9	145.3	292.7	245.1
TOTAL NOX (AS NO2)	(CORR 5% O2)	MG/NM3	3,113.9	2,774.5	1,555.6	1,053.0	1,882.8
TOTAL CO	(CORR 5% O2)	MG/NM3	325.6	474.7	334.6	865.7	945.0
TOTAL HC	(CORR 5% O2)	MG/NM3	40.7	51.9	118.2	199.3	470.1
PART MATTER	(CORR 5% O2)	MG/NM3	13.0	18.3	22.5	73.9	112.8
TOTAL NOX (AS NO2)	(CORR 5% O2)	PPM	1,517	1,351	758	513	917
TOTAL CO	(CORR 5% O2)	PPM	261	380	268	709	756
TOTAL HC	(CORR 5% O2)	PPM	76	97	221	372	878
TOTAL NOX (AS NO2)		G/HP-HR	6.07	5.33	3.40	2.54	4.80
TOTAL CO		G/HP-HR	0.73	1.07	0.85	2.45	3.24
TOTAL HC		G/HP-HR	0.11	0.13	0.34	0.62	1.60
PART MATTER		G/HP-HR	0.03	0.05	0.06	0.24	0.40
TOTAL NOX (AS NO2)		LB/HR	58.80	39.37	17.22	6.97	6.46
TOTAL CO		LB/HR	7.03	7.94	4.33	6.72	4.37
TOTAL HC		LB/HR	1.07	0.99	1.74	1.71	2.15
TOTAL CO2		LB/HR	4,723	3,547	2,724	1,655	917
PART MATTER		LB/HR	0.33	0.35	0.32	0.65	0.54
OXYGEN IN EXH		%	9.9	10.6	11.8	12.6	14.4
DRY SMOKE OPACITY		%	0.5	0.7	0.6	4.8	4.7
BOSCH SMOKE NUMBER			0.19	0.28	0.24	1.25	1.24

Regulatory Information Top

EPA TIER 2 — **2006 - 2010**

GASEOUS EMISSIONS DATA MEASUREMENTS PROVIDED TO THE EPA ARE CONSISTENT WITH THOSE DESCRIBED IN EPA 40 CFR PART 89 SUBPART D AND ISO 8178 FOR MEASURING HC, CO, PM, AND NOX. THE "MAX LIMITS" SHOWN BELOW ARE WEIGHTED CYCLE AVERAGES AND ARE IN COMPLIANCE WITH THE NON-ROAD REGULATIONS.

Locality	Agency	Regulation	Tier/Stage	Max Limits - G/BKW - HR
U.S. (INCL CALIF)	EPA	NON-ROAD	TIER 2	CO: 3.5 NOx + HC: 6.4 PM: 0.20

EPA EMERGENCY STATIONARY — **2011 - ----**

GASEOUS EMISSIONS DATA MEASUREMENTS PROVIDED TO THE EPA ARE CONSISTENT WITH THOSE DESCRIBED IN EPA 40 CFR PART 60 SUBPART IIII AND ISO 8178 FOR MEASURING HC, CO, PM, AND NOX. THE "MAX LIMITS" SHOWN BELOW ARE WEIGHTED CYCLE AVERAGES AND ARE IN COMPLIANCE WITH THE EMERGENCY STATIONARY REGULATIONS.

Locality	Agency	Regulation	Tier/Stage	Max Limits - G/BKW - HR
U.S. (INCL CALIF)	EPA	STATIONARY	EMERGENCY STATIONARY	CO: 3.5 NOx + HC: 6.4 PM: 0.20

Altitude Derate Data Top

Note(s)

ALTITUDE DERATE DATA IS BASED ON THE ASSUMPTION OF A 20 DEGREES CELSIUS(36 DEGREES FAHRENHEIT) DIFFERENCE BETWEEN AMBIENT OPERATING TEMPERATURE AND ENGINE INLET MANIFOLD TEMPERATURE (IMAT). AMBIENT OPERATING TEMPERATURE IS DEFINED AS THE AIR TEMPERATURE MEASURED AT THE TURBOCHARGER COMPRESSOR INLET.

ALTITUDE CORRECTED POWER CAPABILITY (BHP)

AMBIENT OPERATING TEMP (F)	30	40	50	60	70	80	90	100	110	120	130	140	NORMAL
ALTITUDE (FT)													
0	4,423	4,423	4,423	4,423	4,423	4,423	4,423	4,423	4,423	4,423	4,423	4,413	4,423
1,000	4,423	4,423	4,423	4,423	4,423	4,423	4,423	4,423	4,423	4,423	4,423	4,362	4,423
2,000	4,423	4,423	4,423	4,423	4,423	4,423	4,423	4,423	4,423	4,423	4,382	4,323	4,423
3,000	4,360	4,360	4,360	4,360	4,360	4,360	4,360	4,360	4,359	4,294	4,200	4,107	4,360
4,000	4,185	4,185	4,185	4,185	4,185	4,185	4,184	4,182	4,181	4,139	4,080	4,021	4,185
5,000	4,019	4,019	4,019	4,019	4,019	4,019	4,018	4,015	4,013	3,992	3,963	3,935	4,019
6,000	3,867	3,867	3,867	3,867	3,867	3,867	3,866	3,862	3,858	3,853	3,846	3,839	3,867
7,000	3,746	3,746	3,746	3,746	3,746	3,746	3,745	3,741	3,737	3,731	3,725	3,718	3,746
8,000	3,626	3,626	3,626	3,626	3,626	3,626	3,624	3,620	3,615	3,610	3,604	3,597	3,626
9,000	3,511	3,511	3,511	3,511	3,511	3,511	3,509	3,505	3,500	3,495	3,489	3,483	3,511
10,000	3,401	3,401	3,401	3,401	3,401	3,401	3,399	3,394	3,390	3,384	3,379	3,373	3,401
11,000	3,290	3,290	3,290	3,290	3,290	3,290	3,288	3,284	3,279	3,274	3,269	3,264	3,290
12,000	3,180	3,180	3,180	3,180	3,180	3,180	3,178	3,173	3,169	3,164	3,159	3,154	3,180
13,000	3,080	3,080	3,080	3,080	3,080	3,080	3,079	3,075	3,071	3,067	3,063	3,059	3,080
14,000	2,982	2,982	2,982	2,982	2,982	2,982	2,981	2,978	2,976	2,973	2,970	2,967	2,982
15,000	2,885	2,885	2,885	2,885	2,885	2,885	2,884	2,882	2,881	2,879	2,877	2,876	2,885

Cross Reference Top

Engine Arrangement

Arrangement Number	Effective Serial Number	Engineering Model	Engineering Model Version
3079788	WYB00001	GS265	-

Test Specification Data

Test Spec	Setting	Effective Serial Number	Engine Arrangement	Governor Type	Default Low Idle Speed	Default High Idle Speed
0K8532	LL6018	WYB00001	3079788	ADEM4		

Performance Parameter Reference Top

Parameters Reference: DM9600 - 06

PERFORMANCE DEFINITIONS

PERFORMANCE DEFINITIONS DM9600

APPLICATION:
Engine performance tolerance values below are representative of a typical production engine tested in a calibrated dynamometer test cell at SAE J1995 standard reference conditions. Caterpillar maintains ISO9001:2000 certified quality management systems for engine test Facilities to assure accurate calibration of test equipment. Engine test data is corrected in accordance with SAE J1995. Additional

TECHNICAL INFORMATION BULLETIN

Generator Set Sound Data Sheet

			Sound Pressure Data in dB(A)	
Generator Set Model	**Hz**	**Load**	**Raw Exhaust**	**Open Unit, Isolated Exhaust**
KD3000	60	100% Load	120.4	99.1
		No Load	111.2	98.7

Note: Sound pressure data is the logarithmic average of eight perimeter measurement points at a distance of 7 m (23 ft.), except Raw Exhaust data which is a single measurement point at 1 m (3.3 ft.) from the mouth of a straight pipe exhaust.

KD3000	**60 Hz**

				Sound Pressure Levels, dB(A)								
				Octave Band Center Frequency (Hz)								Overall Level
Load	Distance, m (ft)		Measurement Clock Position	63	125	250	500	1000	2000	4000	8000	
100% Load	7 (23)	Open Unit, Isolated Exhaust	3:00	68.6	86.3	89.1	92.5	94.8	94.3	91.2	87.4	100.4
			1:30	61.8	85.1	88.2	92.8	93.5	92.0	88.4	84.2	98.9
			12:00 - Engine	65.9	92.9	90.8	94.1	95.7	93.3	87.1	77.4	100.9
			10:30	62.9	91.9	92.2	94.0	95.1	93.7	89.1	84.4	101.0
			9:00	71.7	88.1	87.9	90.9	93.2	92.3	89.4	85.7	98.9
			7:30	65.7	91.3	88.5	89.8	90.5	91.0	87.2	82.0	97.9
			6:00 - Alternator	67.0	87.1	89.9	87.3	87.8	87.7	83.3	77.0	95.4
			4:30	65.4	90.5	88.0	89.0	89.0	89.1	84.2	77.8	96.6
			8 - pos. log avg.	67.2	89.9	89.6	91.9	93.2	92.1	88.1	83.5	99.1

			Sound Pressure Levels, dB(A)								
			Octave Band Center Frequency (Hz)								Overall Level
Load	Distance, m (ft)	Exhaust	63	125	250	500	1000	2000	4000	8000	
100% Load	1 (3.3)	Raw Exhaust (No Silencer)	90.1	113.1	112.9	111.9	111.1	111.0	112.7	108.9	120.4

KOHLER CO., Kohler, Wisconsin 53044 USA
Phone 920-457-4441, Fax 920-459-1646
For the nearest sales and service outlet in the US and Canada, phone 1-800-544-2444
KOHLERPower.com

KD3000	60 Hz

Load	Distance, m (ft)		Measurement Clock Position	Sound Pressure Levels, dB(A)								
				Octave Band Center Frequency (Hz)								Overall Level
				63	125	250	500	1000	2000	4000	8000	
No Load	7 (23)	Open Unit, Isolated Exhaust	3:00	63.9	83.7	86.0	94.2	95.0	93.6	88.7	80.4	99.8
			1:30	59.5	86.4	86.2	93.4	93.7	91.3	86.2	77.2	98.6
			12:00 - Engine	63.0	94.0	89.9	93.8	96.0	93.1	86.8	75.6	100.9
			10:30	61.4	91.4	90.1	93.4	95.8	93.0	87.6	77.6	100.4
			9:00	63.0	85.5	86.6	91.6	94.7	91.4	87.0	78.7	98.6
			7:30	63.3	91.8	84.2	91.5	91.5	89.7	84.5	75.2	97.7
			6:00 - Alternator	62.1	86.0	83.6	87.5	87.5	86.8	81.1	71.9	93.8
			4:30	62.2	90.7	83.9	90.2	89.5	87.3	80.6	70.7	96.0
			8 - pos. log avg.	62.5	90.0	87.0	92.4	93.8	91.4	86.1	76.9	98.7

Load	Distance, m (ft)	Exhaust	Sound Pressure Levels, dB(A)								
			Octave Band Center Frequency (Hz)								Overall Level
			63	125	250	500	1000	2000	4000	8000	
No Load	1 (3.3)	Raw Exhaust (No Silencer)	81.8	104.7	103.8	103.0	104.5	103.0	98.5	90.6	111.2

Availability is subject to change without notice. Kohler Co. reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever. Contact your local Kohler® generator set distributor for availability.

MOTOR NOISE QUOTATION

MODEL NO.	CATALOG NO.	ORDER NO.	LINE NO.	PHASE	TYPE	FRAME
		1506575	100	3	HVE4	6808

OCTAVE BAND CENTER FREQUENCY (HERTZ)	SOUND PRESSURE LEVELS MEASURED IN A REVERBERANT SOUND ROOM PER IEEE 85, CORRECTED TO FREE FIELD CONDITIONS REFERENCE: .0002 DYNES/CM² WEIGHTING NETWORK 'A'	
	295159	MPI (Ref)
	900	HP
	6	POLES
	60	HZ
31.5	---	DECIBELS
63	45.0	DECIBELS
125	57.5	DECIBELS
250	69.9	DECIBELS
500	78.2	DECIBELS
1000	81.5	DECIBELS
2000	78.4	DECIBELS
4000	73.9	DECIBELS
8000	66.1	DECIBELS
OVERALL	85.0	DECIBELS

DISTANCE FROM MAJOR MOTOR SURFACES 1 Meter

DATA IS TYPICAL UNDER NO LOAD,
IN A FREE FIELD PER ANSI S12.51 AND NEMA MG-1

DATE: 5/4/2021

SUPER CRITICAL GRADE SILENCER

32 to 42 dBA Noise Reduction • EGSA Class 6

A201-6100

APPLICATION

Super critical grade silencer providing a premium level of performance where ambient noise levels are very low and optimal attenuation is mandatory. Recommended for all marine, stationary and mobile, power applications where noise attenuation is critical.

CONSTRUCTION

Sizes 6" and below come standard with ID Cuff/OD Tube connections. Sizes 6" and above come standard with ANSI pattern flanged connections. Additional connections available, consult factory for details.

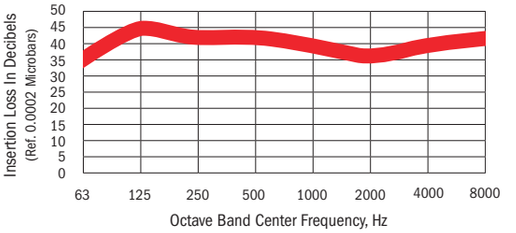
FINISH AND OPTIONAL MATERIALS

Standard aluminzed steel constructions with high temperature, oven cured black paint. Silencers also available in optional colors and stainless steel. Consult with Product Specialist for details.

OPTIONS

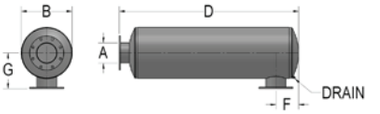
- Aluminized steel, 304L or 316L stainless steel
- Dual inlet or custom inlet/outlet configurations
- Thermal insulation blankets to suit all configurations
- Mounting brackets, gussets and lifting lugs

TYPICAL ATTENUATION CURVE

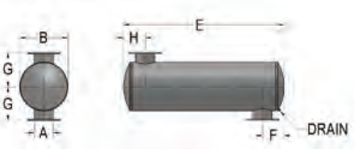


TYPICAL ORIENTATIONS

STYLE 1



STYLE 2



STYLE 3

DIMENSIONS

Part Number	A Inlet Size	B Diameter	C OAL - 1	D OAL - 2	E OAL - 3	F Min	F Max	G Flange Center	H Min	H Max	WT
SIZES 6" AND BELOW COME STANDARD WITH ID CUFF/OD TUBE CONNECTIONS											
A201-6102	2	10	30	27	24	4	8	8	4	7	33
A201-61025	2.5	10	42	39	36	5	15	8	5	11	46
A201-6103	3	12	43	40	37	5	15	9	5	11	58
A201-61035	3.5	14	55	52	49	6	21	10	6	16	92
A201-6104	4	14	55	52	49	6	21	11	6	16	92
A201-6105	5	16	62	58	54	7	23	12	7	17	118
A201-6106	6	20	75	71	67	8	30	14	8	22	184
SIZES 8" AND ABOVE COME STANDARD WITH ANSI PATTERN FLANGED CONNECTIONS											
A201-6108	8	24	76	72	68	10	30	16	10	21	283
A201-6110	10	28	100	96	93	11	42	18	11	22	499
A201-6112	12	36	102	99	95	14	40	22	14	33	749
A201-6114	14	36	138	135	132	15	61	22	15	46	1021
A201-6116	16	42	140	137	133	16	60	25	16	46	1325
A201-6118	18	48	142	139	135	18	59	29	18	46	1541
A201-6120	20	48	165	162	159	19	72	29	19	55	1773
A201-6122	22	54	166	163	161	21	71	32	21	52	2045
A201-6124	24	60	167	164	162	23	70	35	23	55	2335

All spatial dimensions are in inches. Inlet sizes available up to 30 inches.
Additional connections available. **See silencer price book for breakdown of A200 part number.**
F MAX is for inlet only. H MAX is for outlet only. All weights are in pounds. All weights are approximate.
Use diameter to find bracket sizes. Example: A201-6108 (24" dia) would require 3ACI-28-2400 brackets (or similar 29 brackets).

Appendix H

RCNM Noise Calculations

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/28/2021
Case Description: Lindero Pump Station - Demolition

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Swapi Park	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	390.0	0.0
Concrete Saw	No	20		89.6	390.0	0.0
Excavator	No	40		80.7	390.0	0.0
Generator	No	50		80.6	390.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Backhoe	59.7	55.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	71.7	64.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	62.9	58.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	62.8	59.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	71.7	67.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Residence	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	490.0	0.0
Concrete Saw	No	20		89.6	490.0	0.0
Excavator	No	40		80.7	490.0	0.0
Generator	No	50		80.6	490.0	0.0

Results

Equipment	Calculated (dBA) Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Noise Limit Exceedance (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Backhoe	57.7	53.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Concrete Saw	69.8	62.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	60.9	56.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	60.8	57.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	69.8	65.1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/28/2021
Case Description: Lindero Pump Station - Site Preparation

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Swapi Park	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	390.0	0.0
Drill Rig Truck	No	20		79.1	390.0	0.0
Excavator	No	40		80.7	390.0	0.0
Generator	No	50		80.6	390.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Backhoe	59.7	55.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Drill Rig Truck	61.3	54.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	62.9	58.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	62.8	59.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	62.9	63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Residence	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	490.0	0.0
Drill Rig Truck	No	20		79.1	490.0	0.0
Excavator	No	40		80.7	490.0	0.0
Generator	No	50		80.6	490.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Backhoe	57.7	53.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Drill Rig Truck	59.3	52.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	60.9	56.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	60.8	57.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	60.9	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/28/2021
Case Description: Lindero Pump Station - Grading

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Swapi Park	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	390.0	0.0
Compactor (ground)	No	20		83.2	390.0	0.0
Roller	No	20		80.0	390.0	0.0
Generator	No	50		80.6	390.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Backhoe	59.7	55.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	65.4	58.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	62.2	55.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	62.8	59.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	65.4	63.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Residence	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	490.0	0.0
Compactor (ground)	No	20		83.2	490.0	0.0
Roller	No	20		80.0	490.0	0.0
Generator	No	50		80.6	490.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Backhoe	57.7	53.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Compactor (ground)	63.4	56.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Roller	60.2	53.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	60.8	57.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	63.4	61.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/28/2021
Case Description: Lindero Pump Station - Building Construction

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Swapi Park	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	390.0	0.0
Man Lift	No	20		74.7	390.0	0.0
Drill Rig Truck	No	20		79.1	390.0	0.0
Excavator	No	40		80.7	390.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Backhoe	59.7	55.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	56.9	49.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Drill Rig Truck	61.3	54.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	62.9	58.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	62.9	61.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Residence	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Backhoe	No	40		77.6	490.0	0.0
Man Lift	No	20		74.7	490.0	0.0
Drill Rig Truck	No	20		79.1	490.0	0.0
Excavator	No	40		80.7	490.0	0.0

Results

Equipment	Calculated (dBA) Lmax	Leq	Noise Limits (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq	Noise Limit Exceedance (dBA) Day Lmax	Day Leq	Evening Lmax	Evening Leq	Night Lmax	Night Leq
Backhoe	57.7	53.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Man Lift	54.9	47.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Drill Rig Truck	59.3	52.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Excavator	60.9	56.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	60.9	59.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Roadway Construction Noise Model (RCNM),Version 1.1

Report date: 10/28/2021
Case Description: Lindero Pump Station - Paving

**** Receptor #1 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Swapi Park	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compactor (ground)	No	20		83.2	390.0	0.0
Generator	No	50		80.6	390.0	0.0
Front End Loader	No	40		79.1	390.0	0.0
Paver	No	50		77.2	390.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compactor (ground)	65.4	58.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	62.8	59.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	61.3	57.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	59.4	56.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	65.4	64.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

**** Receptor #2 ****

Description	Land Use	Baselines (dBA) Daytime	Evening	Night
Nearest Residence	Residential	60.0	55.0	50.0

Equipment

Description	Impact Device	Usage (%)	Spec Lmax (dBA)	Actual Lmax (dBA)	Receptor Distance (feet)	Estimated Shielding (dBA)
Compactor (ground)	No	20		83.2	490.0	0.0
Generator	No	50		80.6	490.0	0.0
Front End Loader	No	40		79.1	490.0	0.0
Paver	No	50		77.2	490.0	0.0

Results

	Calculated (dBA)		Noise Limits (dBA) Day		Evening		Night		Noise Limit Exceedance (dBA) Day		Evening		Night	
Equipment	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq	Lmax	Leq
Compactor (ground)	63.4	56.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Generator	60.8	57.8	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Front End Loader	59.3	55.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Paver	57.4	54.4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Total	63.4	62.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

Lindero Pump Station Rehabilitation (Project No. 592)

Responses to Comments on the Draft Initial Study – Mitigated Negative Declaration (IS-MND)

Final IS-MND

prepared by

Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, California 91360
Contact: Jennifer Lancaster, Principal Resource Specialist

prepared with the assistance of

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

July 2022

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
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Responses to Comments

This section includes comments received during the circulation of the Draft Initial Study-Mitigated Negative Declaration (IS-MND) prepared for the Lindero Pump Station Rehabilitation ("proposed project") by Calleguas Municipal Water District ("Calleguas"). The Draft IS-MND was circulated for a 30-day public review period which began on Monday, May 23, 2022, and ended on Tuesday, June 21, 2022. Calleguas received two comment letters on the Draft IS-MND during the comment period, as identified below.

Comments are summarized on the following pages, with a response provided to each, and the comment letters are attached, with numbered brackets included to identify each comment addressed herein.

Letter 1

STATE OF CALIFORNIA—CALIFORNIA STATE TRANSPORTATION AGENCY GAVIN NEWSOM, Governor

DEPARTMENT OF TRANSPORTATION
DISTRICT 7
100 S. MAIN STREET, MS 16
LOS ANGELES, CA 90012
PHONE (213) 505-5003
FAX (213) 897-1337
TTY 711
www.dot.ca.gov

Making Conservation a California Way of Life

June 14, 2022

Jennifer Lancaster
Calleguas Municipal Water District
2100 Olson Road
Thousand Oaks, CA 91360

RE: Lindero Pump Station Rehabilitation
Mitigated Negative Declaration (MND)
SCH # 2022050473
Vic. VEN-023/PM: R5.836
GTS # 07-VEN-2022-00490

Dear Jennifer Lancaster:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the above referenced MND. Under the proposed project, a series of improvements and repairs would be implemented at Lindero Pump Station. These improvements include: replacement of existing above-ground horizontal split case pumps with vertical turbine pumps situated primarily below the ground surface; modifications to the existing piping system and replacement of existing control valves; replacement of the existing surge tank air compressors; installation of a removable protective canopy over the pumps to protect the motors from over-heating; replacement of the existing Southern California Edison (SCE) electrical system, and replacement of electrical and controls equipment with new equipment that runs on a standard voltage, including the main transformer, motor control center, and uninterruptible power supply; installation of a new stationary diesel backup generator. The Calleguas Municipal Water District is the Lead Agency under the California Environmental Quality Act (CEQA).

The project site is approximately 0.8 mile from the State Route 23 (SR-23) North onramp on East Avenida De Los Arboles Avenue. After reviewing the MND, construction of the proposed project would increase vehicle trips to and from the project site due to construction worker trips, as well as material and equipment deliveries. Vehicle Miles Travelled (VMT) associated with these activities would cease once construction is completed and VMT levels would return to pre-project conditions. Following the completion of construction activities, operation and maintenance of the pump station would be consistent with existing conditions, with the exception that fewer repairs are anticipated due to the improved performance and reliability to be provided by the project. Therefore, because VMT from construction would be temporary and short-term and limited to the active construction period and operation and maintenance activities would likely be less frequent than under existing conditions, no impact associated with VMT

"Provide a safe and reliable transportation network that serves all people and respects the environment."

would occur and the proposed project would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b). The following information is included for your consideration.

1 Any transportation of heavy construction equipment and/or materials which requires use of oversized-transport vehicles on State highways will need a Caltrans transportation permit. Caltrans recommends that the Project limit construction traffic to off-peak periods to minimize the potential impact on State facilities. If construction traffic is expected to cause issues on any State facilities, please submit a construction traffic control plan detailing these issues for Caltrans' review.

2 Finally, any work completed on or near Caltrans' right of way may require an encroachment permit. However, the final determination on this will be made by Caltrans' Office of Permits. This work would require additional review and may be subject to additional requirements to ensure current design standards and access management elements are being addressed. For more information on encroachment permits, see: https://dot.ca.gov/programs/traffic-operations/ep.

If you have any questions, please feel free to contact Karen Herrera, the project coordinator, at Karen.Herrera@dot.ca.gov and refer to GTS # 07-VEN-2022-00490.

Sincerely,

MIYA EDMONSON
LDR/CEQA Branch Chief

cc: State Clearinghouse

"Provide a safe and reliable transportation network that serves all people and respects the environment."

Letter 1 - Responses

COMMENTER: Miya Edmonson, LDR/CEQA Branch Chief
Caltrans, District 7

DATE: June 14, 2022

1. The commenter states that a Caltrans permit will be required for any transportation of heavy construction equipment and/or materials which requires use of oversized-transport vehicles on State highways. Caltrans recommends that construction traffic be limited to off-peak periods and, if construction traffic would cause issues on any State facilities, a construction traffic control plan detailing these issues should be submitted to Caltrans for review.

   Calleguas acknowledges the information and guidance regarding Caltrans requirements for the use of State highways. No revisions to the Draft IS-MND are necessary, and no errata are associated with this comment.

2. The commenter states that any work completed on or near Caltrans' right-of-way may require an encroachment permit, and that the determination as to whether such a permit is required will be made by Caltrans' Office of Permits. The commenter provides a web address for more information on encroachment permits, and advises that should a permit be required, additional review may be necessary to ensure current [Caltrans] design standards and access management elements are being addressed.

   Calleguas acknowledges the information and guidance regarding Caltrans encroachment permit requirements. No revisions to the Draft IS-MND are necessary, and no errata are associated with this comment.

Letter 2

Ventura County
Air Pollution
Control District

4567 Telephone Rd
Ventura, California 93003

tel 805/303-4005
fax 805/456-7797
www.vcapcd.org

Ali Reza Ghasemi, PE
Air Pollution Control Officer

VENTURA COUNTY
AIR POLLUTION CONTROL DISTRICT
Memorandum

TO: Jennifer Lancaster, Principal Resource Specialist

DATE: June 20, 2022

FROM: Nicole Collazo, Air Quality Specialist, VCAPCD Planning Division

SUBJECT: Lindero Pump Station Rehabilitation Mitigated Negative Declaration

Air Pollution Control District (APCD) staff has reviewed the subject Notice of Intent (NOI) to adopt a Mitigated Negative Declaration (MND) for the project referenced above. The project will provide necessary repairs and improvements to the existing Lindero Pump Station in Thousand Oaks. Lindero Pump Station is a critical component of Calleguas' water infrastructure system and Calleguas' reliable conveyance of potable water supply to the Oak Park Region. The project is located on Erbes Road at East Avenida De Las Flores in Thousand Oaks. The Lead Agency for the project is the Calleguas Municipal Water District.

General Comments

1 Item 1- Page 23. The project proposes to demolish approximately "4,340 ft^2 of building and pump infrastructure". The demolition activities will have to comply with APCD requirements for asbestos abatement per APCD Rule 62.7, *Asbestos- Demolition and Renovation*. This includes meeting the notification requirements to APCD and emission control requirements in Rule 62.7.C.1. We recommend adding this rule to the list of applicable rules on Page 22 and possibly amending the applicable subsection for toxics exposure.

2 Item 2- Page 26. Construction-related TAC Emissions. We recommend a best management practice measure for off-road construction equipment to be at a minimum Tier 3 EPA rating for diesel engines and revise this section of the MND accordingly along with developing a standard condition of approval to make the measure enforceable.

3 The construction schedule is expected to last approximately 1 year. The exposure of toxics, such as diesel particulate matter and nitrous oxides, from daily use of construction equipment to any sensitive receptors residing nearby the construction site (Los Cerritos Middle School, Boys and Girls Club, Sapwi Trails Community Park, residences), may have a health impact, with emphasis on infants age 0-2 years of age which have higher breathing rates and are more susceptible to exposure of air pollutants.

Item 3- As the MND stated, the proposed emergency diesel generator will require a stationary source APCD Permit to Operate. As of June 20, 2022, the Engineering Division has not received

4 a permit application for the diesel engine powering the generator. We advise the applicant to submit the required documentation and application for an Authority to Construct, which must be issued *prior to* installation and construction of said equipment. A Permit to Operate likewise must be issued prior to operation of the diesel generator. Please contact Mr. Chris Harlin, Permit Processing Specialist, at chris@vcapcd.org or 805-303-3683 to ensure the equipment will be operating according to APCD's rules and regulations, including Rule 10, *Permits Required*.

Thank you for the opportunity to comment on the project. If you have any questions, you may contact me at nicole@vcapcd.org.

Letter 2 - Responses

COMMENTER: Nicole Collazo, Air Quality Specialist
Ventura County APCD, Planning Division

DATE: June 20, 2022

1. The commenter states that on page 23 of the Draft IS-MND, description is provided of project-related demolition activities (to demolish "4,340 ft^2 of building and pump infrastructure") that will be required to comply with APCD requirements for asbestos abatement per APCD Rule 62.7, *Asbestos- Demolition and Renovation,* and recommends adding this rule to the list of applicable rules on page 22, and "possibly amending the applicable subsection for toxics exposure."

   In response to this comment, Ventura County APCD Rule 62.7 has been added to the list of "Applicable VCAPCD Rules and Regulations" presented on page 22 of the IS-MND. The discussion of potential impacts associated with toxic air contaminants (TAC), as presented on pages 25 through 27 of the Draft IS-MND, has not been revised in response to this comment. As discussed on the aforementioned pages, compliance of project activities with applicable laws and regulations would reduce potential impacts, including those associated with TAC, to a less-than-significant level.

2. The commenter recommends that on page 26 of the Draft IS-MND, under the discussion of construction-related TAC emissions, a revision should be incorporated to include a best management practice requiring off-road construction equipment to be a minimum Tier 3 EPA rating, and that a condition of approval should be developed to make this measure enforceable.

   Page 26 of the IS-MND has not been revised to include a requirement for Tier 3 construction engines, because the potential impact was determined to be less than significant without mitigation. No revisions have been incorporated in response to this comment.

3. The commenter states that the exposure of toxics from daily use of construction equipment could have a health impact on nearby sensitive receptors, with emphasis on infants aged 0-2 years of age, and identifies sensitive receptors including Los Cerritos Middle School, Boys and Girls Club, Sapwi Trails Community Park, and residences.

   Calleguas acknowledges this comment. As stated in the second full paragraph on page 26 of the Draft IS-MND, the maximum exhaust emissions would occur during the first 150 days of the potentially year-long construction period and emissions would decrease for the remaining construction period as construction activities such as building construction and architectural coating would require less intensive construction equipment. Health risk calculations determined that diesel particulate matter generated by construction emissions would not result in significant impacts, including to sensitive receptors associated with the aforementioned land uses. No revisions have been incorporated in response to this comment.

4. The commenter states that the proposed emergency diesel generator will require a stationary source APCD Permit to Operate and, as of June 20, 2022, the APCD Engineering Division has not received a permit application for the diesel engine powering the generator. The commenter advises that Calleguas submit the required documentation and application for an Authority to

Construct, which must be issued prior to installation and construction of the equipment, and that a Permit to Operate must be issued prior to operation of the equipment.

Calleguas acknowledges this comment. As stated on page 9 of the Draft IS-MND, the Ventura County APCD is identified as an "other public agency whose approval is required" and is responsible for providing a Permit to Construct and a Permit to Operate for the project's new diesel generator. Calleguas will comply with these requirements, which is a ministerial action. No revisions have been incorporated in response to this comment.

Lindero Pump Station Rehabilitation (Project No. 592)

Errata to the Draft Initial Study – Mitigated Negative Declaration (IS-MND)

Final IS-MND

prepared by

Calleguas Municipal Water District
2100 Olsen Road
Thousand Oaks, California 91360
Contact: Jennifer Lancaster, Principal Resource Specialist

prepared with the assistance of

Rincon Consultants, Inc.
180 North Ashwood Avenue
Ventura, California 93003

July 2022

RINCON CONSULTANTS, INC.
Environmental Scientists | Planners | Engineers
rinconconsultants.com

Errata to the Draft IS-MND

The following pages provide a summary record of all proposed text amendments to the Draft Initial Study-Mitigated Negative Declaration (IS-MND). These amendments are the result of comments received during the public review period and directly respond to those comments or correct typographical errors within the Draft IS-MND. These amendments serve as clarifications and amplifications on the content of the Draft IS-MND. None of the changes warrant recirculation of the IS-MND pursuant to CEQA Guidelines Section 15088.5. The amendments serve to clarify and strengthen the content of the IS-MND, but do not introduce significant new information.

Changes in text are signified by strikeout (~~strikeout~~) where text is removed and with underline (underline) where text is added.

Page 22 – the following bullet was added to the list of "Applicable VCAPCD Rules and Regulations":

- **Rule 62.7 (Asbestos- Demolition and Renovation).** This rule applies to operations involving disturbance to 100 or more square feet of asbestos-containing material (ACM) and requires notification to the APCD and use of emission control measures for ACM during demolition.

Pages 36-37 – the following minor revisions were incorporated into the text of Mitigation Measure BIO-3 to provide clarity regarding how to implement the measure:

BIO-3 Pre-Construction Nesting Bird Surveys

To avoid disturbance of nesting and special-status birds protected by the MBTA and CFGC, including raptors, project construction activities such as vegetation removal, ground disturbance, and construction and demolition shall occur outside of the bird breeding season (February 1 through August 31) to the extent feasible. If project construction activities commence during the breeding season for migratory birds (February 1 through August 31), a pre-construction nesting bird survey shall be conducted no more than seven days prior to initiation of construction activities, including demolition, ~~ground disturbance and~~ vegetation removal ~~activities~~, and other ground disturbance. The nesting bird pre-construction survey shall be conducted ~~one foot inside~~ along the boundary of the project footprint~~, including~~ plus a 100-foot buffer (300 feet for raptors). The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California coastal communities. If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and directed to avoid entering the buffer zone while the nest remains active. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed breeding/nesting is completed and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the qualified biologist, and any encroachment into the buffer zone will be monitored by the biologist for the duration of the activities within the buffer.

If active nests of federally or state-listed species (e.g., least Bell's vireo, coastal California gnatcatcher) are detected during the survey, a 500-foot avoidance buffer from the nest shall be established and demarcated by the biologist with flagging, construction lathe, or other means to mark the boundary. If the 500-foot avoidance buffer is infeasible, then Calleguas' contractor(s) shall implement noise reduction measures, such as mufflers and temporary sound walls, that reduce construction noise levels to at or below 60 dBA Leq at the nest site. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed breeding/nesting is completed and the young have fledged the nest, or noise levels remain at or below 60 dBA Leq at the nest site. Encroachment into the buffer shall occur only at the discretion of the qualified biologist, and any encroachment into the buffer zone shall be monitored by the biologist for the duration of the activities within the buffer.

Pages 49 – the title of Mitigation Measure CR-2 was revised for clarity as follows:

CR-2 Monitor for and Treat Any Unanticipated Finds of Archaeological Resources

Lindero Pump Station Rehabilitation (Project No. 592)

Mitigation Monitoring and Reporting Program

Final Initial Study – Mitigated Negative Declaration

prepared by

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July 2022

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Mitigation Monitoring and Reporting Program

The California Environmental Quality Act (CEQA) requires a reporting or monitoring program be adopted for the conditions of project approval necessary to mitigate or avoid significant effects on the environment (Public Resources Code 21081.6). This Mitigation Monitoring and Reporting Program (MMRP) is provided to satisfy that requirement, and to facilitate compliance with adopted mitigation measures during project implementation. For each mitigation measure recommended in the CEQA document for the project, specifications are made herein that identify the actions required, the monitoring that must occur, and the agency or department responsible for oversight.

Mitigation Measure	Action Required	Monitoring Timing	Monitoring Frequency	Party Responsible for Monitoring	Method of Compliance Verification	Verified Date & Initials
Biological Resources						
BIO-1 Biological and Environmental Awareness Training (BEAT) Program						
Prior to initiation of construction activities (including staging and mobilization), all personnel associated with project construction shall attend a BEAT Program sensitivity training conducted by a qualified biologist, to assist workers in recognizing special-status biological resources which may occur in the study area. The specifics of the BEAT Program shall include information about nesting birds and identification of special-status species and habitats at the project site, a description of the regulatory status and general ecological characteristics of special-status resources, and review of the limits of construction and measures required to avoid and minimize impacts to biological resources within the work area. The BEAT Program shall provide specific training on construction BMPs required under Mitigation Measure BIO-2, *Construction BMPs for Biological Resources*, presented below. A fact sheet conveying this information shall also be prepared for distribution to all contractors, their employees, and other personnel involved with construction of the project. All employees shall sign a form provided by the trainer documenting they have attended the BEAT Program sensitivity training and understand the information presented to them. If new construction personnel are added to the project, the contractor shall confirm the new personnel receive the BEAT Program sensitivity training before starting work. The subsequent training of personnel can include a video recording of the initial training and/or the use of written materials rather than in-person training by a biologist. The BEAT Program sensitivity training may be provided jointly with the Cultural and Archeological Resources Education (CARE) Program required under Mitigation Measure CUL-1. If provided as a joint BEAT/CARE sensitivity training session, all requirements of both programs, as defined under Mitigation Measures BIO-1 and CUL-2, will be explicitly addressed.	Calleguas Municipal Water District (CMWD) will conduct the following actions: 1. Retain qualified biologist to conduct the BEAT Program sensitivity training and prepare the fact sheet 2. Verify implementation of the BEAT Program CMWD's construction contractor will be required to conduct the following actions: 3. Verify personnel attendance at the BEAT Program sensitivity training	1. Prior to the BEAT Program sensitivity training 2. Prior to the start of construction and during construction 3. During the BEAT Program sensitivity training	1. Once 2. Ongoing 3. Once	CMWD	CMWD will ensure a qualified biologist is retained, require that the contractor have all construction personnel attend the BEAT Program sensitivity training, and confirm that the BEAT Program is implemented for project construction.	

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BIO-2 Construction BMPs for Biological Resources						
To avoid and/or minimize potential direct and indirect impacts to special-status species, sensitive vegetation, and potentially jurisdictional waters and water quality outside of the project site, the following BMPs shall be implemented: a. Prior to project mobilization, all limits of construction work shall be clearly delineated with orange construction fencing or similar highly visible material and maintained throughout the duration of construction. b. No native vegetation with a diameter at breast height (DBH) of more than four (4) inches shall be removed or damaged without approval by Calleguas. c. Staging and parking areas shall be limited to sites which are unvegetated and/or previously disturbed areas comprising ruderal vegetation or non-native annual grasslands, ornamental landscaping, and paved/graded areas, to the extent practicable. d. Materials and equipment (when not in use) shall be stored on impervious surfaces or plastic ground covers to prevent spills or leakage. e. Adequate spill prevention and response equipment shall be maintained on site and readily available to implement to minimize impacts to the aquatic environment. f. Construction materials and spoils shall be protected from stormwater runoff using temporary perimeter sediment barriers such as berms, silt fences, fiber rolls, covers, sand/gravel bags, and straw bale barriers, as appropriate. g. Off-site tracking of loose construction materials and soil shall be prevented by implementing street sweeping, vacuuming, and rumble plates, as appropriate. h. All vehicles and equipment shall be in good working condition and free of leaks. When vehicles or equipment are stationary, mats or drip pans shall be placed below vehicles to contain fluid leaks. The contractor shall prevent oil, petroleum products, or any other pollutants from contaminating the soil or entering a watercourse	CMWD will conduct the following actions: 1. Incorporate the listed BMPs into the Contract Documents so the contractor is contractually required to implement them 2. Field-verify implementation of listed BMPs CMWD's construction contractor will be required to conduct the following actions: 3. Communicate the BMPs to appropriate personnel who will be working on site	1. Prior to project activities 2. During project activities 3. Prior to and during project activities	1. Once 2. Daily during mobilization to verify that BMPs are properly implemented, then as needed to verify BMPs continue to be properly implemented, at a frequency to be determined at CMWD's discretion 3. As needed to ensure that appropriate personnel working on site have received communication regarding the BMPs	CMWD	CMWD will field-verify implementation of all BMPs	

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(dry or otherwise). i. Fugitive dust from ground disturbance activities shall be minimized using water trucks and covering of soil stockpiles. j. A speed limit of 15 mph for construction vehicles shall be implemented on unpaved roads. k. All food related trash shall be disposed of in closed containers and removed from the project site each day during the construction period. Construction personnel shall not feed or otherwise attract wildlife to the construction area. At project completion, all project-generated debris, vehicles, building materials, and rubbish shall be removed from the project site.						
BIO-3 Pre-Construction Nesting Bird Surveys						
To avoid disturbance of nesting and special-status birds protected by the MBTA and CFGC, including raptors, project construction activities such as vegetation removal, ground disturbance, and construction and demolition shall occur outside of the bird breeding season (February 1 through August 31) to the extent feasible. If project construction activities commence during the breeding season for migratory birds (February 1 through August 31), a pre-construction nesting bird survey shall be conducted no more than seven days prior to initiation of construction activities, including demolition, vegetation removal, and other ground disturbance. The nesting bird pre-construction survey shall be conducted along the boundary of the project footprint plus a 100-foot buffer (300 feet for raptors). The survey shall be conducted by a biologist familiar with the identification of avian species known to occur in southern California coastal communities. If nests are found, an avoidance buffer (dependent upon the species, the proposed work activity, and existing disturbances associated with land uses outside of the site) shall be determined and demarcated by the biologist with flagging, construction lathe, or other means to mark the boundary. All construction personnel shall be notified as to the existence of the buffer zone and directed to avoid entering the buffer zone while the nest remains active. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed breeding/nesting is completed and the young have fledged the nest. Encroachment into the buffer shall occur only at the discretion of the	CMWD will conduct the following actions: 1. Retain a qualified biologist to conduct survey no more than 7 days prior to activities between February 1 and August 31 if project construction activities commence during that time CMWD's construction contractor will be required to conduct the following actions: 2. Implement requirements of survey results,	1. Prior to the commencement of project activities 2. During construction activities	1. Once 2. Periodically	CMWD	CMWD will review pre-construction nesting bird survey results and field-verify compliance with requirements such as avoidance, as necessary.	

Mitigation Measure	Action Required	Monitoring Timing	Monitoring Frequency	Party Responsible for Monitoring	Method of Compliance Verification	Verified Date & Initials
qualified biologist, and any encroachment into the buffer zone will be monitored by the biologist for the duration of the activities within the buffer. If active nests of federally or state-listed species (e.g., least Bell's vireo, coastal California gnatcatcher) are detected during the survey, a 500-foot avoidance buffer from the nest shall be established and demarcated by the biologist with flagging, construction lathe, or other means to mark the boundary. If the 500-foot avoidance buffer is infeasible, then Calleguas' contractor(s) shall implement noise reduction measures, such as mufflers and temporary sound walls, that reduce construction noise levels to at or below 60 dBA Leq at the nest site. All construction personnel shall be notified as to the existence of the buffer zone and to avoid entering the buffer zone during the nesting season. No ground-disturbing activities shall occur inside this buffer until the avian biologist has confirmed breeding/nesting is completed and the young have fledged the nest, or noise levels remain at or below 60 dBA Leq at the nest site. Encroachment into the buffer shall occur only at the discretion of the qualified biologist, and any encroachment into the buffer zone shall be monitored by the biologist for the duration of the activities within the buffer.	such as buffers for avoidance, as needed					
BIO-4 Pre-Construction Presence/Absence Survey for Special Status Species						
Within seven days prior to the commencement of ground disturbing activities, a qualified biologist shall be retained to perform a survey for California legless lizard, southern California legless lizard, coastal whiptail, western pond turtle, and two-striped gartersnake in natural habitat areas within the project footprint and a 50-foot buffer to determine the presence/absence of these species. Raking shall be conducted in areas of sandy, loose, and moist soils under sparse vegetation/leaf litter to determine the presence/absence of special-status reptiles. The qualified biologist shall relocate any identified special-status species to suitable habitat outside of the construction area. Construction shall not proceed until the work area is determined to be free of special-status species. Survey results shall be documented in a technical memorandum submitted to Calleguas.	CMWD will conduct the following actions: 1. Retain a qualified biologist to conduct special status species survey 2. CMWD's qualified biologist will conduct relocation of special-status species as required	1. Prior to the commencement of construction, no more than seven days before 2. During surveys, if needed	1. Once 2. As needed	CMWD	CMWD will ensure a qualified biologist is retained and conducts the survey, and relocates any special-status species as needed.	

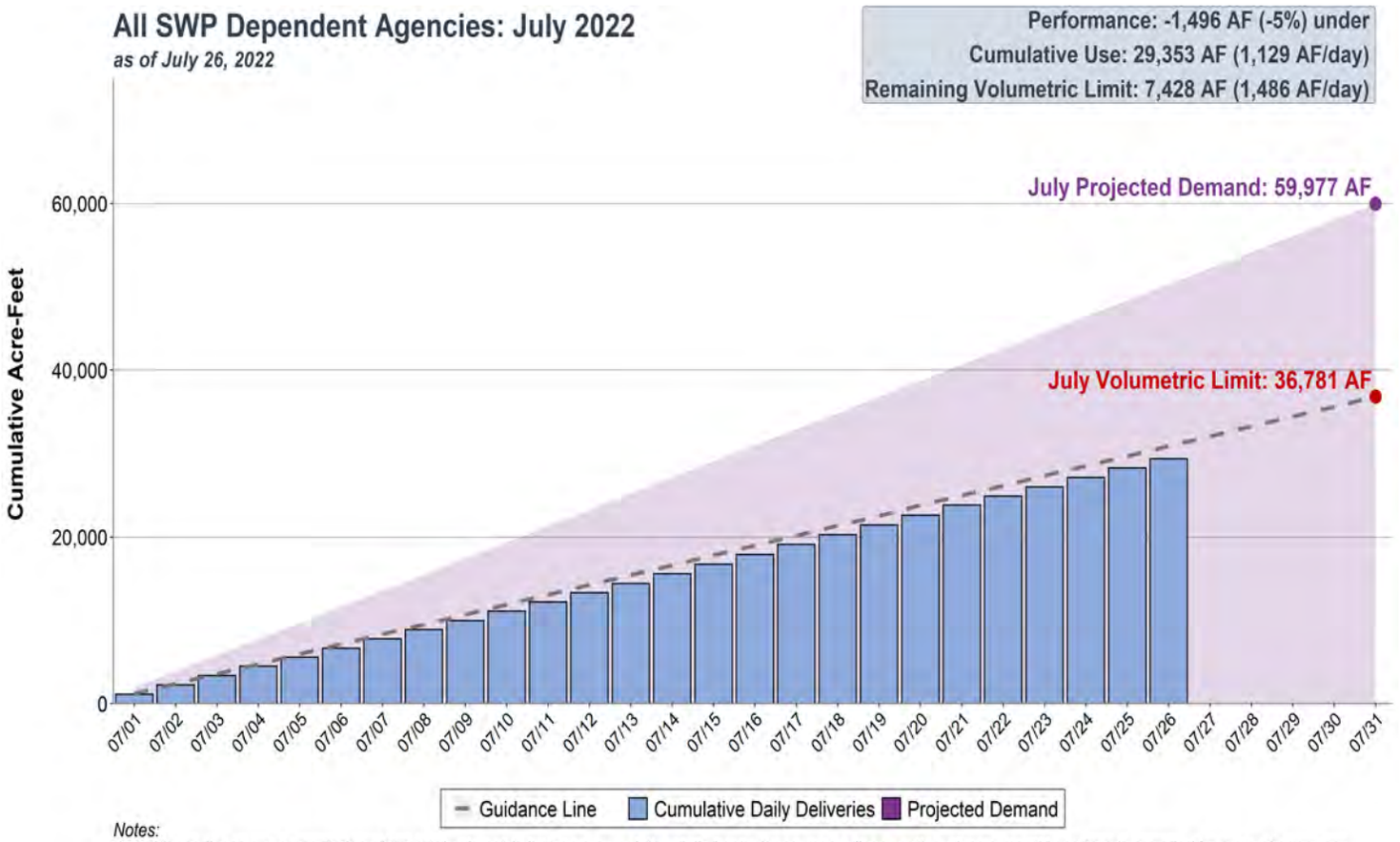
Mitigation Measure	Action Required	Monitoring Timing	Monitoring Frequency	Party Responsible for Monitoring	Method of Compliance Verification	Verified Date & Initials
BIO-5 Certified Arborist Guidance for Oak Tree Trimming						
Any trimming of coast live oak trees necessary to provide sufficient clearance for site access during construction of the project shall be conducted under the guidance and direction of a certified arborist. The certified arborist shall be present during all oak tree trimming activities conducted for the project and shall provide direction as to how tree trimming shall be conducted in a manner which avoids damage to the tree(s).	CMWD will conduct the following actions: 1. Retain a certified arborist to conduct or supervise oak tree trimming CMWD's construction contractor will be required to conduct the following actions: 2. Conduct oak tree trimming under the direction of CMWD's certified arborist, as needed to provide clearance for site access	1 & 2 Prior to project-related need for clearance to access site	1 & 2 Once	CMWD	CMWD will ensure that any oak tree trimming required for site access is conducted under the direction of a certified arborist.	

Mitigation Measure	Action Required	Monitoring Timing	Monitoring Frequency	Party Responsible for Monitoring	Method of Compliance Verification	Verified Date & Initials
Cultural Resources						
CR-1 Cultural and Archaeological Resources Education (CARE) Program						
Prior to any ground-disturbing activity, an archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall provide an initial sensitivity training session to the assigned Calleguas inspectors, contractors, subcontractors, and other workers prior to their involvement in any ground-disturbing activities, with subsequent training sessions to accommodate new personnel becoming involved in the project. The CARE Program shall address the cultural sensitivity of the affected site and how to identify these types of resources; specific procedures to be followed in the event of an inadvertent discovery; safety procedures when working with monitors; and consequences in the event of non-compliance. The CARE Program sensitivity training may be provided jointly with the BEAT Program sensitivity training required under Mitigation Measure BIO-1, *Biological and Environmental Awareness Training (BEAT) Program*. If provided as a joint CARE/BEAT sensitivity training session, all requirements of both programs, as defined under Mitigation Measures BIO-1 and CR-1, will be explicitly addressed.	CMWD will conduct the following actions: 1. Retain qualified archaeologist to conduct the CARE Program sensitivity training 2. Verify implementation of the CARE Program CMWD's construction contractor will be required to conduct the following actions: 3. Verify personnel attendance at the CARE Program sensitivity training	1. Prior to the CARE Program sensitivity training 2. Prior to the start of construction and during construction 3. During the CARE Program sensitivity training	1. Once 2 & 3 Ongoing	CMWD	CMWD will ensure a qualified archaeologist is retained, require that the contractor have all construction personnel attend the CARE Program sensitivity training, and confirm that the CARE Program is implemented for project construction.	

Mitigation Measure	Action Required	Monitoring Timing	Monitoring Frequency	Party Responsible for Monitoring	Method of Compliance Verification	Verified Date & Initials
CR-2 Monitor for and Treat Any Unanticipated Finds of Archaeological Resources						
An archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (National Park Service 1983) shall conduct periodic spot checks during excavation. In the event that unanticipated cultural resources are encountered during ground-disturbing activities associated with the project, work in the immediate area must halt and appropriate evaluation and treatment procedures implemented. In addition, upon inadvertent discovery of a potential resource, the qualified archaeologist must be contacted immediately to evaluate the find. If the discovery proves to be eligible for listing in the NRHP or the CRHR, additional work may be warranted, such as data recovery excavation and coordination with interested Tribes on the identification, treatment, and disposition of the resource(s).	CMWD will conduct the following actions: 1. Retain a qualified archaeologist CMWD's qualified archaeologist will: 2. Conduct spot-checks during excavation 3. Remain on call for the duration of construction to evaluate any unanticipated finds CMWD's construction contractor will be required to conduct the following actions: 4. Stop work in the immediate area of a find and contact CMWD (if archaeologist is not on site) or CMWD's archaeologist (if on site) for evaluation	1. Prior to excavation activities 2. During excavation activities 3 & 4 During construction	1. Once 2. Periodically 3 & 4 As needed	CMWD	CMWD will ensure a qualified archaeologist is retained and conducts spot-checks, and will coordinate with the archaeologist regarding any finds requiring halt of construction activities.	

All SWP Dependent Agencies: July 2022

as of July 26, 2022



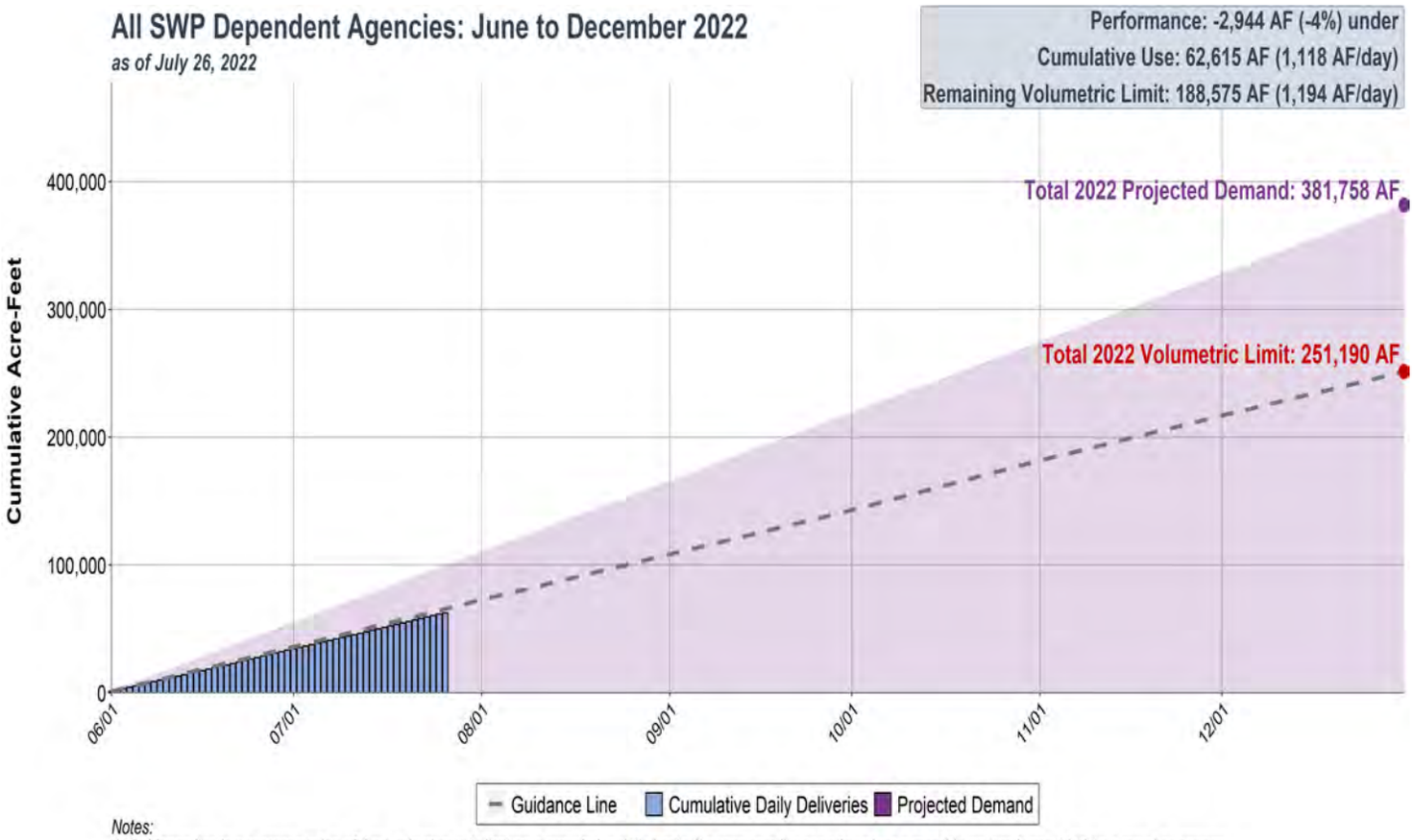
Notes:

1. Guidance line is a representation of the total volumetric limit on a cumulative daily basis. It assumes a linear path, unless a monthly pattern is provided by a member agency.
2. Performance is the acre-foot and corresponding percent deviation from the guidance line, per as of date.
3. For Path 2 agencies, monthly penalties paid will be credited if actual total water use is below the total volumetric limit at the end of the seven-month period.
4. Tracking of cumulative daily deliveries only include those agencies planning to receive SWP supplies June - December 2022.
5. Projected demand as of April 26, 2022.

Disclaimer: Data presented is preliminary and subject to change based on monthly reconciled billing data.

All SWP Dependent Agencies: June to December 2022

as of July 26, 2022



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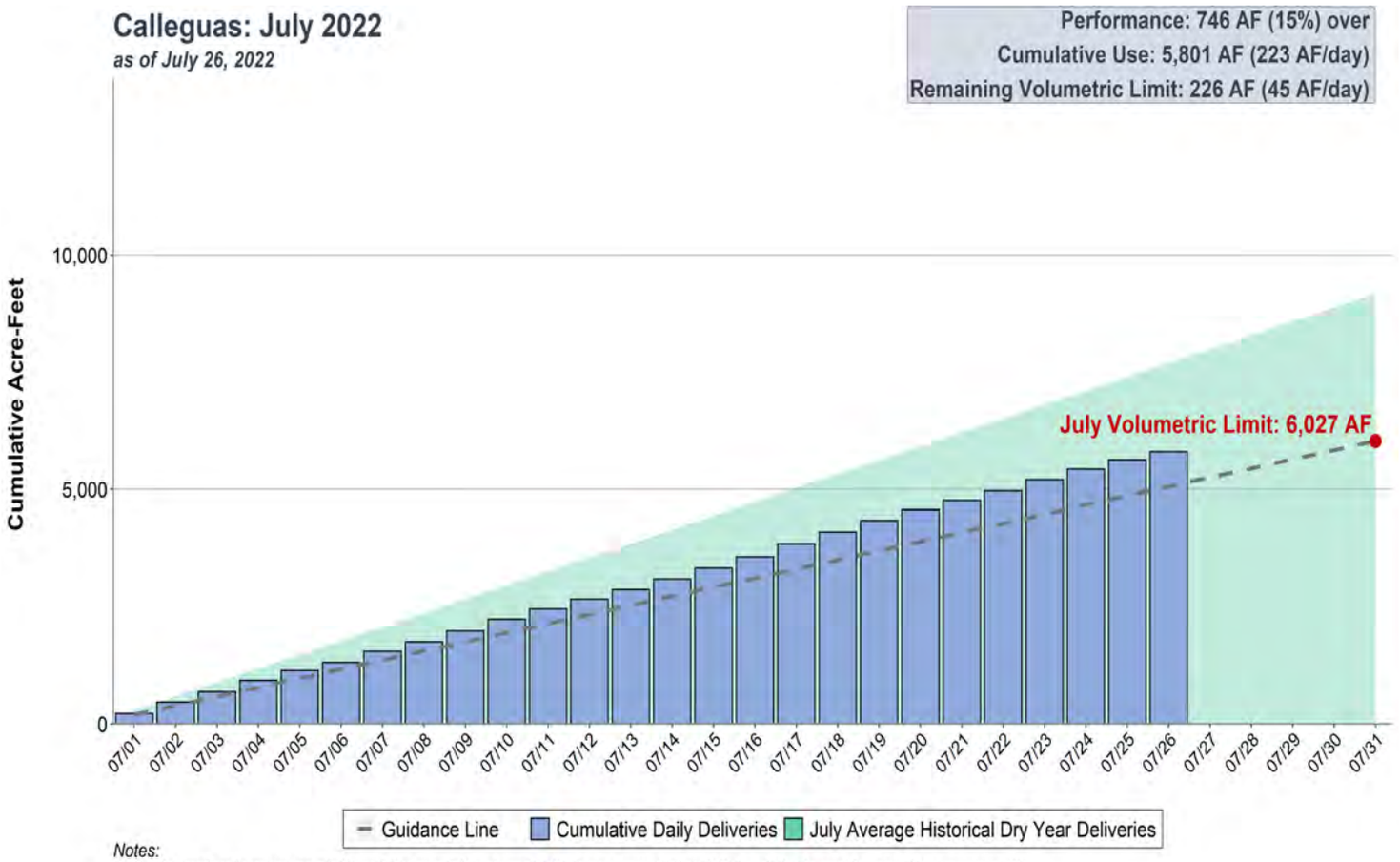
Calleguas: July 2022

as of July 26, 2022



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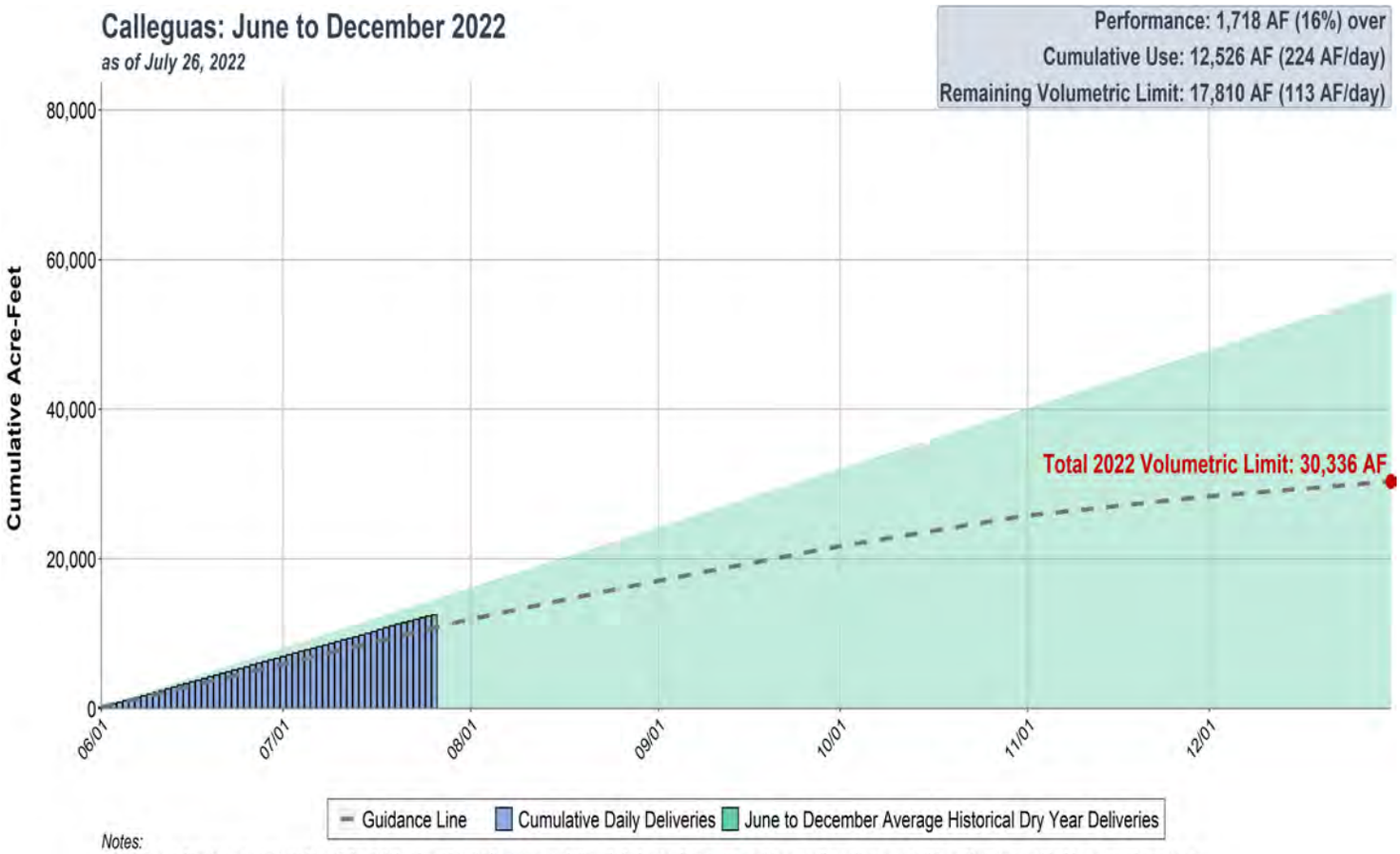
Calleguas: June to December 2022

as of July 26, 2022



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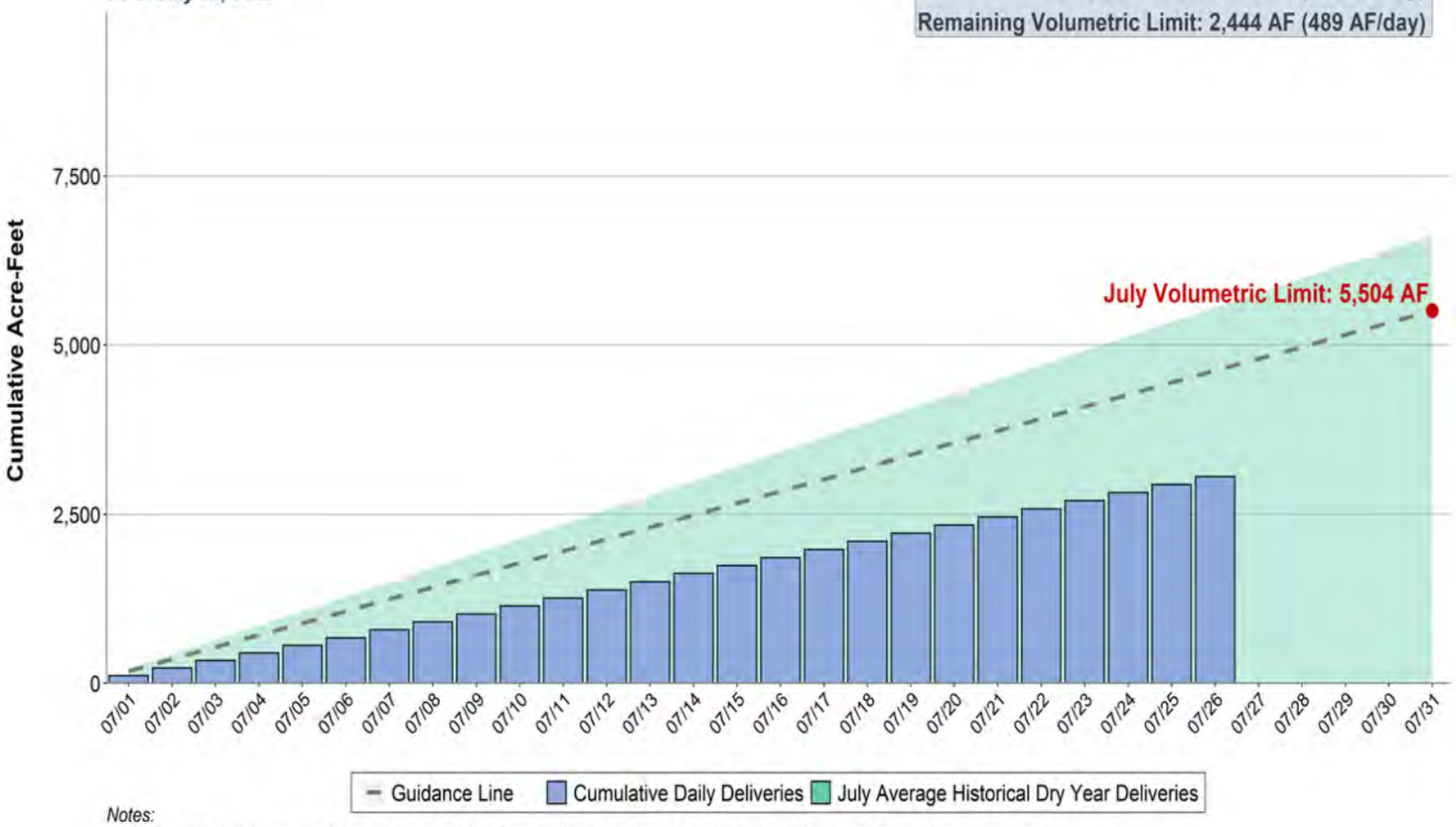
IEUA: July 2022

as of July 26, 2022

Performance: -1,556 AF (-34%) under
Cumulative Use: 3,060 AF (118 AF/day)
Remaining Volumetric Limit: 2,444 AF (489 AF/day)



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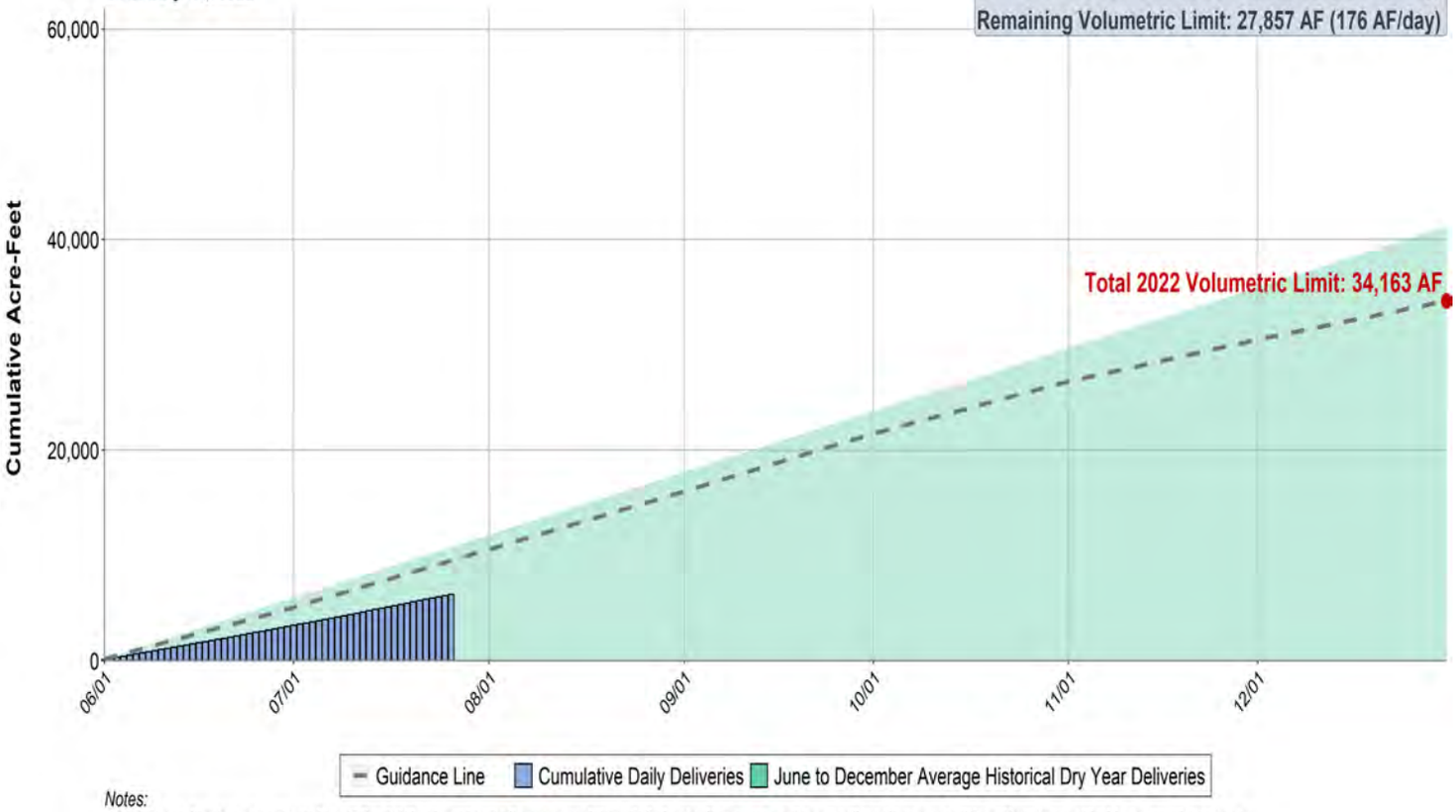
IEUA: June to December 2022

as of July 26, 2022

Performance: -3,192 AF (-34%) under
Cumulative Use: 6,306 AF (113 AF/day)
Remaining Volumetric Limit: 27,857 AF (176 AF/day)



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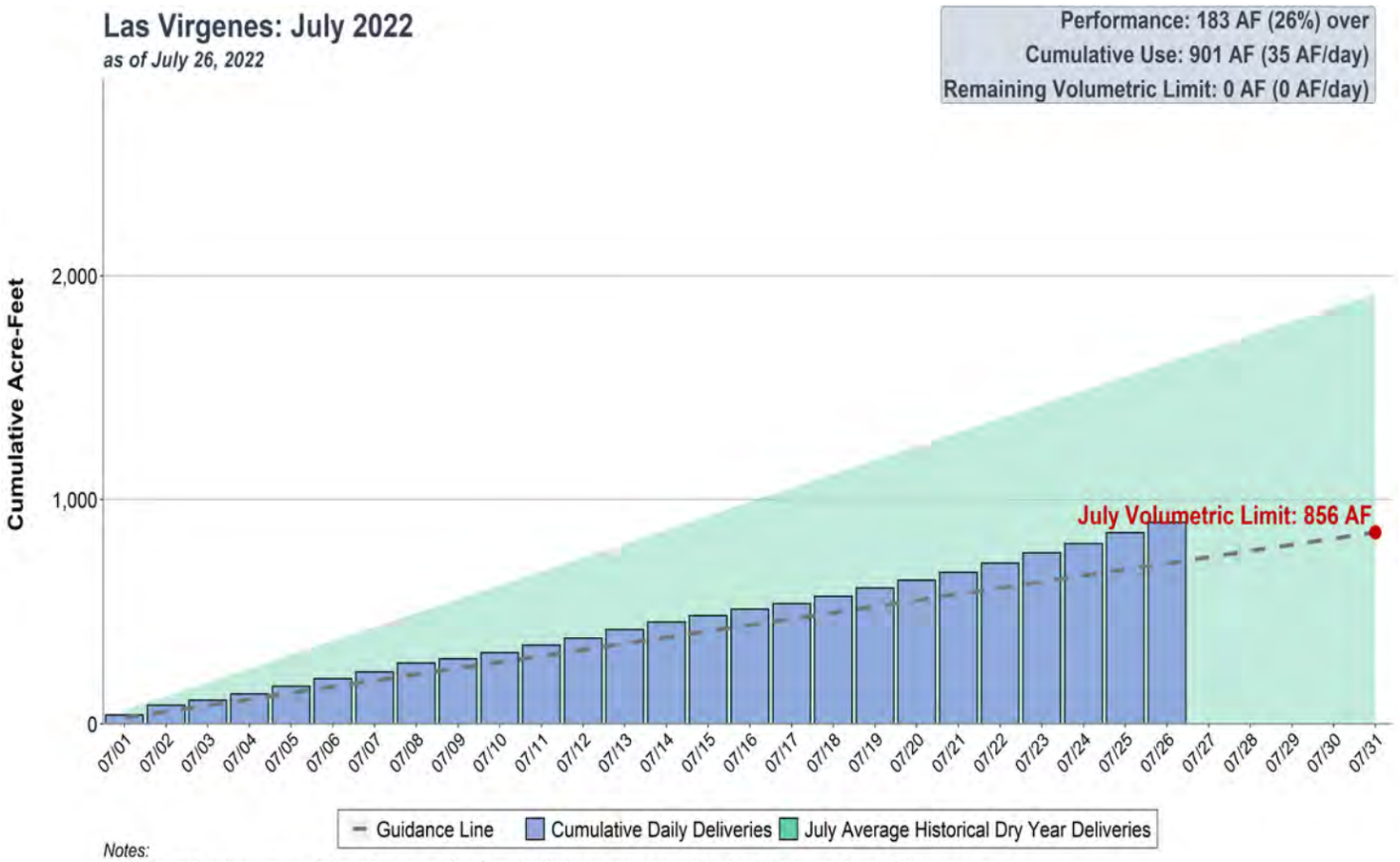
Las Virgenes: July 2022

as of July 26, 2022



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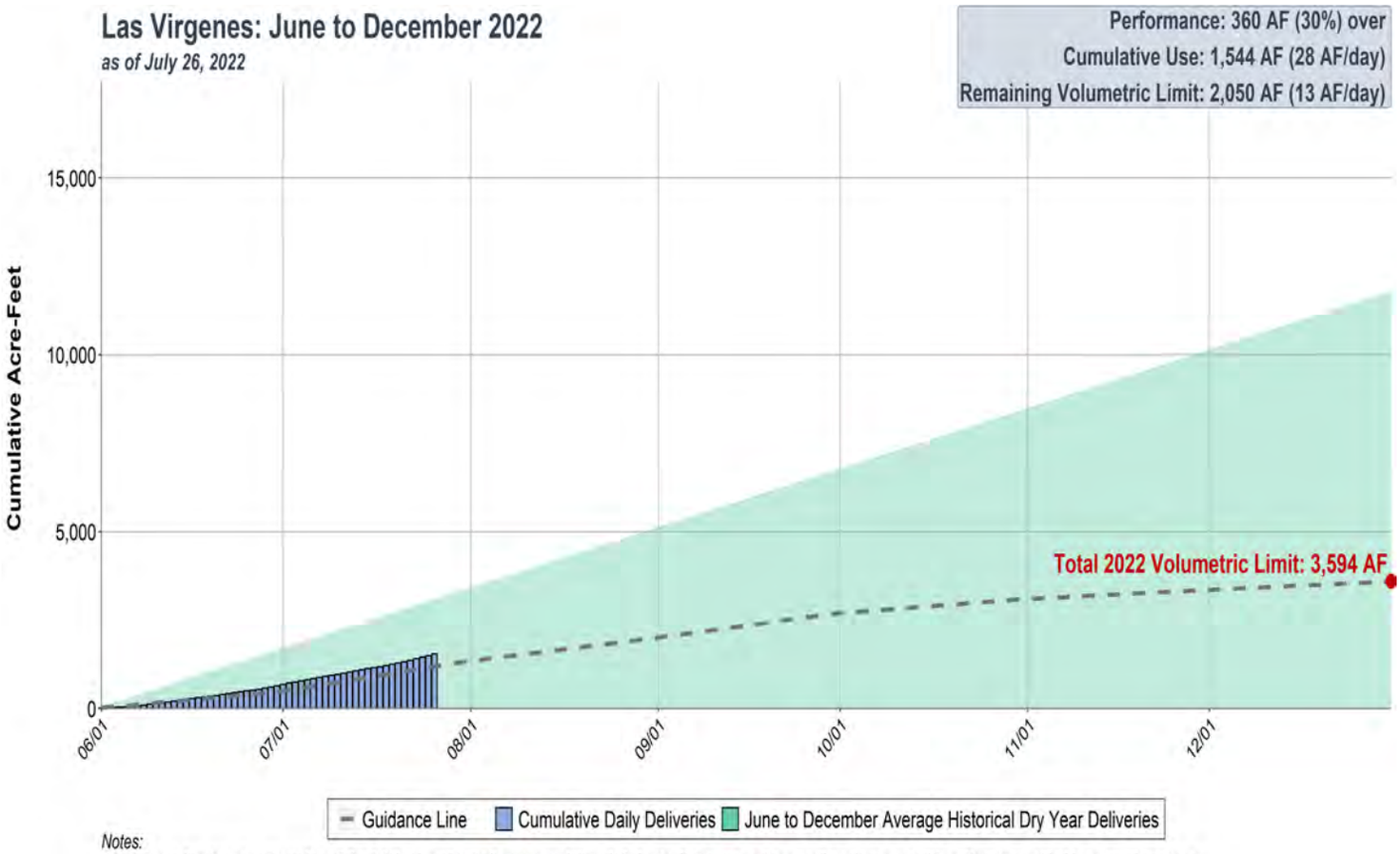
Las Virgenes: June to December 2022

as of July 26, 2022



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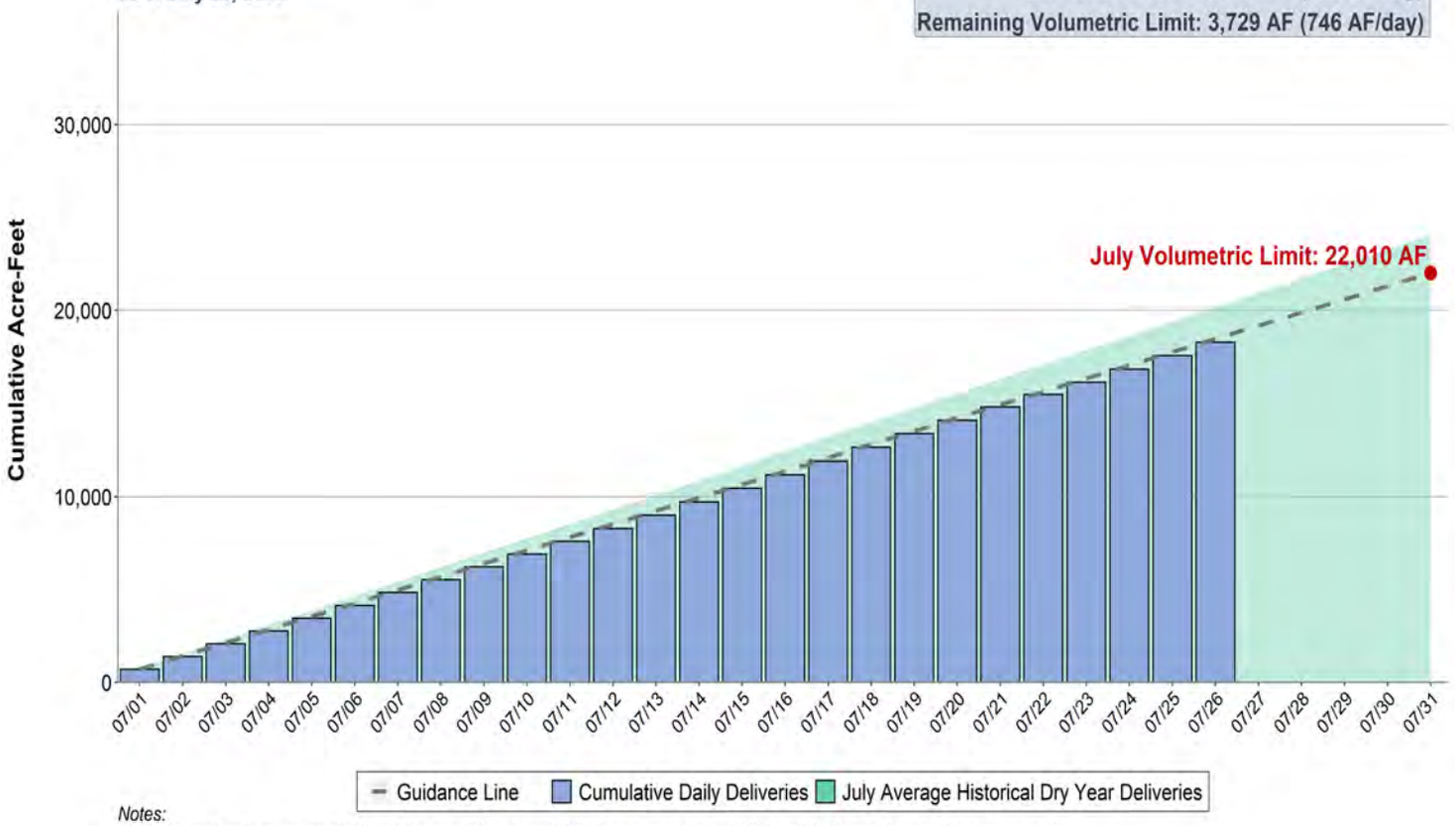
Los Angeles: July 2022

as of July 26, 2022

Performance: -179 AF (-1%) under
Cumulative Use: 18,281 AF (703 AF/day)
Remaining Volumetric Limit: 3,729 AF (746 AF/day)



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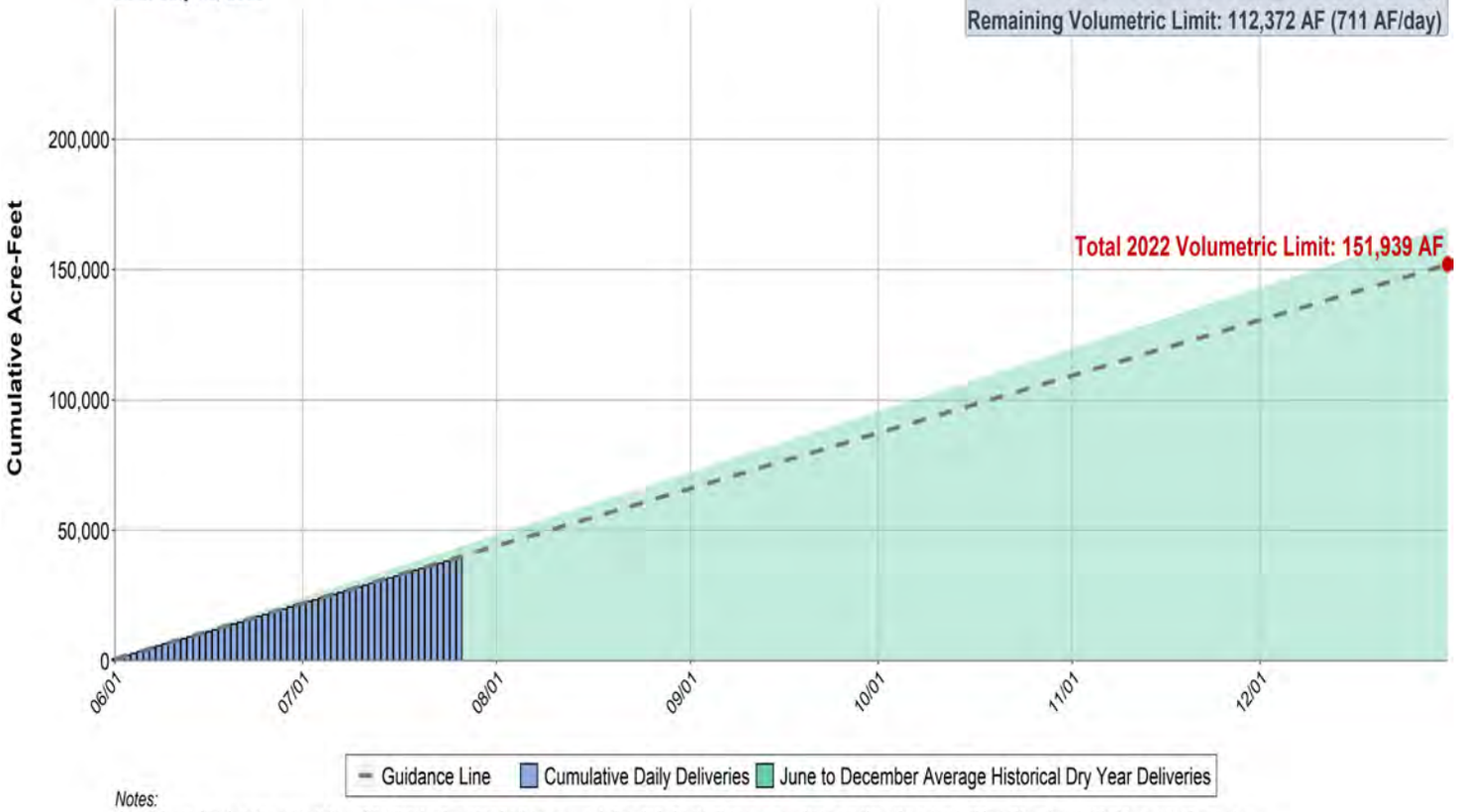
Los Angeles: June to December 2022

as of July 26, 2022

Performance: -193 AF (0%) under
Cumulative Use: 39,567 AF (707 AF/day)
Remaining Volumetric Limit: 112,372 AF (711 AF/day)



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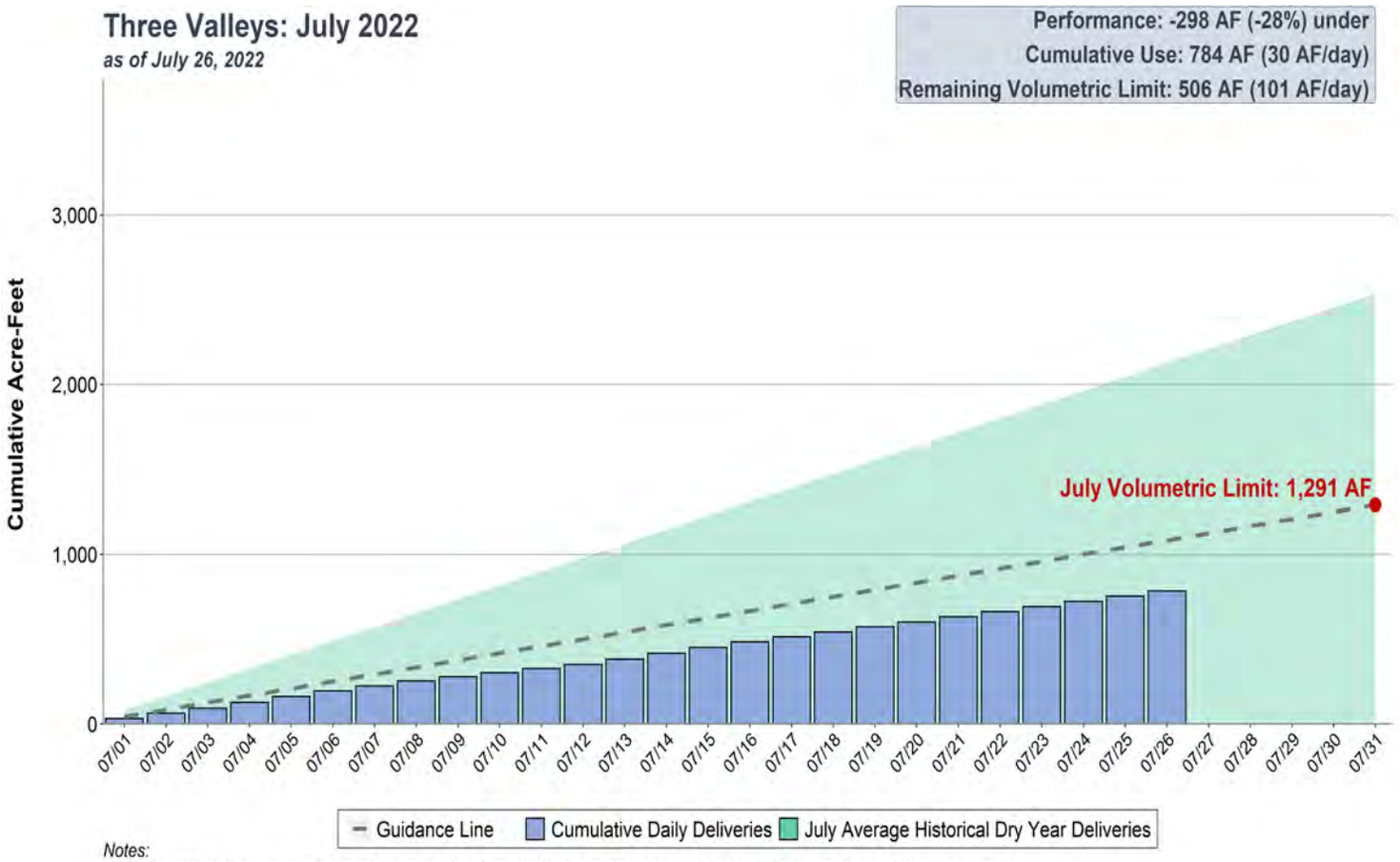
Three Valleys: July 2022

as of July 26, 2022



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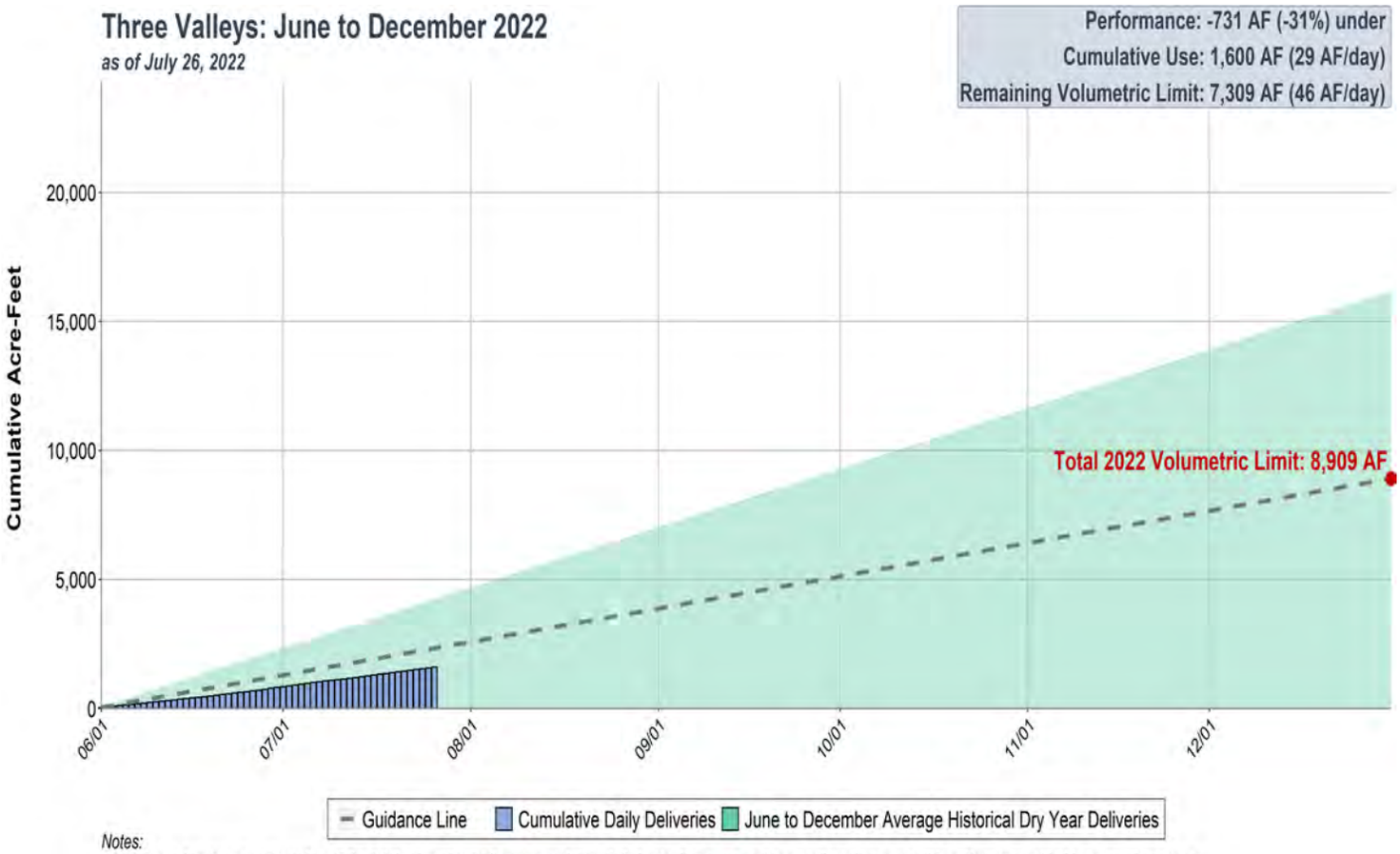
Three Valleys: June to December 2022

as of July 26, 2022



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Water Supply Update & Drought Report

Last Revised: 07/27/2022

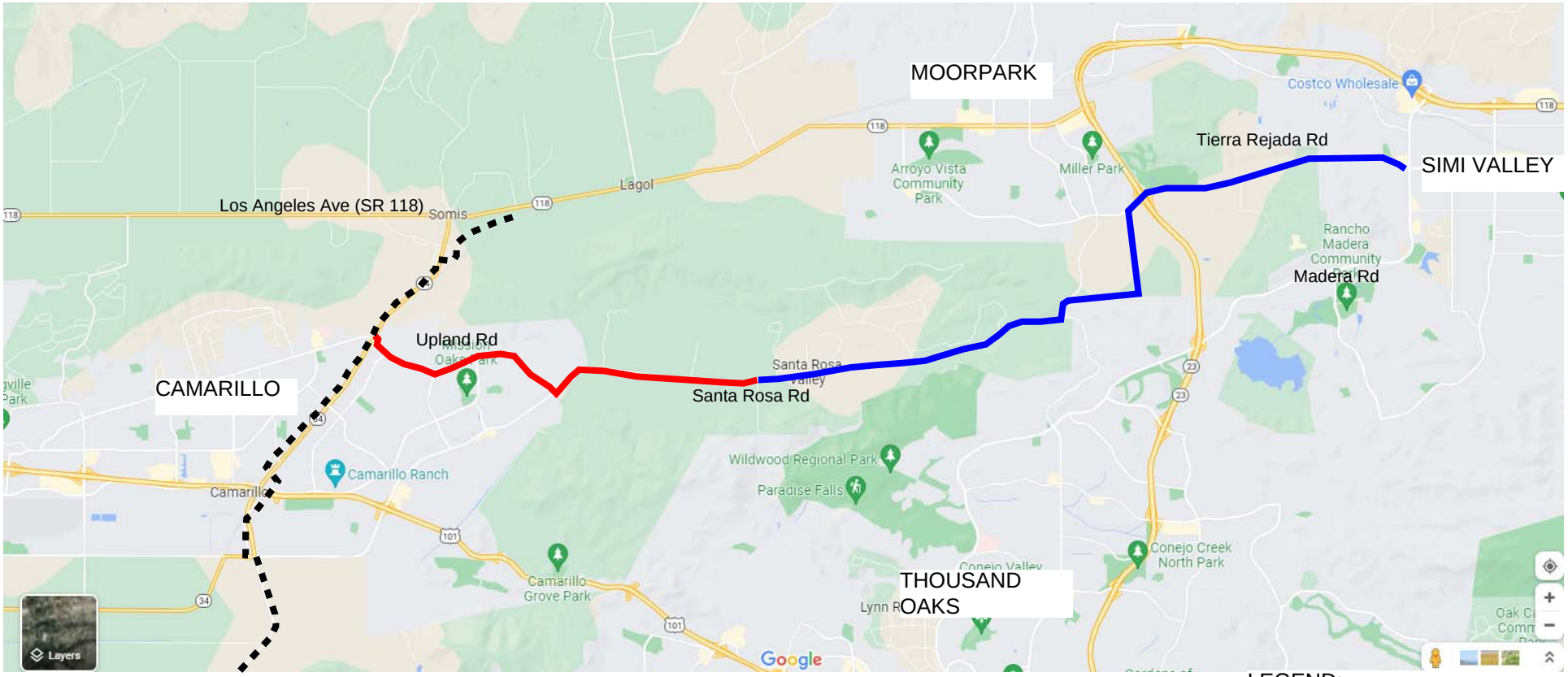
PROGRESS ON REDUCING IMPORTED WATER USE

The Emergency Water Conservation Program (EWCP) period is: June 1, 2022 – December 31, 2022. Metropolitan Water District of Southern California (Metropolitan) established an agency-specific volumetric delivery limit for Calleguas. Calleguas subsequently calculated volumetric limits for its water purveyors. Volumetric limits are based on an equivalent share of Human Health and Safety (HH&S) water available from DWR (roughly based on 55 gallons per person per day offset by a certain volume of local supplies) plus any additional water Metropolitan can provide from the SWP system, allocated to each agency based on proportionate population. The following table exhibits monthly volumetric targets representing each agency's proportional share of the imported water available. If at a future date the individual agency, or Metropolitan as a whole, exercises the option to move to volumetric targets, the volumetric amounts would be the basis for how penalties would be assessed following Metropolitan's Emergency Water Conservation Handbook.

Purveyor	Population (CY 2022)	07/01/22 – 07/26/22 Period Target (AF)	07/01/22 – 07/26/22 Period Target (GPCD)	Period Ending 07/26/22 (AF)	Period Ending 07/26/22 (GPCD)	% Over / Under
Brandeis Mutual Water Company	600	5.2	**108**	3.6	**74**	**-31%**
Berylwood Heights Mutual Water Company	-	-	**-**	-	**-**	**0%**
Butler Ranch Mutual Water Company	-	-	**-**	-	**-**	**0%**
California Water Service	19,647	169.0	**108**	424.6	**271**	**151%**
California-American Water Company	63,898	549.8	**108**	962.7	**189**	**75%**
Camrosa Water District	32,945	259.2	**99**	327.5	**125**	**26%**
City of Camarillo	50,062	368.6	**92**	345.3	**86**	**-6%**
City of Oxnard	245,679	1,502.1	**77**	668.8	**34**	**-55%**
City of Simi Valley (VCWWD #8)	97,633	839.4	**108**	1,277.8	**164**	**52%**
City of Thousand Oaks	53,555	460.8	**108**	593.6	**139**	**29%**
Crestview Mutual Water Company	2,095	11.4	**68**	-	**-**	**-100%**
Golden State Water Company	45,287	389.4	**108**	309.2	**86**	**-21%**
Triunfo Water & Sanitation	14,002	120.5	**108**	115.4	**103**	**-4%**
Pleasant Valley Mutual Water Company	5,792	35.8	**77**	0.4	**1**	**-99%**

Solano Verde Mutual Water Company	100	0.9	**108**	24.9	**3,126**	**2799%**
Ventura County Water Works District #1	36,899	317.7	**108**	481.1	**163**	**51%**
Ventura County Water Works District #19	1,440	9.8	**85**	-	**-**	**-100%**
Ventura County Waterworks District #38	1,772	15.2	**108**	121.2	**857**	**695%**
Zone Mutual Water Company	-	-	**-**	-	**-**	**0%**
Total	**671,408**	5,055		**5,656**		**12%**

SALINITY MANAGEMENT PIPELINE, PHASES 3 AND 4



LEGEND:
- Phase 3
- Phase 4
- Existing SMP

Calleguas Municipal Water District
Capital Project Information Sheet

Name: Salinity Management Pipeline, Phase 3

Account No: 536

Description: Approximately 5.1 miles of 24- and 18-inch-diameter pipe

Location: From the intersection of Upland and Lewis Rds. in Camarillo to Santa Rosa and Hill Canyon Rds. in the Santa Rosa Valley

Purpose: Extend SMP to Hill Canyon Rd. to reach several potential dischargers.

Category

- [X] Salinity Management Pipeline
- [ ] Water Transmission
- [ ] Outage Water Supply Reliability
- [ ] Improvements to Existing Facilities
- [ ] Rehabilitation, Replacement & Relocation

Budget Estimates

Project Phase	Amount	Cumulative Amount	Date	Notes
Preliminary Design	$100,000	$100,000	9/17/2014	Preliminary design only
Preliminary Design	$42,000	$142,000	10/7/2015	Additional budget to complete structural bridge analysis and permit coordination with the City of Camarillo and County of Ventura as well as begin public outreach with the surrounding community.
Design	$81,000	$223,000	5/17/2017	Prepare design plans for the pipeline within the Upland Rd bridge and structural calculations to support key elements of the design which affect the bridge structure. Revise the structural analysis as requested by Camarillo.
Design	$53,000	$276,000	11/6/2019	Perform structural analysis as requested by Camarillo.
CEQA	$124,000	$400,000	8/3/2022	

Calleguas Municipal Water District
Capital Project Evaluation Sheet

Name: Salinity Management Pipeline, Phase 3
Project No: 536

Ranking Category	Description	Score (1-5)
Consequences of Not Implementing Project (A)	Camrosa and Thousand Oaks would be unable to construct their treatment facilities and there would be slightly less local water available during emergencies (7.8 cfs from Camrosa & Conejo Valley Desalters). Very small reductions in service could result. The duration of the reduction would depend on the nature of the emergency and could be several days to several months. Another consequence is that Calleguas will find it very difficult to permit an ocean desalination project without making use of all available brackish groundwater supplies first.	NA
Probability of Occurrence (B)	100%	NA
Cost Considerations (C)	There are no alternative projects available to accomplish the same objective. Annual revenue from brine discharge from projects coming on line in next ten years would be $400k at current SMP discharge rates. Additional funds may be available from the Met LRP Program.	NA
Evaluation Score	2A + 2B + C (Max Score = 25)	16.9
Priority Ranking		Low

Calleguas Municipal Water District
Capital Project Information Sheet

Name: Salinity Management Pipeline, Phase 4

Project No: 561

Description: Approximately 9.3 miles of 12- to 24-inch diameter pipeline.

Location: From the intersection of Santa Rosa and Hill Canyon Roads in the Santa Rosa Valley to Los Angeles Avenue in Simi Valley.

Purpose: Extend the SMP to serve potential dischargers.

Category

- [X] Salinity Management Pipeline
- [ ] Water Transmission
- [ ] Outage Water Supply Reliability
- [ ] Improvements to Existing Facilities
- [ ] Rehabilitation, Replacement & Relocation

Budget Estimates

Project Phase	Amount	Cumulative Amount	Date	Notes
Preliminary Design	$ 250,000	$ 250,000	12/21/2016	
CEQA	$ 124,000	$ 374,000	8/3/2022	

Calleguas Municipal Water District
Capital Project Evaluation Sheet

Name: Salinity Management Pipeline, Phase 4

Project No: 561

Ranking Category	Description	Score (1-5)
Consequences of Not Implementing Project (A)	Simi Valley would be unable to construct its treatment facilities and there would be slightly less local water available during emergencies. Very small reductions in service could result. The duration of the reduction would depend on the nature of the emergency and could be several days to several months. Another consequence is that Calleguas will find it very difficult to permit an ocean desalination project without making use of all available brackish groundwater supplies first.	NA
Probability of Occurrence (B)	The likelihood of a failure or scheduled shutdown where local groundwater would be helpful to meet the District demands is 100%.	NA
Cost Considerations (C)	There are no alternative projects available to accomplish the same objective. Annual revenue from brine discharge from projects coming on line in next ten years would be $650k at current SMP discharge rates. Additional funds may be available from the Met LRP Program.	NA
Evaluation Score		17.1
Priority Ranking		Low

Upcoming Meetings

This table includes meetings that can be attended by all Board members.

VCSDA-#"What to Expect for the November 2022 General Election: Candidacy, Voting, and Canvass."	Tue. 08/02, 5:15 pm	UWCD Boardroom, 1701 N. Lombard Street, Oxnard CA 93033 Hybrid Event
Calleguas Board Meeting	Wed. 08/03, 5:00 pm	2100 Olsen Road, Thousand Oaks Hybrid Event
ACWA Region 8 Program & Member Meeting-Speaker: Jeffrey Kightlinger "Adapting to Climate Change: The Future of Southern California's Water Supply" *	Fri. 08/12, 11:30 a.m.-3:00 p.m. **Canceled and will be re-scheduled	Virtual
Special Calleguas Board Meeting	Wed. 08/17, Closed Session at 4:00 pm	2100 Olsen Road, Thousand Oaks Hybrid Event
Special Calleguas Board Meeting/Directors Retreat	Tue. 09/06 to Wed. 09/07 Time TBD	TBD
Calleguas Board Meeting	Wed. 09/07, 5:00 pm	2100 Olsen Road, Thousand Oaks Hybrid Event
AWA-Reception for Members/Elected Officials*	Thu. 09/15, 4:00 p.m.	Ronald Reagan Presidential Library 40 Presidential Dr., Simi Valley
AWA-Water Issues	Tue. 09/20, 8:00 a.m.	TBD
Calleguas Board Meeting	Wed. 09/21, 5:00 pm	2100 Olsen Road, Thousand Oaks Hybrid Event

AWA-CCWUC*	Thu. 09/28, 8:00 am	TBD
Calleguas Board Meeting	Wed. 10/05, 5:00 pm	2100 Olsen Road, Thousand Oaks Hybrid Event

** Reservations required. Contact Kara if you would like to attend.*

*** In order to ensure Brown Act compliance, a majority of members should not discuss Calleguas specific issues at meetings other than designated Calleguas Board Meetings.*