Las Virgenes – Triunfo Joint Powers Authority
4232 Las Virgenes Road, Calabasas, CA 91302
818.251.2100

THIS MEETING WILL BE CONDUCTED PURSUANT TO AB 361, WHICH SUSPENDS CERTAIN REQUIREMENTS OF THE RALPH M. BROWN ACT TO SUPPORT SOCIAL DISTANCING GUIDELINES ASSOCIATED WITH RESPONSE TO THE CORONAVIRUS (COVID-19) OUTBREAK. BOARD MEMBERS AND STAFF MAY PARTICIPATE IN THE MEETING BY TELECONFERENCE. THE PUBLIC IS STRONGLY ENCOURAGED TO PARTICIPATE ELECTRONICALLY AT www.lvmwd.com/JPALiveStream.

TO JOIN THE WEBINAR VIA COMPUTER, PLEASE USE THE FOLLOWING ZOOM WEBINAR ID: https://us06web.zoom.us/j/84526277308

TO JOIN BY TELEPHONE, PLEASE DIAL (669) 900-6833 OR (346) 248-7799 AND ENTER WEBINAR ID: 845 2627 7308

Call and Notice of Special Meeting of the Governing Board of the Las Virgenes – Triunfo Joint Powers Authority

A Special Meeting of the Governing Board of the Las Virgenes – Triunfo Joint Powers Authority (JPA) is hereby called, and notice of said Special Meeting is hereby given for **5:00 p.m. on Tuesday, December 13, 2022**, at Las Virgenes Municipal Water District, 4232 Las Virgenes Road, Calabasas, California 91302, to consider the following:

1. Call to Order
2. Special Meeting of December 13, 2022 (see attached agenda)
3. Adjourn

By Order of the Board of Directors
JAY LEWITT, Chair

David W. Pedersen, P.E.
Deputy Secretary

Dated: December 7, 2022

LAS VIRGENES TRIUNFO JOINT POWERS AUTHORITY

Las Virgenes Municipal Water District Board Room, 4232 Las Virgenes Road, Calabasas, CA 91302

AGENDA

JOINT POWERS AUTHORITY - SPECIAL MEETING

TUESDAY, DECEMBER 13, 2022 – 5:00 PM

Public Participation for Meetings of Las Virgenes - Triunfo Joint Powers Authority in Response to COVID-19

Pursuant to AB-361 (Government Code Section 54953(e)), the Las Virgenes - Triunfo Joint Powers Authority Board of Directors finds health concerns dictate offer the public and directors the opportunity to attend board meetings via teleconferencing.

PUBLIC PARTICIPATION: Pursuant to AB-361 and given the current health concerns, this meeting is being conducted via Zoom Webinar and all attendees are muted by default. To join via computer, please use the following Webinar ID:

Webinar ID: https://us06web.zoom.us/j/84526277308

To join by telephone, please dial (669) 900-6833 or (346) 248-7799 and enter Webinar ID: 845 2627 7308

For members of the public wishing to address the Board during Public Comment or during a specific agenda item, please press "Raise Hand" if you are joining via computer, or press *9 if you are joining via phone.

Members of the public can also access and request to speak at meetings live on-line, with audio and limited video, at www.lvmwd.com/livestream. To ensure distribution of the agenda, please submit comments 24 hours prior to the day of the meeting. Those comments, as well as any comments received during the meeting, will be distributed to the members of the Board of Directors and will be made part of the official public record of the meeting. Contact Josie Guzman, Executive Assistance/Clerk of the Board, at (818) 251-2123 or jguzman@lvmwd.com with any questions.

ACCESSIBILITY: If requested, the agenda and backup materials will be made available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and the federal rules and regulations adopted in the implementation thereof. Any person who requires a disability-related modification, accommodation, aid, or service by contacting the Executive Assistant/Clerk of the Board by telephone at (818) 251-2123 or via email to jguzman@lvmwd.com no later than 9:00 AM on the day before the scheduled meeting.

Members of the public wishing to address the Board of Directors are advised that a statement of Public Comment Protocols is available from the Clerk of the Board. Prior to speaking, each speaker is asked to review these protocols, complete a speakers' card, and hand it to the Clerk of the Board. Speakers will be recognized in the order the cards are received. A live webcast of the meeting will be available at LVMWD.com. Also, a web-based version of the speaker card is available for those who would like to submit written comments electronically or request to make public comment by telephone during the meeting.

PLEDGE OF ALLEGIANCE

1. **CALL TO ORDER AND ROLL CALL**

2. **APPROVAL OF AGENDA AND ADOPTION OF RESOLUTION NO. 24 (AB 361)**

2.A **Approval of Agenda and Reauthorization of Revised Use of Teleconferencing for Public Meetings (Pg. 7)**
Approve the agenda and pass, approve, and adopt proposed Resolution No. 24, reauthorizing the revised use of teleconferencing for public meetings pursuant to the Brown Act provisions enacted by Assembly Bill 361.

RESOLUTION NO. 24

A RESOLUTION OF THE GOVERNING BOARD OF THE LAS VIRGENES-TRIUNFO JOINT POWERS AUTHORITY REAUTHORIZING THE REVISED USE OF TELECONFERENCING FOR PUBLIC MEETINGS

(Reference is hereby made to Resolution No. 24 on file in the JPA's Resolution Book and by this reference the same is incorporated herein.)

3. **PUBLIC COMMENTS**

Members of the public may now address the Board of Directors ON MATTTERS NOT APPEARING ON THE AGENDA, but within the jurisdiction of the Board. No action shall be taken on any matter not appearing on the agenda unless authorized by Subdivision (b) of Government Code Section 54954.2.

4. **CONSENT CALENDAR**

Matters listed under the Consent Calendar are considered to be routine, non-controversial and normally approved with one motion. If discussion is requested by a member of the Board on any Consent Calendar item, or if a member of the public wishes to comment on any item, that item will be removed from the Consent Calendar for separate action.

4.A **Minutes: Regular Meeting of November 7, 2022 (Pg. 13)**
Approve.

4.B **Time and Location of Regular JPA Board Meetings (Pg. 21)**
Pass, approve, and adopt proposed Resolution No. 22 establishing the time and location for regular meetings.

RESOLUTION NO. 22

A RESOLUTION OF THE GOVERNING BOARD OF THE LAS VIRGENES-TRIUNFO JOINT POWERS AUTHORITY ESTABLISHING THE TIME AND LOCATION FOR REGULAR MEETINGS

(Reference is hereby made to Resolution No. 22 on file in the JPA's Resolution Book and by this reference the same is incorporated herein.)

4.C **Statement of Revenues, Expenses and Changes in Net Position: October 2022** **(Pg. 23)**
Receive and file the Statement of Revenues, Expenses and Changes in Net Position for the period ending on October 31, 2022.

4.D **Tapia WRF Summer Season TMDL Compliance and Meter Replacement Project: Time Extension** **(Pg. 26)**
Authorize the Administering Agent/General Manager to approve Change Order No. 5 to Pacific Hydrotech Corporation for a no-cost time extension of 104 calendar days for the Tapia WRF Summer Season TMDL Compliance and Meter Replacement Project.

4.E **Tapia Aluminum Sulfate Tank Replacement Project: Award of Design** **(Pg. 47)**
Accept the proposal from Pacific Advanced Civil Engineering, Inc.; and authorize the Administering Agent/General Manager to execute a professional services agreement, in the amount of $87,965, for design and engineering services during construction for the Tapia Aluminum Sulfate Tank Replacement Project.

4.F **Tapia Selector Channel Wall Infill Project: Call for Bids** **(Pg. 81)**
Find that the work is exempt from the provisions of the California Environmental Quality Act and authorize the Administering Agent/General Manager to issue a call for bids for the Tapia Selector Channel Wall Infill Project.

4.G **Title 22 Recycled Water Engineering Report Update: Approval of Scope Change** **(Pg. 86)**
Authorize the Administering Agent/General Manager to execute Scope Change No. 1, in the amount of $16,795, to Larry Walker Associates for the Title 22 Recycled Water Engineering Report Update.

5. **ILLUSTRATIVE AND/OR VERBAL PRESENTATION AGENDA ITEMS**

5.A **Recognition of JPA Director Lee Renger**

5.B **State and Federal Legislative Update** **(Pg. 92)**

5.C **Pure Water Project Las Virgenes-Triunfo: Update** **(Pg. 173)**

6. **ACTION ITEMS**

6.A **Fiscal Year 2021-22 Annual Financial Statements and Independent Auditor's Report** **(Pg. 177)**
Receive and file the Fiscal Year 2021-22 Annual Financial Statements and

Independent Auditor's Report.

6.B **Certification of the Final Programmatic Environmental Impact Report and Approval of the Pure Water Project Las Virgenes-Triunfo (Pg. 211)**
Pass, approve and adopt proposed Resolution No. 23, approving the Pure Water Project Las Virgenes-Triunfo, certifying the Final Programmatic Environmental Impact Report, adopting the environmental findings, mitigation measures, statement of overriding considerations, and mitigation monitoring and reporting program and selecting 30800 Agoura Road in the City of Agoura Hills as the preferred site for the proposed Advanced Water Purification Facility; and authorize the Administering Agent/General Manager to sign a Notice of Determination to be filed with the Los Angeles and Ventura County Clerks and State Clearinghouse for the Pure Water Project Las Virgenes-Triunfo.

RESOLUTION NO. 23

A RESOLUTION OF THE GOVERNING BOARD OF THE LAS VIRGENES-TRIUNFO JOINT POWERS AUTHORITY CERTIFYING THE FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT REPORT, APPROVING THE PURE WATER PROJECT LAS VIRGENES-TRIUNFO, AND ADOPTING THE ENVIRONMENTAL FINDINGS, MITIGATION MEASURES, STATEMENT OF OVERRIDING CONSIDERATIONS, AND MITIGATION MONITORING AND REPORTING PROGRAM

(Reference is hereby made to Resolution No. 23 on file in the JPA's Resolution Book and by this reference the same is incorporated herein.)

6.C **Rancho Solar and Battery Energy Storage System Project: Award (Pg. 264)**
Conduct a public hearing and upon its conclusion: (1) pass, approve and adopt proposed Resolution No. 25, authorizing the Administering Agent/General Manager to execute of all necessary agreements in the forms approved by JPA Counsel; and (2) authorize the Administering Agent/General Manager to execute a scope change with TerraVerde Energy, LLC, in the amount of $15,028, for the additional cost to negotiate with Tesla, circulate a second Request for Proposals and negotiate terms with Distributed Solar Development, LLC (DSD) for the Rancho Solar and Battery Energy Storage System Project.

RESOLUTION NO. 25

A RESOLUTION OF THE GOVERNING BOARD OF THE LAS VIRGENES-TRIUNFO JOINT POWERS AUTHORITY FINDINGS ON ENERGY SAVINGS AND DETERMINING OTHER MATTERS IN CONNECTION WITH A POWER PURCHASE AGREEMENT

(Reference is hereby made to Resolution No. 25 on file in the JPA's Resolution Book and by this reference the same is incorporated herein.)

7. **BOARD COMMENTS**

8. **ADMINISTERING AGENT/GENERAL MANAGER REPORT**

9. **FUTURE AGENDA ITEMS**

10. **PUBLIC COMMENTS**

Members of the public may now address the Board of Directors ON MATTERS NOT APPEARING ON THE AGENDA, but within the jurisdiction of the Board. No action shall be taken on any matter not appearing on the agenda unless authorized by Subdivision (b) of Government Code Section 54954.2.

11. **ADJOURNMENT**

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 a disability-related modification or accommodation, including auxiliary aids or services, in order to attend or participate in a meeting, should be made to the Executive Assistant/Clerk of the Board in advance of the meeting to ensure 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.

AGENDA ITEM NO. 2.A

DATE: December 13, 2022

TO: JPA Board of Directors

FROM: General Manager

SUBJECT: Approval of Agenda and Reauthorization of Revised Use of Teleconferencing for Public Meetings

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SUMMARY:

On September 16, 2021, Governor Gavin Newsom signed Assembly Bill (AB) 361 to temporarily exempt certain requirements of the Brown Act and change the requirements for public meetings held by teleconference under certain circumstances. Staff recommends that the Board adopt proposed Resolution No. 19 to reauthorize implementation of the provisions of AB 361 given the on-going health concerns associated with the COVID-19 pandemic. If approved, the Board is required to reconsider and renew the action every 30 days.

RECOMMENDATION(S):

Approve the agenda and pass, approve, and adopt proposed Resolution No. 24, reauthorizing the revised use of teleconferencing for public meetings pursuant to the Brown Act provisions enacted by Assembly Bill 361.

RESOLUTION NO. 24

A RESOLUTION OF THE GOVERNING BOARD OF THE LAS VIRGENES-TRIUNFO JOINT POWERS AUTHORITY REAUTHORIZING THE REVISED USE OF TELECONFERENCING FOR PUBLIC MEETINGS

(Reference is hereby made to Resolution No. 24 on file in the JPA's Resolution Book and by this reference the same is incorporated herein.)

DISCUSSION:

Background:

The Brown Act secures public access to the meetings of public commissions, boards, councils and agencies in the state. It also affirms that the people have the right of access to information concerning the conduct of the people's business, and, therefore, the meetings of public bodies and the writings of public officials and agencies shall be open to public scrutiny.

Under the Brown Act, all meetings of the legislative body of a local agency shall be open and public, and all persons shall be permitted to attend any such meeting. The Brown Act, as it presently exists, provides the following requirements for use of teleconferencing in connection with a meeting of a legislative body:

- Teleconferencing, as authorized, may be used for all purposes in connection with any meeting within the subject matter jurisdiction of the legislative body. All votes taken during a teleconferenced meeting shall be by roll call.
- If the legislative body elects to use teleconferencing, it must post agendas at all teleconference locations and conduct teleconference meetings in a manner that protects the statutory and constitutional rights of the parties or the public appearing before the legislative body of the local agency.
- Each teleconferencing location shall be identified in the posted agenda of the meeting or proceeding, and each teleconference location shall be accessible to the public.
- During the teleconference, at least a quorum of the members of the legislative body shall participate from locations within the boundaries of the territory over which the local agency exercised jurisdiction.
- The agenda shall provide an opportunity for members of the public to address the legislative body directly, as the Brown Act requires for in-person meetings, at each teleconference location.
- For purposes of these requirements, “teleconference” means a meeting of a legislative body, the members of which are in different locations, connected by electronic means, through either audio or video, or both.

Executive Order N-29-20 and Assembly Bill 361 :

In March 2020, Governor Gavin Newsom issued Executive Order N-29-20, which waived Brown Act requirements found in Government Code §54953(b)(3) for teleconference participation in public meetings. In particular, the Executive Order waived the following:

- The requirement that state and local bodies notice each teleconference location from which a member will be participating in a public meeting;
- The requirement that each teleconference location be accessible to the public;
- The requirement that members of the public may address the body at each teleconference location;
- The requirement that state and local bodies post agendas at all teleconference locations; and
- The requirement that, during teleconference meetings, at least a quorum of the members of the local body participate from locations within the boundaries of the territory over which the local body exercises jurisdiction.

Executive Order N-29-20 expired on October 1, 2021. In light of the expiration date, a recent bill, AB 361, was approved by the California Legislature and signed by the Governor to extend the provisions of Executive Order N-29-20, subject to certain conditions to be met by the local legislative body seeking to utilize the exemptions. AB 361 also imposes certain new requirements as detailed below.

Analysis of Assembly Bill 361 :

AB 361 exempts local legislative bodies from certain Brown Act requirements currently

governing teleconferencing. These exemptions may be used only in one of the following circumstances:

- The legislative body holds a meeting during a proclaimed state of emergency, and state or local officials have imposed or recommended measures to promote social distancing. The legislative body holds a meeting during a proclaimed state of emergency for purposes of determining, by majority vote, whether as a result of the emergency, meeting in person would present imminent risks to the health and safety of attendees.
- The legislative body holds a meeting during a proclaimed state of emergency and has determined by majority vote pursuant to b) above that, as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees.

The JPA is currently subject to a Health Officer Order issued by Los Angeles County Department of Public Health on August 23, 2021. The Order eliminated physical distancing requirements except during major outbreaks. Accordingly, to avail itself of the teleconferencing exemptions provided by AB 361, the JPA must determine that the state of emergency continues to present imminent risk to the health or safety of attendees at public meetings.

Further, AB 361 requires that the Board reconsider the state of emergency and renew its determination every 30 days after commencing use of its exemptions. However, if during the 30-day period, the Board wishes to meet in person, it may choose to do so despite adoption of the proposed Resolution. The intent of the Resolution is merely to allow the Board to avail itself of the AB 361 teleconferencing provisions.

Finally, in addition to allowing for the above exemptions, AB 361 adds the following requirements:

- The legislative body must give notice of the meeting and post agendas as otherwise required by the Brown Act.
- The legislative body must allow members of the public to access the meeting, and the agenda must provide an opportunity for members of the public to address the legislative body directly pursuant to Brown Act requirements. In each instance where notice of the time of the teleconferenced meeting is otherwise given or the agenda for the meeting is otherwise posted, the legislative body must also give notice of the means by which members of the public may access the meeting and offer public comment. The agenda must identify and include an opportunity for all persons to attend via call-in option or an internet-based service option. The legislative body need not provide a physical location from which the public may attend or comment.
- The legislative body must conduct teleconference meetings in a manner that protects the statutory and constitutional rights of the parties and the public appearing before the legislative body.
- In the event of a disruption that prevents the public agency from broadcasting the meeting to members of the public using the call-in or internet-based service options, or in the event of a disruption within the local agency's control that prevents members of the public from offering public comments using the call-in or internet-based service options, the legislative body must take no further action on items appearing on the meeting agenda until public access to the meeting is restored. Actions taken on agenda items during a disruption preventing the broadcast of the meeting may be challenged as provided in the Brown Act.
- The legislative body may not require public comments to be submitted in advance of the

meeting, and it must provide an opportunity for the public to address the legislative body and offer comment in real time.
- The legislative body may use an online third-party system for individuals to provide public comment that requires an individual to register with the system prior to providing comment.
- If a legislative body provides a timed public comment period, it may not close the comment period or the time to register to provide comment until the timed period has elapsed. If the legislative body does not provide a time-limited comment period, it must allow a reasonable time for the public to comment on each agenda item.

Prepared by: Josie Guzman, Executive Assistant/Clerk of the Board

ATTACHMENTS:
Proposed Resolution No. 24 - Reauthorizing Revised Use of Teleconferencing

RESOLUTION NO. 24

A RESOLUTION OF THE GOVERNING BOARD OF THE LAS VIRGENES – TRIUNFO JOINT POWERS AUTHORITY REAUTHORIZING THE REVISED USE OF TELECONFERENCING FOR PUBLIC MEETINGS

BE IT RESOLVED BY THE GOVERNING BOARD OF THE LAS VIRGENES – TRIUNFO JOINT POWERS AUTHORITY as follows:

WHEREAS, the Governor of the State of California ("Governor") proclaimed a State of Emergency to exist as a result of the threat of COVID-19. (Governor's Proclamation of a State of Emergency (Mar. 4, 2020).)

WHEREAS, the Governor's Exec. Order No. N-25-20 (Mar. 12, 2020); Governor's Exec. Order No. N-29-20 (Mar. 17, 2020); and Governor's Exec. Order No. N-08-21 (Jun. 11, 2021) provided that local legislative bodies may hold public meetings via teleconferencing and make public meetings accessible telephonically or otherwise electronically to all members of the public seeking to observe and to address the local legislative body and waived the Brown Act provisions found in Govt. Code section 54953(b)(3) which require the physical presence of the members, the clerk, or other personnel of the body, or the public, as a condition of participation in, or quorum for, a public meeting, including:

a) The requirement that state and local bodies notice each teleconference location from which a member will be participating in a public meeting.
b) The requirement that each teleconference location be accessible to the public.
c) The requirement that members of the public may address the body at each teleconference location.
d) The requirement that state and local bodies post agendas at all teleconference locations.
e) The requirement that, during teleconference meetings, at least a quorum of the members of the local body participate from locations within the boundaries of the territory over which the local body exercises jurisdiction.

WHEREAS, the provisions of Governor's Exec. Order No. N-25-20 (Mar. 12, 2020); Governor's Exec. Order No. N-29-20 (Mar. 17, 2020); and Governor's Exec. Order No. N-08-21 (Jun. 11, 2021) expired on September 30, 2021;

WHEREAS, the Center for Disease Control is currently contending with the Delta Variant of the COVID-19 virus and anticipates the development of potential other strains which may further impede public agency operations and prolong the need for social distancing requirements;

AND WHEREAS, recent legislation (A.B. 361) authorizes a local legislative body to use teleconferencing for a public meeting without complying with the Brown Act's teleconferencing quorum, meeting notice, and agenda requirements set forth in Government Code section 54953(b)(3), in any of the following circumstances:

a) The legislative body holds a meeting during a proclaimed state of emergency, and state or local officials have imposed or recommended measures to promote social distancing.

b) The legislative body holds a meeting during a proclaimed state of emergency for purposes of determining, by majority vote, whether as a result of the emergency, meeting in person would present imminent risks to the health and safety of attendees.

c) The legislative body holds a meeting during a proclaimed state of emergency and has determined by majority vote pursuant to b) above that, as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees.

NOW, THEREFORE, BE IT RESOLVED by the Governing Board of the Las Virgenes – Triunfo Joint Powers Authority as follows:

Section 1. Incorporation of Recitals. All of the foregoing Recitals are true and correct and the Board so finds and determines. The Recitals set forth above are incorporated herein and made an operative part of this Resolution.

Section 2. Adoption of AB-361. The Board has determined by majority vote that, as a result of the emergency, meeting in person would present imminent risks to the health or safety of attendees.

Section 3. Continued Implementation of AB-361. If the state of emergency remains active, or state or local officials have imposed measures to promote social distancing, the Governing Board of the Las Virgenes – Triunfo Joint Powers Authority shall, in order to continue meeting subject to this exemption to the Brown Act, no later than 30 days after it commences using the exemption, and every 30 days thereafter, make the following findings by majority vote:

a) The legislative body has reconsidered the circumstances of the state of emergency; *and*
b) Either (1) the state of emergency continues to directly impact the ability of the members to meet safely in person; or (2) state or local officials continue to impose or recommend measures to promote social distancing.

PASSED, APPROVED AND ADOPTED this 13th day of December, 2022.

_____
Jay Lewitt, Chair

ATTEST:

_____
Leon E. Shapiro, Vice Chair

APPROVED AS TO FORM:

_____
W. Keith Lemieux, Agency Counsel

LAS VIRGENES – TRIUNFO
JOINT POWERS AUTHORITY
MINUTES
REGULAR MEETING

5:00 PM November 7, 2022

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance to the Flag was led by Oliver Slosser.

1. CALL TO ORDER AND ROLL CALL

The meeting was called to order at **5:00 p.m.** by Chair Lewitt in the Board Room at Las Virgenes Municipal Water District headquarters at 4232 Las Virgenes Road, Calabasas, CA 91302. The meeting was conducted via teleconference pursuant to the provisions of Assembly Bill 361, which suspended certain requirements of the Ralph M. Brown Act to support social distancing guidelines associated with response to the coronavirus (COVID-19) outbreak. Josie Guzman, Clerk of the Board, conducted the roll call.

Present: Directors Caspary, Lewitt, Lo-Hill, Nye, Orkney (via teleconference), Polan, Renger, Shapiro, Tjulander (via teleconference), and Wall.
Absent: None

2. APPROVAL OF AGENDA AND APPROVAL OF FINDINGS OF RESOLUTION NO. xx (AB 361)

Director Polan moved to approve the agenda and approve the findings of Resolution No. 20 (AB 361). Motion seconded by Director Lo-Hill. Motion carried unanimously by roll call vote.

3. PUBLIC COMMENTS

None.

4. CONSENT CALENDAR

Director Caspary pulled Item 4B for discussion.

A Minutes: Special Meeting of October 12, 2022: Approve

Director Caspary moved to approve Consent Calendar Item 4A. Motion seconded by Director Polan. Motion carried unanimously by roll call vote.

4. CONSENT CALENDAR – SEPARATE ACTION ITEM

B Statement of Revenues, Expenses, and Changes to Net Position: September 2022.

Receive and file the Statement of Revenues, Expenses, and Changes in Net Position for the period ending on September 30, 2022.

Director Caspary moved to approve Item 4B. Motion seconded by Director Polan.

Brian Richie, Finance Manager, responded to a question regarding the budget for the Pure Water Project Las Virgenes-Triunfo by stating that the recently approved budget would be included in the October 2022 report.

Motion carried unanimously by roll call vote.

5. ILLUSTRATIVE AND/OR VERBAL PRESENTATION AGENDA ITEMS

A Recognition of JPA Director Lynda Lo-Hill

Director Shapiro, on behalf of Triunfo Water & Sanitation District, presented a plaque to Director Lo-Hill in recognition of her service on the JPA Board.

Director Lo-Hill expressed her appreciation for serving on the JPA Board.

B State and Federal Legislative Update

Ana Schwab, federal lobbyist for the JPA with Best Best & Krieger LLP (BBK), reported that Congress would be back in session the following week and would work on completing the Water Resources Development Act, the National Defense Authorization Act, and appropriations for Fiscal Year 2023. She also reported that the U.S. Environmental Protection Agency (EPA) proposed a rule to designate per- and polyfluoroalkyl substances (PFAS) and perfluorooctanoic acid (PFOA) as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – the Superfund Law. She noted that BBK worked with staff to submit comments to the proposed rule, which she would share with the Board. She also reported that each of the JPA's Congressional delegation provided letters of support for the JPA's Water Infrastructure Finance and Innovation Act (WIFIA) application. She responded to a question regarding the format of the bill matrix by stating that the report included the status of all bills. She noted that the legislative matrix and report would be reformatted for the 118th Congressional Session, and would include spotlight bills for the JPA's priorities as opposed to all bills. She also responded to a question regarding H.R. 4069, Septic

Upgrade Grant Act, by stating that this bill was introduced in 2021 with a goal to reduce nitrogen pollution in septic systems; however, there were no committee hearing for this bill. She also responded to a question regarding S. 1855, Wildfire Emergency Act of 2021, by stating that this bill was introduced in 2021; however, it did not move forward. She noted that there were some wildfire provisions approved in 2021 and in the Inflation Reduction Act.

Director Caspary reported that he attended the Association of California Water Agencies (ACWA) State Legislative Committee Meeting on October 28th, where they discussed potential legislation to be introduced in the next Legislative Session including: allowing water agencies to bill fixed charges on the property tax rolls; streamline permit issuance; appoint administrative expert law judges for water law cases; add additional administrative remedies for appeals filed under the Proposition 218 rate setting process; and a proposal for desalination by the Montecito Water District.

B Pure Water Project Las Virgenes-Triunfo: Update

Oliver Slosser, Engineering Program Manager, presented the report. He noted that the Letter of Intent for WIFIA financing was sent earlier in the day, and five letters of support were received from the JPA's Congressional delegation. He stated that staff would explore the State Revolving Fund (SRF) as the next funding target. He reported that he provided information regarding public health and water quality at the Oak Park Municipal Advisory Council meeting in response to a presentation from a previous meeting. He stated that the final public document for the Preliminary Environmental Impact Report would be generated for public review prior to it being presented to the JPA for adoption, including a recommendation for the advanced water purification facility site. He responded to questions regarding the status of a simulated brine line, the effects of brine from the Pure Water Project Las Virgenes-Triunfo to the larger brine line, and the status of testing for constituents of emerging concern, hormones, and drugs at the Pure Water Demonstration Facility. He also responded to a question regarding data from test results by stating that the first year's data was located in the digital library page at www.ourpureh2o.com, and staff was currently reviewing the second year's data. He stated that he would provide a link to the digital library page to the Board.

Director Caspary requested that staff provide a copy of the WIFIA Letter of Intent to the Board.

Mr. Slosser responded to questions regarding seeking opportunities to maintain the brine line using mechanical means and the status of the water augmentation strategy. He noted that the regional Memorandum of Understanding for Water Resources Collaboration (MOU) outlined additional water sources for the project, and he stated that he would provide a copy of the MOU to the Board.

Eric Schlageter, Principal Engineer, responded to a question regarding the Board's role in the development of the Request for Qualifications (RFQ) and Request for Proposals (RFP) as part of the design-build process by stating that traditionally the Board would not be directly involved; however, due to the size and magnitude of the project, an item would be brought before the Board. He noted that recommendations would be presented to the Board after responses to the RFQ and RFP are received. He also responded to a question regarding whether there were any existing brine lines that could be studied by stating that staff discussed other water reuse projects and their challenges with the Jacobs Team.

6. ACTION ITEMS

A Proposed 2023 JPA Board Meeting Calendar

Review the proposed 2023 JPA Board Meeting Calendar, and make any scheduling changes.

Josie Guzman, Clerk of the Board, presented the report.

A discussion ensued regarding canceling the January 3, 2023 meeting and scheduling a special meeting on January 9, 2023; canceling the November 5, 2023 meeting and scheduling a special meeting on October 30, 2023; and alternating the meeting location between the LVMWD Board Room and the new Board Room at Triunfo Water & Sanitation District.

Director Shapiro moved to approve Item 6A with the changes discussed. Motion seconded by Director Polan. Motion carried unanimously by roll call vote.

B Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project: Additional Environmental Permitting Support

Authorize the Administering Agent/General Manager to issue Contract Adjustment No. 2, to Rincon Consultants, Inc., in an amount not-to-exceed$37,663, to provide additional Coastal Development Permit and CEQA Support for the Tapia Water Reclamation Facility 003 Outfall Rehabilitation Project.

Brett Dingman, Water Reclamation Manager, presented the report.

Director Lo-Hill moved to approve Item 6B. Motion seconded by Director Polan.

Mr. Dingman responded to a question regarding whether a pump would be added to the discharge effluent by stating that this would be determined as part of the project. He also responded to a question regarding tree removal by stating that some trees might need to be trimmed or removed from the access road for the installation a manhole, which would be used to inspect the lines with a camera. He

noted that additional details would be provided with the Coastal Commission permit and environmental scoping.

Motion carried unanimously by roll call vote.

C Farm Sprayfield Operations and Maintenance: Authorization of Change Order No. 2

Authorizing the Administering Agent/General Manager to execute Change Order No. 2 with W. Litten Land Preparation, in an amount not to exceed $392,600, for annual costs associated with operations and maintenance of the Rancho Las Virgenes Farm Sprayfields through November 2023, and ratify Contract Extension No. 1 in the amount of $384,900 extending the term through November 1, 2022.

Joe McDermott, Director of Engineering and External Affairs, presented the report.

Director Caspary moved to approve Item 6C. Motion seconded by Director Wall.

Mr. McDermott responded to a question regarding maintaining clearance to the area where the solar panels were installed by stating that this was the responsibility of solar field provider.

Motion carried unanimously by roll call vote.

7. BOARD COMMENTS

Director Polan inquired whether it would be appropriate to seek legislation for an organized centralized permit system. Director Caspary responded that the ACWA State Legislative Committee recommended that ACWA introduce legislation to streamline permitting.

Director Lewitt mentioned an article in the *Los Angeles Times* regarding the possibility of ocean desalination solving the water crisis in California.

Director Lo-Hill reported that she attended the MWD Board meeting where the MWD Board discussed inflationary trends. She noted that last year's construction cost inflation in Los Angeles was 8% and year-to-date was 4.93%, and the Los Angeles region went from 7.6% last year to 2.2% this year.

Director Caspary expressed his hope that the EPA would regulate ocean discharge from desalination plants. He questioned what the JPA could do to succeed in a court action to collect damages from the EPA because it mandated that the JPA meet the standards they requested, and now the JPA had produced a byproduct that might prohibited by the EPA. He noted that Palmdale Water District had an aquifer with storage capacity for 500,000 acre-feet, and he suggested that staff

explore the possibility of obtaining some of this water for the Pure Water Project Las Virgenes-Triunfo.

Director Renger noted that there was emerging technology to treat brine to make it less toxic, and he suggested that the JPA plan now for this eventuality.

8. ADMINISTERING AGENT/GENERAL MANAGER REPORT

Administering Agent/General Manager David Pedersen reported that the flow in Malibu Creek measured 11.8 cubic feet per second (CFS), and recent rain measured 0.09 inches. He reminded the Board that the Pure Beer Event would be held on November 10th at Ladyface Brewery in Agoura Hills. He noted that District offices would be closed on November 11th for the Veterans' Day Holiday. He reported that he and Chair Lewitt attended the US-Israel Collaboration on Water Reuse Delegation Visit to Israel, and they visited the Intel semiconductors plant. He noted that one of the challenges faced by Intel was treating their wastewater to meet regulatory standards. He also noted that the plant was 20 miles from the ocean, and they built their own ocean outfall.

9. FUTURE AGENDA ITEMS

None.

10. INFORMATION ITEMS

A Tapia Tertiary Filter Media Replacement: Authorization

B Tapia Carbon Tower Media Replacement: Authorization

Brett Dingman, Water Reclamation Manager, responded to a question regarding the height of the carbon towers by stating that the towers were approximately 20 feet in height.

11. PUBLIC COMMENTS

Dr. Janice Smets inquired regarding repayment of the WIFIA loans and whether Administering Agent/General Manager David Pedersen would report on the November 10th Los Angeles Regional Water Quality Control Board Meeting.

Steve Bilson expressed concern that the Pure Water Project Las Virgenes-Triunfo was being compared to Orange County Water Replenishment System, and suggested that it was comparable to Pure Water San Diego. He also expressed concern with the project's cost estimate.

12. ADJOURNMENT

Seeing no further business to come before the Board, the meeting was duly adjourned at **6:22 p.m**.

Jay Lewitt, Chair

ATTEST:

Leon E. Shapiro, Vice Chair

AGENDA ITEM NO. 4.B

DATE: December 13, 2022

TO: JPA Board of Directors

FROM: General Manager

SUBJECT: Time and Location of Regular JPA Board Meetings

SUMMARY:

On November 7, 2022, the JPA Board reviewed the proposed 2023 JPA Board Meeting Calendar and expressed an interest to resume alternating the meeting location beginning in 2023. The meetings in January, March, May, July, September, and November would be held in the LVMWD Board Room, and the meetings in February, April, June, August, October, and December would be held in the new Triunfo Water & Sanitation District Board Room in Westlake Village. Staff recommends adoption of proposed Resolution No. 22 to supersede Resolution No. 4 that previously established the time and location for JPA Board meetings.

RECOMMENDATION(S):

Pass, approve, and adopt proposed Resolution No. 22 establishing the time and location for regular meetings.

RESOLUTION NO. 22

A RESOLUTION OF THE GOVERNING BOARD OF THE LAS VIRGENES-TRIUNFO JOINT POWERS AUTHORITY ESTABLISHING THE TIME AND LOCATION FOR REGULAR MEETINGS

(Reference is hereby made to Resolution No. 22 on file in the JPA's Resolution Book and by this reference the same is incorporated herein.)

FINANCIAL IMPACT:

There is no financial impact associated with this action.

Prepared by: Josie Guzman, Executive Assistant/Clerk of the Board

ATTACHMENTS:
Proposed Resolution No. 22 - Establishing Time and Location of Regular Meetings

RESOLUTION NO. 22

A RESOLUTION OF THE GOVERNING BOARD OF THE LAS VIRGENES-TRIUNFO JOINT POWERS AUTHORITY ESTABLISHING THE TIME AND LOCATION FOR REGULAR MEETINGS

BE IT RESOLVED BY THE GOVERNING BOARD OF THE LAS VIRGENES-TRIUNFO JOINT POWERS AUTHORITY as follows:

1. Purpose.

This resolution sets the time and location for regular meetings.

2. Regular Meetings.

(a) The governing board shall hold regular meetings on the first Monday of each and every month at the hour of 5 o'clock p.m.

(b) The regular meetings shall be held at alternating locations at 4232 Las Virgenes Road, Calabasas, California 91302, beginning during the month of January 2023, and at 370 N. Westlake Boulevard, Suite 100, Westlake Village, California, 91362, beginning during the month of February 2023, and alternating every other month thereafter.

(c) In all respects, meetings of the governing board shall be conducted in accordance with the Brown Act.

PASSED, APPROVED AND ADOPTED on the _____ day of _____, 20__.

_____
Jay Lewitt, Chair

ATTEST:

_____
Leon E. Shapiro, Vice Chair

[Seal]

APPROVED AS TO FORM:

_____
Legal Counsel

AGENDA ITEM NO. 4.C

DATE: December 13, 2022

TO: JPA Board of Directors

FROM: Finance and Administration

SUBJECT: Statement of Revenues, Expenses and Changes in Net Position: October 2022

SUMMARY:

To ensure effective utilization of the public's assets and money, a monthly Statement of Revenues, Expenses and Changes in Net Position (Statement) is provided to the Board for review. The report is a high-level overview that summarizes the JPA's financial status through the end of the referenced month. The report is formatted to mirror the presentation in the JPA's Annual Financial Statements and consists of an operating financial section, non-operating financial section and year-to-date changes in net position. The report is unaudited and preliminary due to the timing of its preparation versus month-end closing for the reported month.

RECOMMENDATION(S):

Receive and file the Statement of Revenues, Expenses and Changes in Net Position for the period ending on October 31, 2022.

FINANCIAL IMPACT:

There is no financial impact associated with the report.

DISCUSSION:

JPA operating revenues year-to-date through October 31st of Fiscal Year 2022-23 were $1.9 million, an increase of $0.9 million compared to prior year revenues. The increase in revenues year-over-year was due mainly from a one-time insurance claim payment of $581,000 received by the JPA in August 2022. The payment compensated the JPA for building damage repair costs at the Rancho Las Virgenes Composting Facility that resulted from the Woolsey Fire in 2018.

Wholesale recycled water sales of $1.3 million were favorable as compared to prior year sales by $0.3 million or 29.6% through October 31, 2022. The increase in revenues was in-line with expectations as wholesale recycled water rates were budgeted to increase by 25% from $456.63 per acre-foot in Fiscal Year 2021-22 to $570.32 per acre-foot in Fiscal Year 2022-23.

JPA operating expenses year-to-date through October 31, 2022 were $7.3 million, which were

$0.8 million (or 12.6%) above prior year's operating expenses of $6.5 million and encompass 32.3% of the $22.7 million annual operating budget for the fiscal year, in-line with expectations for this point in the fiscal year.

Increases in operating expenses versus the prior year were primarily due to higher general and administrative (G&A) costs reported, which were up $0.7 million year-to-date through October 31, 2022. G&A costs of $4.0 million year-to-date equate to 32.6% of the $12.3 million budgeted for Fiscal Year 2022-23, in-line with expectations for this point in the fiscal year.

Expenses of $1.1 million at the Rancho Las Virgenes Composting Facility were up $0.2 million year-over-year through October 31, 2022. The increase was driven mainly from one-time costs of $110,000 for the purchase and replacement of biofilter media. Approximately 31% of the budget was expensed at the Rancho Las Virgenes Composting Facility through October 31, 2022, which is favorable as compared to expectations for this point in the fiscal year.

Expenses of $1.3 million at the Tapia Water Reclamation Facility and $0.8 million for recycled water transmission and distribution costs were in-line with prior year expenses for the same period, which were $1.4 million and $0.8 million, respectively. Continuing revenue and expense trends will be monitored and reported as part of the on-going financial reviews presented throughout the fiscal year.

Within the attached report, the “Current Budget” column pertains to the current fiscal year budget that was adopted and/or amended by the Board. The “Actual Year-to-Date” columns presents the cumulative year-to-date revenues and expenses for both the current fiscal year and prior fiscal year. Lastly, the “Variance with Prior Year” column calculates the net difference between the current fiscal year-to-date balance and the prior fiscal year-to-date balance.

GOALS:

Ensure Effective Utilization of the Public's Assets and Money

Prepared by: Brian Richie, Finance Manager

ATTACHMENTS:
Statement of Revenues, Expenses and Changes in Net Position: October 2022

LAS VIRGENES-TRIUNFO JOINT POWERS AUTHORITY
Statement of Revenues, Expenses, and Changes in Net Position
For the Month ended October 31, 2022 (Preliminary) and 2021
(dollars in thousands)

	Current Budget	*Through 33% of fiscal year* Actual Year-to-Date		Variance with Prior Year Positive (Negative)
	2022/23	2022/23	2021/22	2022/23 to 2021/22
OPERATING REVENUES:				
Wholesale recycled water sales	$ 2,691	$ 1,314	$ 1,014	$ 300
Other income	65	598	18	580
Total operating revenues	**2,756**	**1,912**	**1,032**	**880**
OPERATING EXPENSES:				
Treatment Plant	4,406	1,298	1,351	(53)
Recycled water transmission and distribution	2,130	806	873	(67)
Compost Plant	3,397	1,058	837	221
Sewer	171	54	56	(2)
General and administrative	12,341	4,023	3,341	682
Other operating expenses	265	98	56	42
Total operating expenses	**22,710**	**7,337**	**6,514**	**823**
OPERATING INCOME (LOSS) BEFORE BILLING TO PARTICIPANTS	(19,954)	(5,425)	(5,482)	57
Billing to Participants	19,954	5,425	5,482	(57)
OPERATING INCOME (LOSS)	**-**	**-**	**-**	**-**
NONOPERATING REVENUES (EXPENSES):				
Interest income (expense)	-	38	13	25
Other revenues (expenses)	-	5	7	(2)
Total nonoperating revenues (expenses)	**-**	**43**	**20**	**23**
CHANGES IN NET POSITION	**-**	**43**	**20**	**23**
NET POSITION:				
Beginning of fiscal year	101,134	101,134	98,362	2,772
Ending Net Position	**$ 101,134**	**$ 101,177**	**$ 98,382**	**$ 2,795**

AGENDA ITEM NO. 4.D

DATE: December 13, 2022

TO: JPA Board of Directors

FROM: Engineering and External Affairs

SUBJECT: Tapia WRF Summer Season TMDL Compliance and Meter Replacement Project: Time Extension

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SUMMARY:

On September 13, 2021, the JPA Board awarded a construction contract to Pacific Hydrotech Corporation (PHC) for the Tapia Water Reclamation Facility (WRF) Summer Season Total Maximum Daily Load (TMDL) Compliance and Meter Replacement Project. The scope of work generally includes the extension of a potable water pipeline and appurtenances; reconfiguration of the effluent overflow basin at Tapia WRF; installation of a new flow meter; and associated mechanical and electrical installations.

The Covid-19 Pandemic has created a very challenging work environment for over two years, including labor shortages and factory shutdowns. Equipment vendors and suppliers have not yet recovered and are still experiencing industry-wide supply chain issues, material delays, manufacturing difficulties and workflow setbacks. PHC has been affected on the receiving end of the supply chain and had difficulties procuring the necessary equipment and instrumentation. As a result of these extenuating circumstances beyond their control, PHC submitted a change order request for a no-cost time extension. The request is for extension of the contract duration by 104 calendar, updating the completion date from November 10, 2022 to February 23, 2023, which exceeds the amount that can be administratively approved and requires Board approval.

RECOMMENDATION(S):

Authorize the Administering Agent/General Manager to approve Change Order No. 5 to Pacific Hydrotech Corporation for a no-cost time extension of 104 calendar days for the Tapia WRF Summer Season TMDL Compliance and Meter Replacement Project.

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

There is no direct financial impact associated with this action.

DISCUSSION:

The Tapia WRF Summer Season TMDL Compliance Project was developed in response to new total nitrogen and total phosphorus limits established by the 2017 Tapia WRF National Pollutant Discharge Elimination System (NPDES) Permit No. CA0056014. The JPA Board selected breakpoint chlorination and the discharge of potable water to Malibu Creek as the preferred compliance method for the summer season regulatory limits.

On September 13, 2021, the JPA Board awarded a construction contract to Pacific Hydrotech Corporation (PHC) for the Tapia Water Reclamation Facility (WRF) Summer Season Total Maximum Daily Load (TMDL) Compliance and Meter Replacement Project. The scope of work includes the extension of a potable waterline from the Piuma Road intersection, south on Malibu Canyon Road across Malibu Creek, terminating at the Tapia effluent overflow structure. Modifications to the effluent structure include walls, baffles, piping, chemical storage, chemical pumps, analyzers and related electrical equipment. Chemical delivery piping from the chemical storage building is also being installed as part of the project.

Upon award of the project, PHC immediately began submitting for materials with the longest lead times for release. Long lead times were expected; however, actual delays of up to 12 months were unprecedented. The contractor kept the District project manager updated on material delays officially noting, in May 2022, that certain valves and other equipment had delivery dates beyond the original contract completion date. The contractor exhausted efforts to push vendors and suppliers for expedited delivery, explored alternate sources and worked with the District to find equivalent alternatives for equipment to improve lead times. Due to these extraordinary circumstances beyond the contractor's control, PHC submitted a change order request for a no-cost time extension of 104 calendar days, which would adjust the contract completion date from November 10, 2022 to February 23, 2023. The requested time extension exceeds the 25% allowable to be processed administratively; therefore, it is presented for approval by the JPA Board.

Below is a summary of change orders to-date:

1. Change Order No. 1 – Net credit back to the District for pipe changes, deletion of a magnetic flow meter, pipe bracket material change, credit for unused rebar, replacement of a damaged drain pipe found during excavation, additional materials and labor costs (administratively approved, March 2022).
2. Change Order No. 2 – Additional material, labor for asphalt cement paving, credit for unused open hard rock excavation and disposal, vault and electrical duct bank modifications (administratively approved, May 2022).
3. Change Order No. 3 – Costs to furnish and install additional 12" CML&C steel pipe (administratively approved, May 2022).
4. Change Order No. 4 – No-cost time extension for 122 calendar days, contract completion date November 10, 2022.
5. Change Order No. 5 – No-cost time extension for 104 calendar days, contract completion date February 23, 2023.

Description	**Cost**	**Fee with Adjustment**	**Cumulative Percent Change**
Original Contract	$3,488,505.00	--	
Change Order No. 1	-$78,611.28	$3,409,893.72	----

Change Order No. 2	$65,771.31	$3,475,665.03	----
Change Order No. 3	$18,751.00	$3,494,416.11	0.2%
Change Order No. 4	$0.00	$3,494,416.11	0.2%
Change Order No. 5 (proposed)	$0.00	$3,494,416.11	0.2%

The contractor is working through the material and equipment delays to streamline project progress and minimize further delays. PHC has provided a schedule of foreseeable weeks when construction cannot proceed until equipment/instrumentation is received.

GOALS:

Construct, Manage and Maintain all Facilities and Provide Services to Assure System Reliability and Environmental Compatibility

Prepared by: Veronica Hurtado, Assistant Engineer

ATTACHMENTS:
CO No. 5 Pacific Hydrotech Corp.pdf

CONTRACT CHANGE ORDER
No. 5

4232 Las Virgenes Road
Calabasas, California 91302-1994

Project: Tapia WRF Summer Discharge Compliance and Meter Project Project No. Acct. No. 10619.1880.505

Contractor Pacific Hydrotech Corporation Date 12/5/2022

CONTRACTOR CHANGE ORDER NO. 5 The Contractor is hereby authorized and directed to make the herein described changes from the Plans and Specifications or do the following work not included in the Plans and Specifications for the construction of this project.

This change requested by: Pacific Hydrotech Corporation

DESCRIPTION OF CHANGE:

	Description	Amount
	Contractor Change Order Request Item One: • Time Extension – 104 days due to instrumentation lead times	$0
	TOTAL	**$0**

~~INCREASES~~
TOTAL AT AGREED PRICES OR FORCE ACCOUNT **$0**
~~**DECREASES**~~

Contract Change Order No. 5 Project No. 10619 Acct. No. 10619.1880.505
Date 12/5/2022

(2) Estimate of increases and/or decreases in contract items at contract unit prices:

INCREASES

Item	Description	Quantity	Unit Price	Total
			TOTAL INCREASES	N/A

DECREASES

TOTAL DECREASES	N/A
TOTAL NET DECREASE IN CONTRACT ITEMS AT CONTRACT UNIT PRICES	N/A

~~INCREASE~~

TOTAL COST OF THIS CHANGE ORDER $0

~~DECREASE~~

It is agreed 104 calendar days extension of time will be allowed by reason of this change.

Recommended by

Veronica Hurtado
Assistant Engineer

Departmental Approval

Joe McDermott. P.E.
Director of Engineering and External Affairs

ACCEPTED:

By:

Date:

APPROVED:

Las Virgenes Municipal Water District

By:
David W. Pedersen, General Manager

Date:

Note: Attention is called to the sections of the Special Provisions and Standard Provisions on EXTRA, ADDITIONAL OR OMITTED WORK.

■ THIS CHANGE ORDER IS NOT EFFECTIVE UNTIL APPROVED BY OWNER

□ IF ACCEPTABLE TO THE CONTRACTOR, THIS CHANGE ORDER IS EFFECTIVE IMMEDIATELY

November 1, 2022

Las Virgenes Municipal Water District
4232 Las Virgenes Road
Calabasas, CA 91302

Attention: **Veronica Hurtado**
Assistant Engineer

Reference: **Tapia Water Reclamation Facility Summer Discharge Compliance and Metering Project**

Dear Veronica,

Please see the attached COR. As you are aware, the past 2 years created a challenging work atmosphere resulting from restrictions placed on society resulting from the Covid-19 Pandemic, significantly changing our normal workflows. During this time, health and safety concerns forced remote office work which also hindered efficiency due to the abnormal work conditions. Additionally, industry manufacturers and venders are still working through supply chain and staffing challenges without end in sight. These extraordinary circumstances significantly hindered our ability to gather the necessary paperwork and procure materials in time to meet the project schedule. This project has seen delays on the following materials/equipment.

- Chemical Tanks
- Chemical Pumps
- Flow Meters
- Analyzers
- Electrical Panels

The ammonia analyzer's delivery date is causing the largest delay on the project per the attached delivery dates from Taft/HACH. Pacific Hydrotech is requesting a time extension of 104 calendar days per the attached schedule update with current lead times. This would move the contract completion date to February 23, 2022. We have truly enjoyed working with you and your district to make this a successful project. If we can answer and questions regarding this change order or any other aspect of the project, please feel free to call me anytime at 951-943-8803.

Sincerely yours,
Pacific Hydrotech Corp.

James Rouse
Project Coordinator

Sales Order Acknowledgement

(This is not an Invoice)

HACH COMPANY

Headquarters
P. O. Box 389
5600 Lindbergh Drive
Loveland, CO 80539-0389

Purchase Orders
PO Box 608
Loveland, CO 80539-0608
Web Site: www.hach.com

U.S.A.
Phone: 800-227-4224
Fax: 970-669-2932
Email: orders@hach.com
quotes@hach.com
bids@hach.com
techhelp@hach.com

Export
Phone: 970-669-3050
Fax: 970-461-3939
Email: intl@hach.com

Remittance
2207 Collections Center Drive
Chicago, IL 60693

Wire Transfers
Bank of America
231 S. LaSalle St.
Chicago, IL 60604
Account: 8765602385
Routing (ABA): 026009593
Swift Code: BOFAUS3N

P.O. Number	21644-04T
Payment Terms	Net 30
Currency	USD
Freight Terms	Collect And Paid By Customer
Ship Method	UPS-UPS**UPS --Ground

Customer Number	296068
Order Contact	JOHN LOCKHART
Phone	8056421999
Fax	
E-Mail	JLOCKHART@INSTRUMENTCONTROL.COM

Bill-To

706327
INSTRUMENT CONTROL SERVICES
6085 KING DR UNIT 100
VENTURA,CA,93003-7178
/United States

Ship-To

768503
INSTRUMENT CONTROL SERVICES
6085 KING DR UNIT 100
VENTURA,CA,93003-7178
/United States

Deliver-To

768503
INSTRUMENT CONTROL SERVICES
6085 KING DR UNIT 100
VENTURA,CA,93003-7178
/United States

Ln#	Item No	Description	Order Qty	Out of Stock	Estimated Ship Date
1.1	5500.AMC.1.KTO	KTO: 5500sc Ammonia Monochloramine, 1 Channel	2	0	01/24/2023
2.1	6786600	KIT, STAINLESS STEEL SAMPLE CONDITIONING, PROCESS ANALYZER	2	2	10/27/2022
3.1	8573000	KTO: CL17sc, TOTAL CHLORINE WITH PRESS. REG.	1	0	11/07/2022
4.1	LXV525.99A11501	SC4500 w/o plug Prognosys mAOutput 1DigSensor	1	1	11/09/2022

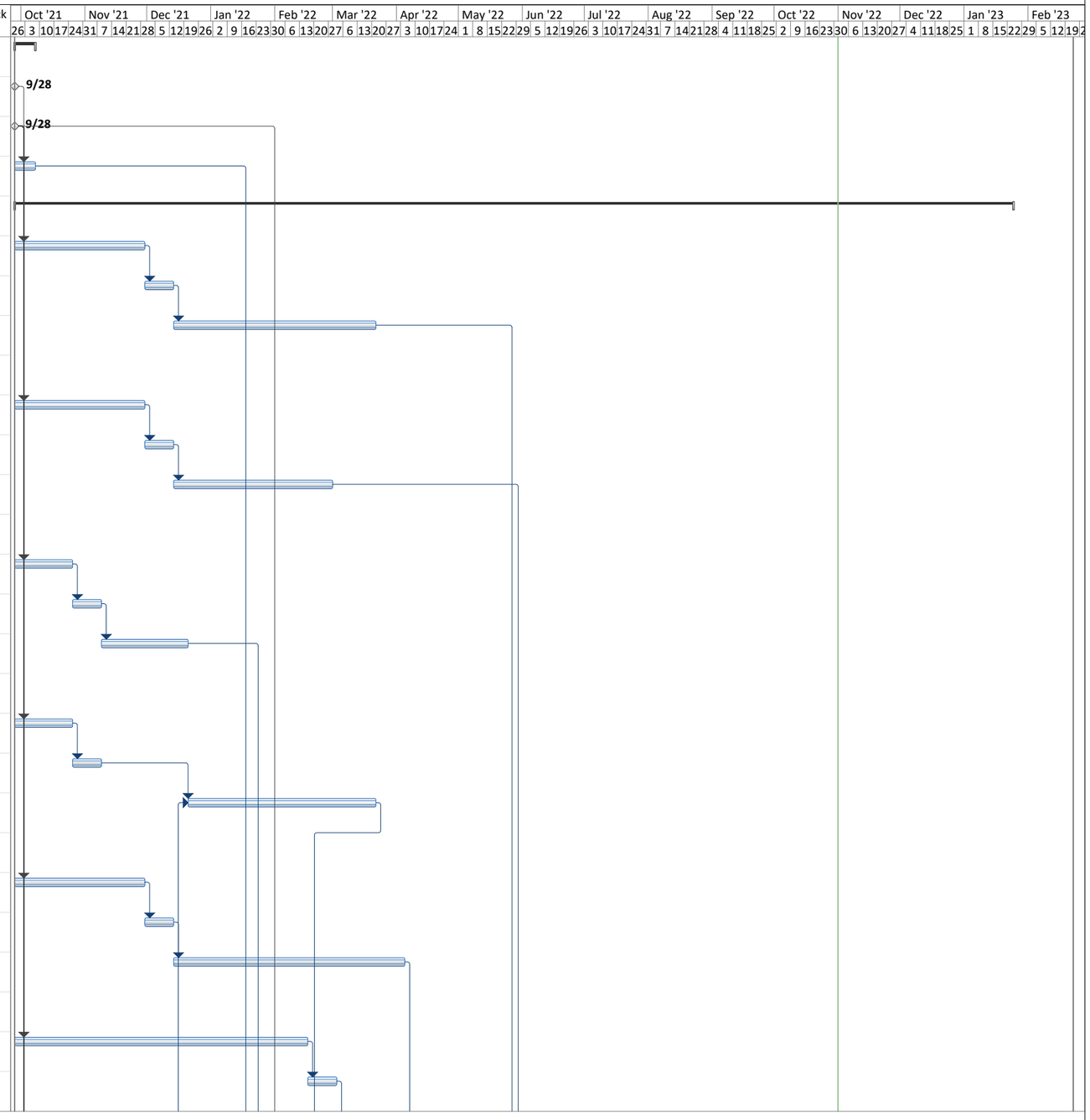
Sales Order Acknowledgement

(This is not an Invoice)

Ln#	Item No	Description	Order Qty	Out of Stock	Estimated Ship Date
5.1	59P	** Field Svc FULL DAY StartUp-PROCESS (P)	1	0	10/26/2022
6.1	STARTUP TRAVEL	** Field Svc HACH START UP TRAVEL CHG	1	0	10/26/2022
8.1	FEEHAMW	Handling Fee	1	0	01/24/2023

Tapia Water Reclamation Facility Summer Discharge Compliance

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Successors	Total Slack
1		**CONTRACT DOCUMENTS**	**8 days**	**Tue 9/28/21**	**Thu 10/7/21**			**0 days**
2		NOTICE OF AWARD	0 days	Tue 9/28/21	Tue 9/28/21		3SS,4	0 days
3		NOTICE TO PROCEED	0 days	Tue 9/28/21	Tue 9/28/21	2SS	6,10,14,18,	0 days
4		CONTRACT EXECUTION	8 days	Tue 9/28/21	Thu 10/7/21	2	231	0 days
5		**CRITICAL SUBMITTALS**	**346 days**	**Tue 9/28/21**	**Tue 1/24/23**			**0 days**
6		CHEMICAL PUMP SUBMITTAL	45 days	Tue 9/28/21	Mon 11/29/21	3	7	0 days
7		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/30/21	Mon 12/13/21	6	8	0 days
8		CHEMICAL PUMP LEAD TIME	70 days	Tue 12/14/21	Mon 3/21/22	7	296	0 days
9								
10		SAMPLE PUMP SUBMITTAL	45 days	Tue 9/28/21	Mon 11/29/21	3	11	0 days
11		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/30/21	Mon 12/13/21	10	12	0 days
12		SAMPLE PUMP LEAD TIME	55 days	Tue 12/14/21	Mon 2/28/22	11	286	0 days
13								
14		C900 PIPE SUBMITTAL	20 days	Tue 9/28/21	Mon 10/25/21	3	15	0 days
15		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 10/26/21	Mon 11/8/21	14	16	0 days
16		C900 PIPE LEAD TIME	30 days	Tue 11/9/21	Mon 12/20/21	15	253	0 days
17								
18		STEEL PIPE SUBMITTAL	20 days	Tue 9/28/21	Mon 10/25/21	3	19	0 days
19		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 10/26/21	Mon 11/8/21	18	20	0 days
20		STEEL PIPE LEAD TIME	65 days	Tue 12/21/21	Mon 3/21/22	19,236FS-30 d	251FS-17 d	0 days
21								
22		FLOW METER SUBMITTAL	45 days	Tue 9/28/21	Mon 11/29/21	3	23	0 days
23		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/30/21	Mon 12/13/21	22	24	0 days
24		FLOW METER LEAD TIME	80 days	Tue 12/14/21	Mon 4/4/22	23	273	0 days
25								
26		ANALYZER SUBMITTAL	102 days	Tue 9/28/21	Wed 2/16/22	3	27	0 days
27		ENGINEERS REVIEW AND APPROVAL	10 days	Thu 2/17/22	Wed 3/2/22	26	28	0 days

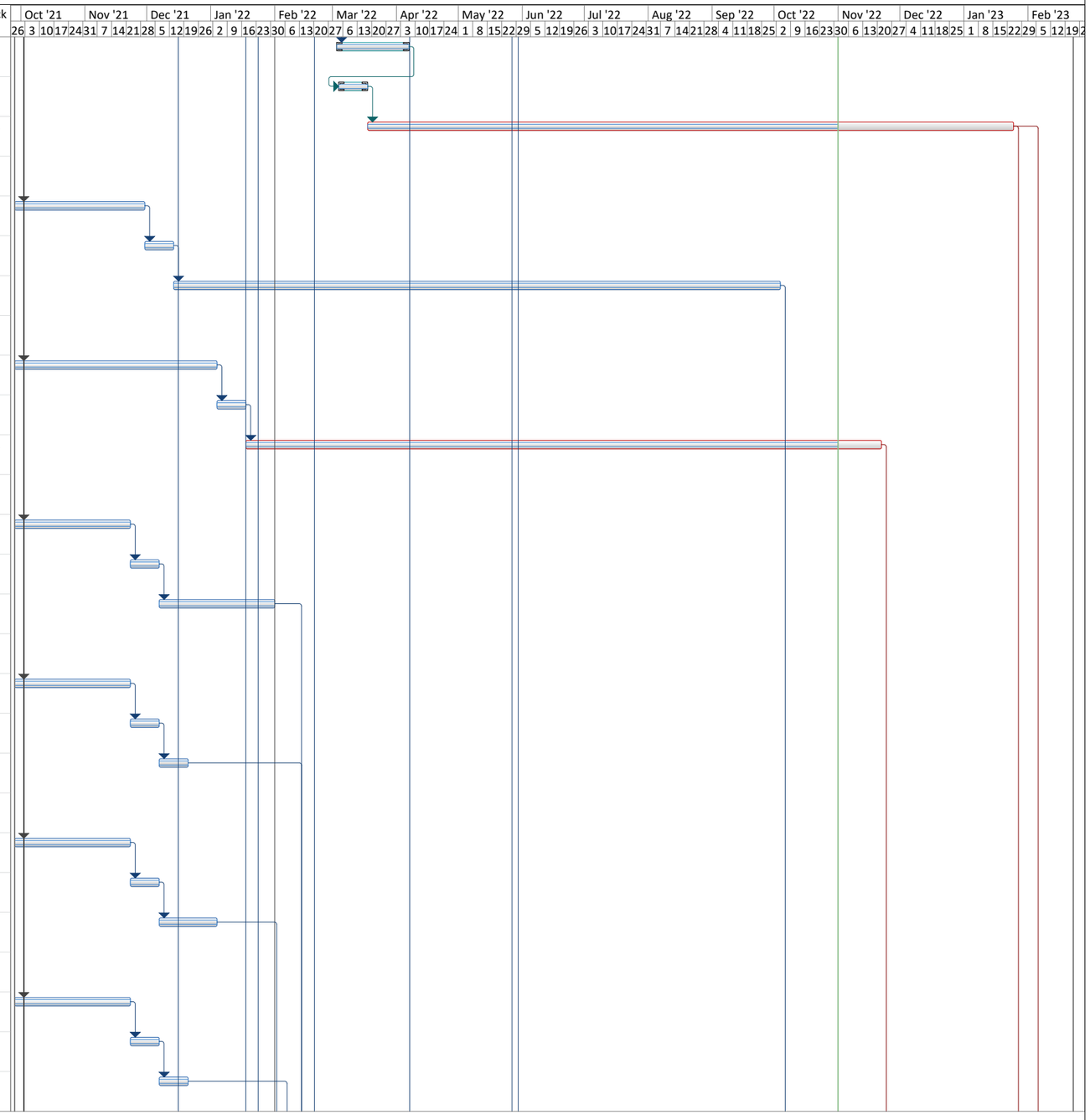


Project: C2120 October 2022 Upd
Date: Tue 11/1/22

Task	Summary	External Milestone	Inactive Summary	Manual Summary Rollup	Finish-only	Critical Split
Split	Project Summary	Inactive Task	Manual Task	Manual Summary	Deadline	Progress
Milestone	External Tasks	Inactive Milestone	Duration-only	Start-only	Critical	

Tapia Water Reclamation Facility Summer Discharge Compliance

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Successors	Total Slack
28		ANALYZER RESUBMITTAL	25 days	Thu 3/3/22	Wed 4/6/22	27	29	0 days
29		ENGINEERS REVIEW AND APPROVAL	10 days	Fri 3/4/22	Thu 3/17/22	28	30	0 days
30		ANALYZER LEAD TIME	223 days	Fri 3/18/22	Tue 1/24/23	29	311,308	-66 days
31								
32		INSTRUMENTATION SUBMITTAL	45 days	Tue 9/28/21	Mon 11/29/21	3	33	0 days
33		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/30/21	Mon 12/13/21	32	34	0 days
34		INSTRUMENTATION LEAD TIME	210 days	Tue 12/14/21	Mon 10/3/22	33	299	0 days
35								
36		ELECTRICAL EQUIPMENT SUBMITTAL	70 days	Tue 9/28/21	Mon 1/3/22	3	37	0 days
37		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 1/4/22	Mon 1/17/22	36	38	0 days
38		ELECTRICAL EQUIP. LEAD TIME	220 days	Tue 1/18/22	Mon 11/21/22	37	297	-36 days
39								
40		MISC ELECTRICAL MATERIALS SUBMITTAL	40 days	Tue 9/28/21	Mon 11/22/21	3	41	0 days
41		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/23/21	Mon 12/6/21	40	42	0 days
42		MISC ELECTRICAL MTRLS LEAD TIME	40 days	Tue 12/7/21	Mon 1/31/22	41	278	0 days
43								
44		RED DYE CONCRETE SUBMITTAL	40 days	Tue 9/28/21	Mon 11/22/21	3	45	0 days
45		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/23/21	Mon 12/6/21	44	46	0 days
46		RED DYE CONCRETE LEAD TIME	10 days	Tue 12/7/21	Mon 12/20/21	45	278	0 days
47								
48		REBAR SUBMITTAL	40 days	Tue 9/28/21	Mon 11/22/21	3	49	0 days
49		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/23/21	Mon 12/6/21	48	50	0 days
50		REBAR LEAD TIME	20 days	Tue 12/7/21	Mon 1/3/22	49	244	0 days
51								
52		CONCRETE SUBMITTAL	40 days	Tue 9/28/21	Mon 11/22/21	3	53	0 days
53		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/23/21	Mon 12/6/21	52	54	0 days
54		CONCRETE LEAD TIME	10 days	Tue 12/7/21	Mon 12/20/21	53	246	0 days



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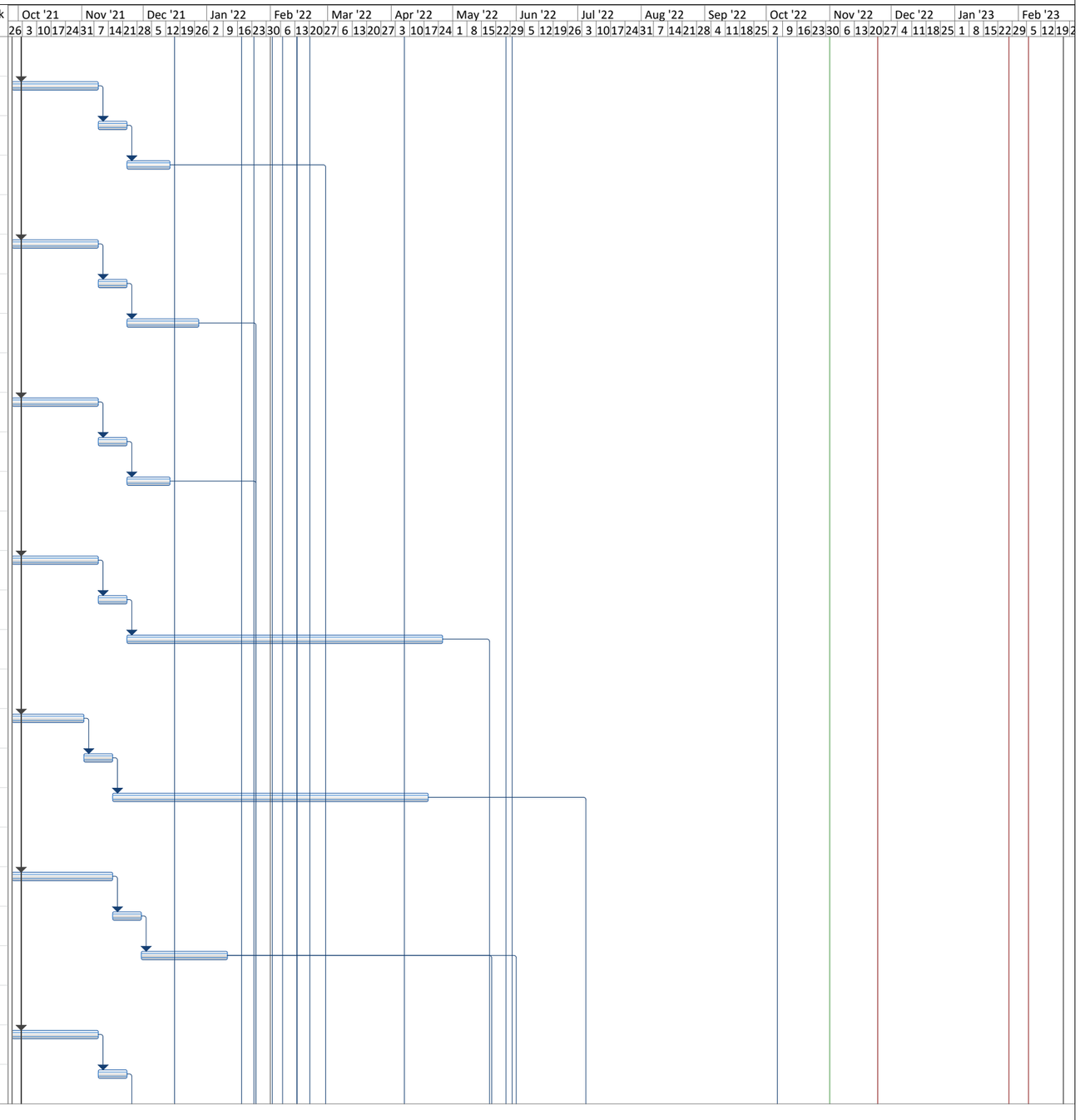
Task	Summary	External Milestone	Inactive Summary	Manual Summary Rollup	Finish-only	Critical Split
Split	Project Summary	Inactive Task	Manual Task	Manual Summary	Deadline	Progress
Milestone	External Tasks	Inactive Milestone	Duration-only	Start-only	Critical	

Tapia Water Reclamation Facility Summer Discharge Compliance

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Successors	Total Slack
55								
56		NUT BOLT GASKET SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	57	0 days
57		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	56	58	0 days
58		NUT BOLT GASKET LEAD TIME	15 days	Tue 11/23/21	Mon 12/13/21	57	266	0 days
59								
60		MJ RESTRAINT SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	61	0 days
61		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	60	62	0 days
62		MJ RESTRAINT LEAD TIME	25 days	Tue 11/23/21	Mon 12/27/21	61	258	0 days
63								
64		DETECTABLE TAPE SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	65	0 days
65		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	64	66	0 days
66		DETECTABLE TAPE LEAD TIME	15 days	Tue 11/23/21	Mon 12/13/21	65	258	0 days
67								
68		BUTTERFLY VALVE SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	69	0 days
69		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	68	70	0 days
70		BUTTERFLY VALVE LEAD TIME	110 days	Tue 11/23/21	Mon 4/25/22	69	254FS+17 d	0 days
71								
72		MOV BUTTERFLY VALVE SUBMITTAL	25 days	Tue 9/28/21	Mon 11/1/21	3	73	0 days
73		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/2/21	Mon 11/15/21	72	74	0 days
74		MOV BUTTERFLY VALVE LEAD TIME	110 days	Tue 11/16/21	Mon 4/18/22	73	275FS+55 d	0 days
75								
76		TUBING SUBMITTAL	35 days	Tue 9/28/21	Mon 11/15/21	3	77	0 days
77		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/16/21	Mon 11/29/21	76	78	0 days
78		TUBING LEAD TIME	30 days	Tue 11/30/21	Mon 1/10/22	77	287,280	0 days
79								
80		COMBO AIR RELEASE VALVE SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	81	0 days
81		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	80	82	0 days



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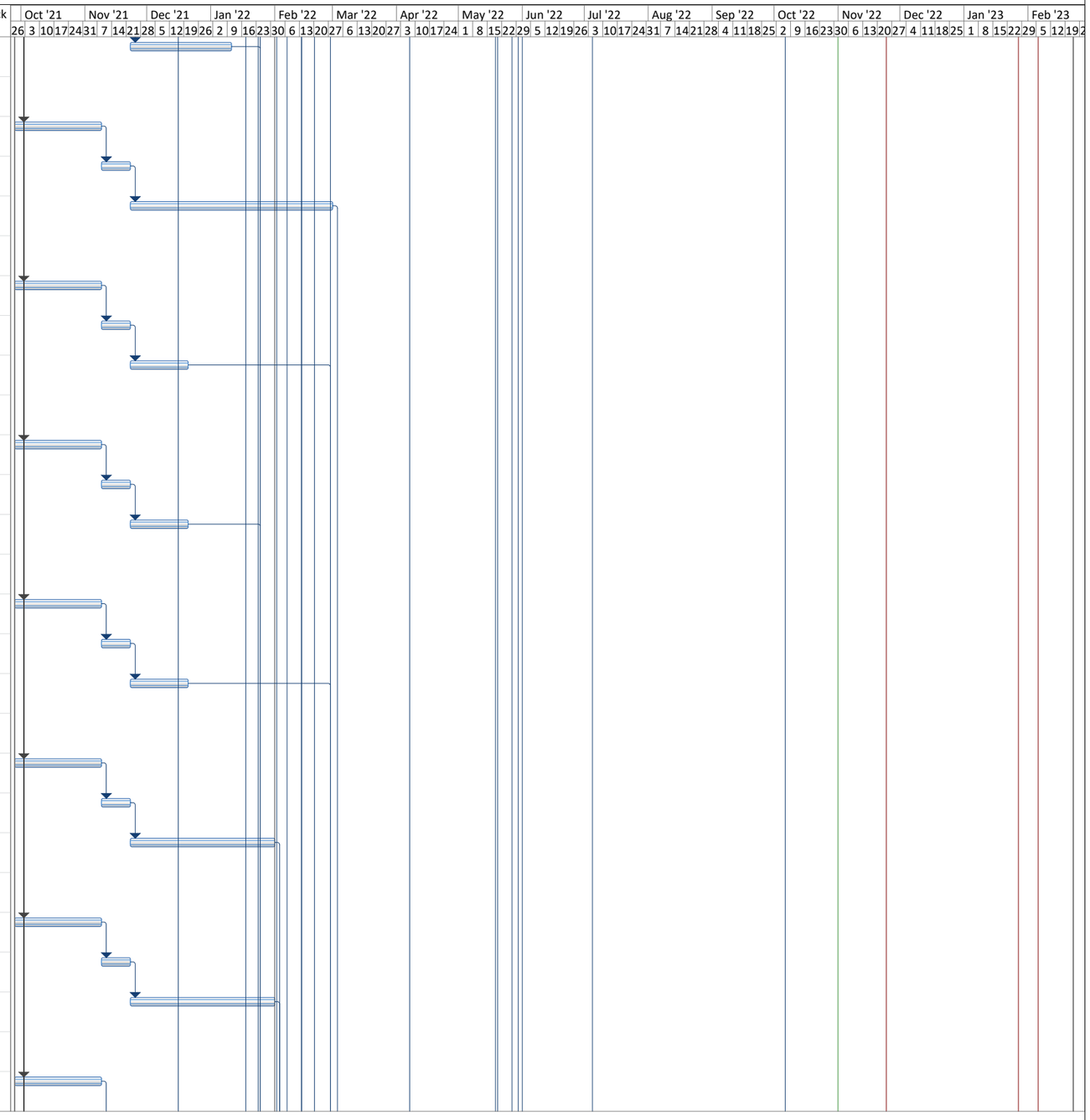
Task	Summary	External Milestone	Inactive Summary	Manual Summary Rollup	Finish-only	Critical Split
Split	Project Summary	Inactive Task	Manual Task	Manual Summary	Deadline	Progress
Milestone	External Tasks	Inactive Milestone	Duration-only	Start-only	Critical	

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Successors	Total Slack
82		COMBO AIR RELEASE VALVE LEAD TIME	35 days	Tue 11/23/21	Mon 1/10/22	81	258	0 days
83								
84		FLEX TEND SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	85	0 days
85		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	84	86	0 days
86		FLEX TEND LEAD TIME	70 days	Tue 11/23/21	Mon 2/28/22	85	266FS-1 da	0 days
87								
88		LINK SEAL SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	89	0 days
89		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	88	90	0 days
90		LINK SEAL LEAD TIME	20 days	Tue 11/23/21	Mon 12/20/21	89	266	0 days
91								
92		GATE VALVE SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	93	0 days
93		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	92	94	0 days
94		GATE VALVE LEAD TIME	20 days	Tue 11/23/21	Mon 12/20/21	93	258	0 days
95								
96		BLOW OFF MATERIAL SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	97	0 days
97		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	96	98	0 days
98		BLOW OFF MATERIAL LEAD TIME	20 days	Tue 11/23/21	Mon 12/20/21	97	266	0 days
99								
100		PRESSURE REDUCING VALVE SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	101	0 days
101		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	100	102	0 days
102		PRESSURE REDUCING VALVE LEAD TIME	50 days	Tue 11/23/21	Mon 1/31/22	101	255	0 days
103								
104		PRESSURE RELIEF VALVE SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	105	0 days
105		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	104	106	0 days
106		PRESSURE RELIEF VALVE LEAD TIME	50 days	Tue 11/23/21	Mon 1/31/22	105	256	0 days
107								
108		DISMANTLING JOINT SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	109	0 days



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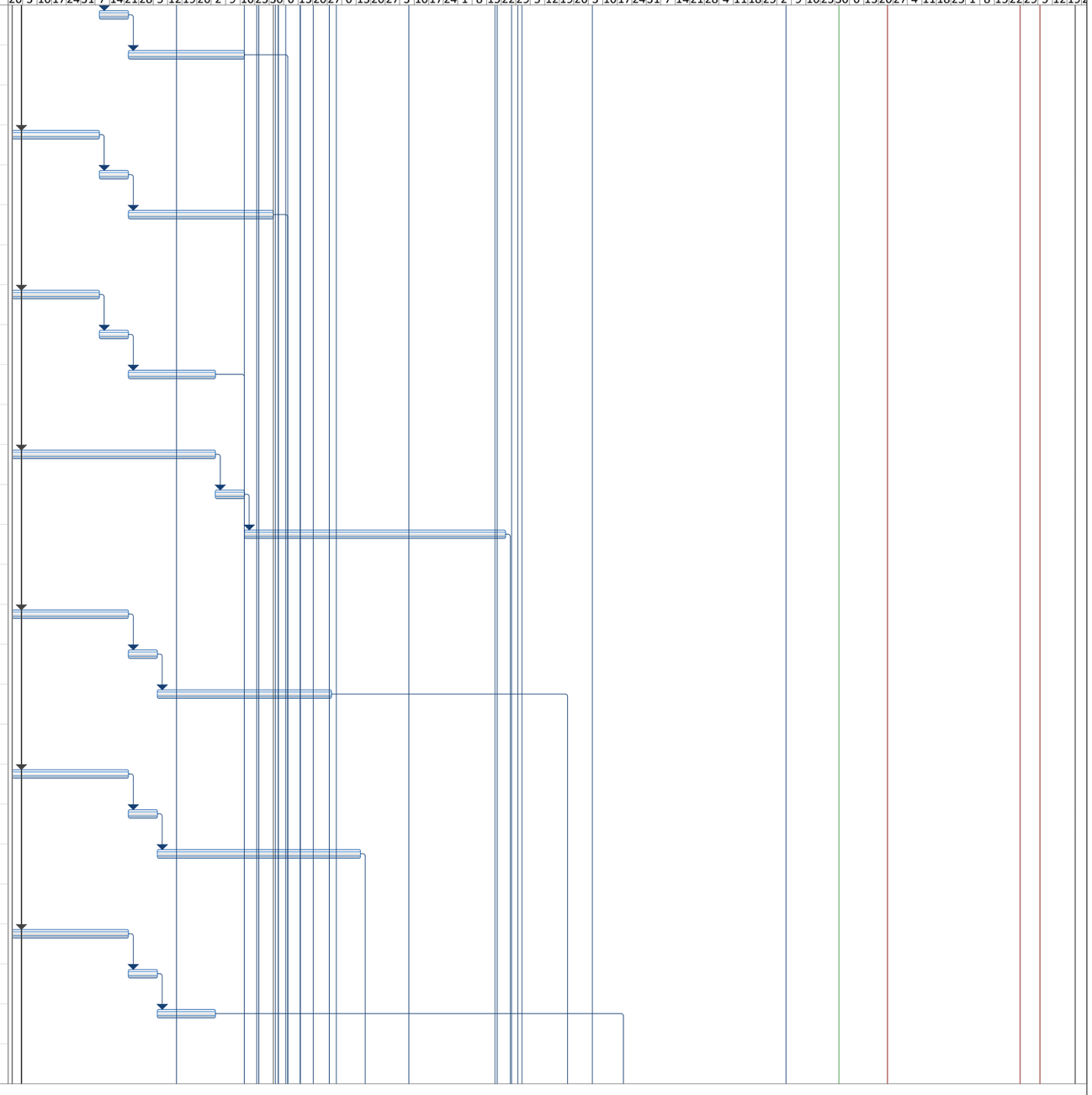
Tapia Water Reclamation Facility Summer Discharge Compliance

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Successors	Total Slack
109		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	108	110	0 days
110		DISMANTLING JOINT LEAD TIME	40 days	Tue 11/23/21	Mon 1/17/22	109	250	0 days
111								
112		FLANGE SUPPORT SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	113	0 days
113		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	112	114	0 days
114		FLANGE SUPPORT LEAD TIME	50 days	Tue 11/23/21	Mon 1/31/22	113	257	0 days
115								
116		DI FITTING SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	117	0 days
117		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	116	118	0 days
118		DI FITTING LEAD TIME	30 days	Tue 11/23/21	Mon 1/3/22	117	231FS+10 d	0 days
119								
120		BAFFLES SUBMITTAL	70 days	Tue 9/28/21	Mon 1/3/22	3	121	0 days
121		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 1/4/22	Mon 1/17/22	120	122	0 days
122		BAFFLE LEAD TIME	90 days	Tue 1/18/22	Mon 5/23/22	121	294FS-1 da	0 days
123								
124		CHEMICAL SHELTER SUBMITTAL	40 days	Tue 9/28/21	Mon 11/22/21	3	125	0 days
125		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/23/21	Mon 12/6/21	124	126	0 days
126		CHEMICAL SHELTER LEAD TIME	60 days	Tue 12/7/21	Mon 2/28/22	125	295FS+82 d	0 days
127								
128		PRECAST VAULT SUBMITTAL	40 days	Tue 9/28/21	Mon 11/22/21	3	129	0 days
129		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/23/21	Mon 12/6/21	128	130	0 days
130		PRECAST VAULT LEAD TIME	70 days	Tue 12/7/21	Mon 3/14/22	129	267	0 days
131								
132		PAINTING AND COATING SUBMITTAL	40 days	Tue 9/28/21	Mon 11/22/21	3	133	0 days
133		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/23/21	Mon 12/6/21	132	134	0 days
134		PAINTING AND COATING LEAD TIME	20 days	Tue 12/7/21	Mon 1/3/22	133	277	0 days
135								



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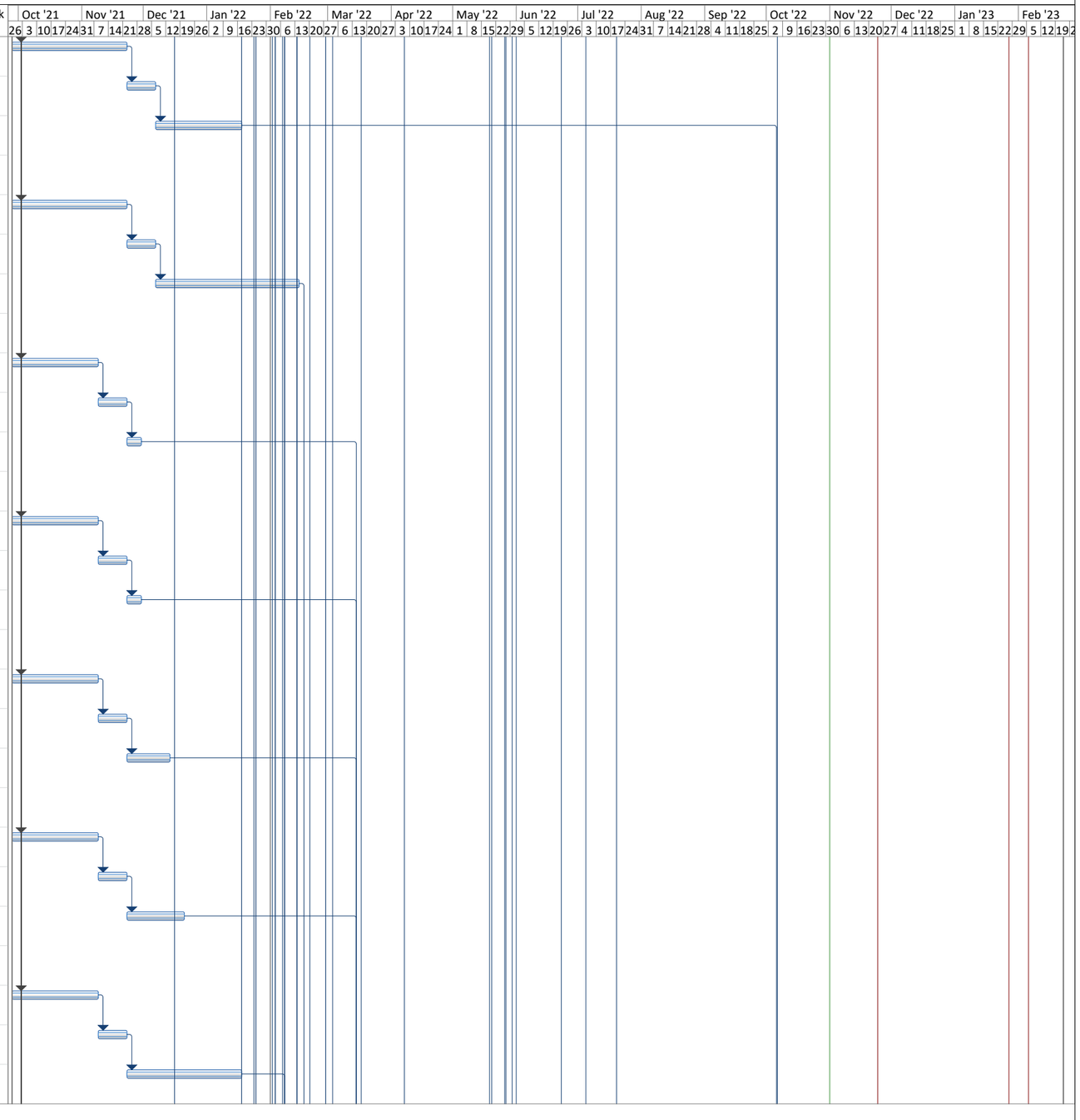
ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Successors	Total Slack
136		PVC VALVE BOX SUBMITTAL	40 days	Tue 9/28/21	Mon 11/22/21	3	137	0 days
137		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/23/21	Mon 12/6/21	136	138	0 days
138		PVC VALVE BOX LEAD TIME	30 days	Tue 12/7/21	Mon 1/17/22	137	306	0 days
139								
140		FLOW CONTROL VALVE SUBMITTAL	40 days	Tue 9/28/21	Mon 11/22/21	3	141	0 days
141		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/23/21	Mon 12/6/21	140	142	0 days
142		FLOW CONTROL VALVE LEAD TIME	50 days	Tue 12/7/21	Mon 2/14/22	141	249	0 days
143								
144		CLASS 2 AGG BASE SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	145	0 days
145		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	144	146	0 days
146		CLASS 2 AGG BASE LEAD TIME	5 days	Tue 11/23/21	Mon 11/29/21	145	267	0 days
147								
148		SAND SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	149	0 days
149		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	148	150	0 days
150		SAND LEAD TIME	5 days	Tue 11/23/21	Mon 11/29/21	149	267	0 days
151								
152		MIRAFI SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	153	0 days
153		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	152	154	0 days
154		MIRAFI LEAD TIME	15 days	Tue 11/23/21	Mon 12/13/21	153	267	0 days
155								
156		DRAIN ROCK SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	157	0 days
157		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	156	158	0 days
158		DRAIN ROCK LEAD TIME	20 days	Tue 11/23/21	Mon 12/20/21	157	267	0 days
159								
160		PIPE HANGERS SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	161	0 days
161		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	160	162	0 days
162		PIPE HANGERS LEAD TIME	40 days	Tue 11/23/21	Mon 1/17/22	161	257	0 days



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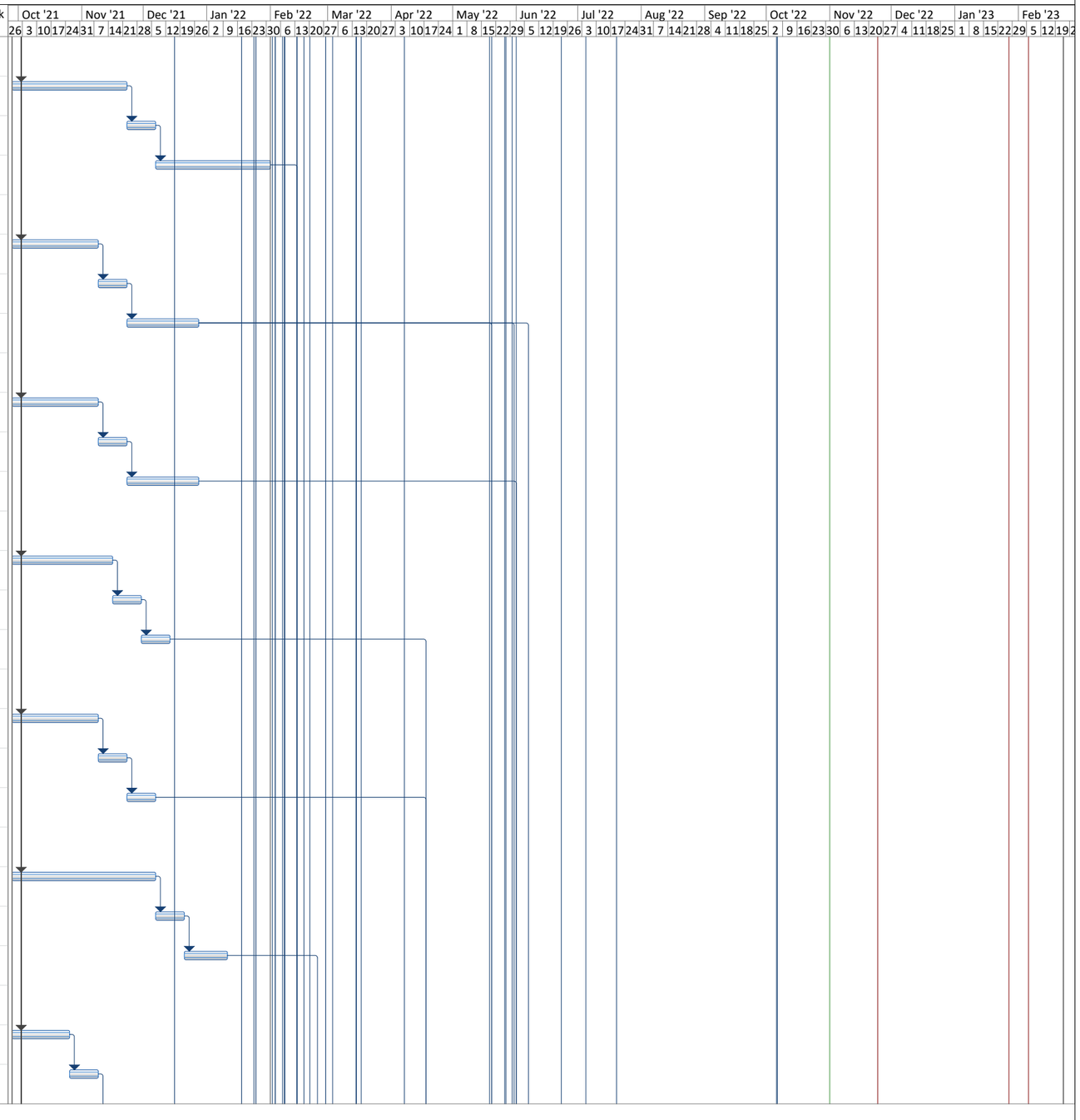
ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Successors	Total Slack
163								
164		ELECTRICAL PULL BOX SUBMITTAL	40 days	Tue 9/28/21	Mon 11/22/21	3	165	0 days
165		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/23/21	Mon 12/6/21	164	166	0 days
166		ELECT. PULL BOX LEAD TIME	40 days	Tue 12/7/21	Mon 1/31/22	165	278	0 days
167								
168		CPVC PIPES AND FITTING SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	169	0 days
169		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	168	170	0 days
170		CPVC PIPE AND FITTING LEAD TIME	25 days	Tue 11/23/21	Mon 12/27/21	169	280,284,28	0 days
171								
172		TUBING SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	173	0 days
173		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	172	174	0 days
174		TUBING LEAD TIME	25 days	Tue 11/23/21	Mon 12/27/21	173	287	0 days
175								
176		EPOXY FOR DOWELS SUBMITTAL	35 days	Tue 9/28/21	Mon 11/15/21	3	177	0 days
177		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/16/21	Mon 11/29/21	176	178	0 days
178		EPOXY FOR DOWEL LEAD TIME	10 days	Tue 11/30/21	Mon 12/13/21	177	289	0 days
179								
180		DOWEL SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	181	0 days
181		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	180	182	0 days
182		DOWEL LEAD TIME	10 days	Tue 11/23/21	Mon 12/6/21	181	289	0 days
183								
184		BOLLARD SUBMITTAL	50 days	Tue 9/28/21	Mon 12/6/21	3	185	0 days
185		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 12/7/21	Mon 12/20/21	184	186	0 days
186		BOLLARD LEAD TIME	15 days	Tue 12/21/21	Mon 1/10/22	185	265	0 days
187								
188		ORIFICE PLATE SUBMITTAL	20 days	Tue 9/28/21	Mon 10/25/21	3	189	0 days
189		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 10/26/21	Mon 11/8/21	188	190	0 days



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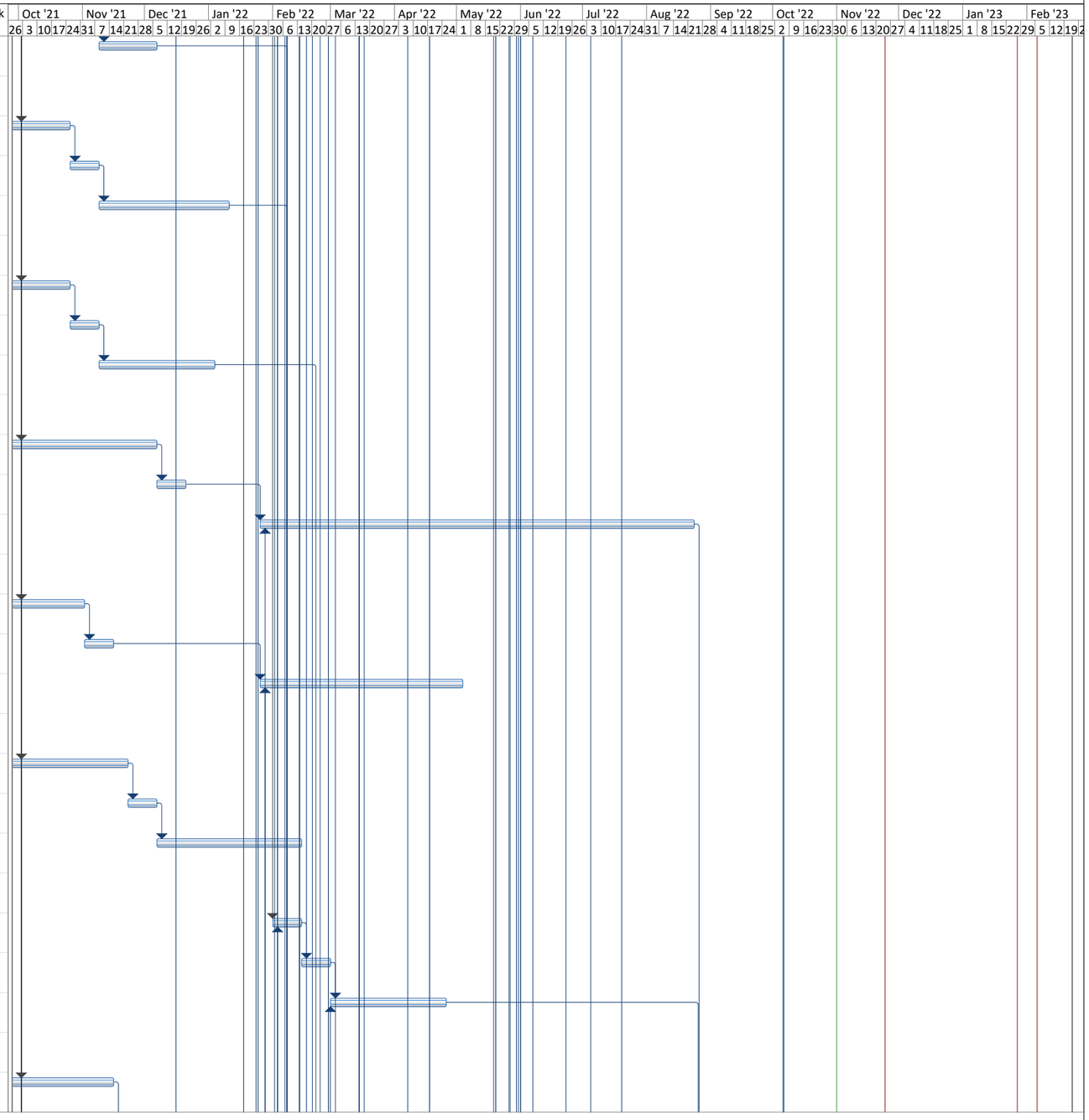
Tapia Water Reclamation Facility Summer Discharge Compliance

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Successors	Total Slack
190		ORIFICE PLATE LEAD TIME	20 days	Tue 11/9/21	Mon 12/6/21	189	248	0 days
191								
192		WALL THIMBLE SUBMITTAL	20 days	Tue 9/28/21	Mon 10/25/21	3	193	0 days
193		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 10/26/21	Mon 11/8/21	192	194	0 days
194		WALL THIMBLE LEAD TIME	45 days	Tue 11/9/21	Mon 1/10/22	193	288	0 days
195								
196		RESTRAINED FLANGE COUPLING ADAPTER SUBMITTAL	20 days	Tue 9/28/21	Mon 10/25/21	3	197	0 days
197		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 10/26/21	Mon 11/8/21	196	198	0 days
198		RESTRAINED FLANGE COUPLING ADAPTER LEAD TIME	40 days	Tue 11/9/21	Mon 1/3/22	197	264	0 days
199								
200		6" FLOW METER SUBMITTAL	50 days	Tue 9/28/21	Mon 12/6/21	3	201	0 days
201		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 12/7/21	Mon 12/20/21	200	202	0 days
202		6" FLOW METER LEAD TIME	150 days	Wed 1/26/22	Tue 8/23/22	201,237	318	0 days
203								
204		30" DISMANTLING JOINT SUBMITTAL	25 days	Tue 9/28/21	Mon 11/1/21	3	205	0 days
205		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/2/21	Mon 11/15/21	204	206	0 days
206		30"DISMANTLING JOINT LEAD TIME	70 days	Wed 1/26/22	Tue 5/3/22	205,237		0 days
207								
208		VAULT HATCH SUBMITTAL	40 days	Tue 9/28/21	Mon 11/22/21	3	209	0 days
209		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/23/21	Mon 12/6/21	208	210	0 days
210		VAULT HATCH LEAD TIME	50 days	Tue 12/7/21	Mon 2/14/22	209		0 days
211								
212		DI PIPE AND FITTINGS SUBMITTAL	10 days	Tue 2/1/22	Mon 2/14/22	3,239	213	0 days
213		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 2/15/22	Mon 2/28/22	212	214	0 days
214		DI PIPE AND FITTING LEAD TIME	40 days	Tue 3/1/22	Mon 4/25/22	213,237	320	0 days
215								
216		30" TRANSITION COUPLING SUBMITTAL	35 days	Tue 9/28/21	Mon 11/15/21	3	217	0 days



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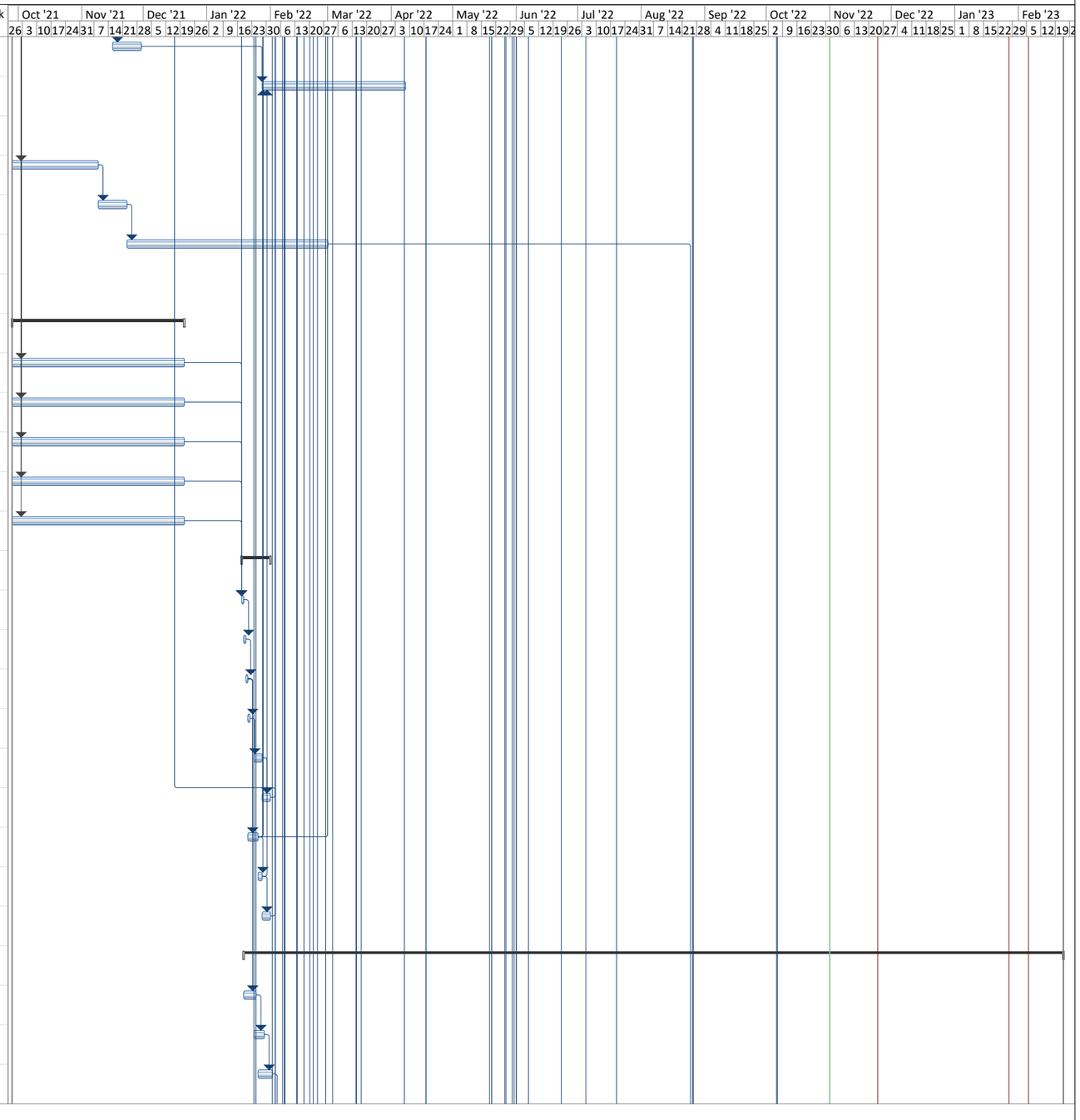
217		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/16/21	Mon 11/29/21	216	218	0 days
218		30" TRANSITION COUPLING LEAD TIME	50 days	Fri 1/28/22	Thu 4/7/22	217,237,238		0 days
219								
220		FLANGED PIPE SUPPORT SCH B SUBMITTAL	30 days	Tue 9/28/21	Mon 11/8/21	3	221	0 days
221		ENGINEERS REVIEW AND APPROVAL	10 days	Tue 11/9/21	Mon 11/22/21	220	222	0 days
222		FLANGED PIPE SUPPORT SCH B LEAD TIME	70 days	Tue 11/23/21	Mon 2/28/22	221	319	0 days
223								
224		**PERMITS**	**60 days**	**Tue 9/28/21**	**Mon 12/20/21**			**0 days**
225		OBTAIN LA COUNTY ROAD PERMIT AND BRIDGE CONSTRUCTION PERMIT	60 days	Tue 9/28/21	Mon 12/20/21	3	231	0 days
226		OBTAIN CA DEPT. OF TRANSPORTATION PERMIT	60 days	Tue 9/28/21	Mon 12/20/21	3	231	0 days
227		OBTAIN AGOURA HILLS TRAFFIC CONTROL PERMIT	60 days	Tue 9/28/21	Mon 12/20/21	3	231	0 days
228		OBTAIN AGOURA HILLS ENCROACHMENT PERMIT	60 days	Tue 9/28/21	Mon 12/20/21	3	231	0 days
229		OBTAIN LA COASTAL DEVELOPMENT PERMIT	60 days	Tue 9/28/21	Mon 12/20/21	3	231	0 days
230		**MOBILIZATION**	**10 days**	**Tue 1/18/22**	**Mon 1/31/22**			**0 days**
231		MOBILIZE ON SITE	1 day	Tue 1/18/22	Tue 1/18/22	118FS+10 day	232	0 days
232		SET TEMP FACILITIES	1 day	Wed 1/19/22	Wed 1/19/22	231	233	0 days
233		SET BMPS	1 day	Thu 1/20/22	Thu 1/20/22	232	241FS-2 da	0 days
234		SET STAGING AREA	1 day	Fri 1/21/22	Fri 1/21/22	233	235	0 days
235		POTHOLE FOR 8" PIPE WORK	4 days	Mon 1/24/22	Thu 1/27/22	234	236	0 days
236		POTHOLE FOR 12" PIPE WORK	2 days	Fri 1/28/22	Mon 1/31/22	235	20FS-30 da	0 days
237		POTHOLE SCHEDULE B 30" PIPE	3 days	Fri 1/21/22	Tue 1/25/22	233	214,218,20	0 days
238		POTHOLE 6" PEPPERDINE PIPE	2 days	Wed 1/26/22	Thu 1/27/22	237	218,239	0 days
239		POTHOLE 6" FLOW METER PIPE	2 days	Fri 1/28/22	Mon 1/31/22	238	212	0 days
240		**WORK AT AMMONIA REMOVAL CONTACT TANK**	**286 days**	**Wed 1/19/22**	**Wed 2/22/23**			**-13 days**
241		EXCAVATE/RECOMPACT PRE FAB SHED PAD	4 days	Wed 1/19/22	Mon 1/24/22	233FS-2 days	242FS-1 da	0 days
242		INSTALL U/G CONDUITS AT CHEM SHED	5 days	Mon 1/24/22	Fri 1/28/22	241FS-1 day	243FS-3 da	0 days
243		INSTALL U/G PIPES AT CHEM SHED	5 days	Wed 1/26/22	Tue 2/1/22	242FS-3 days	244	0 days



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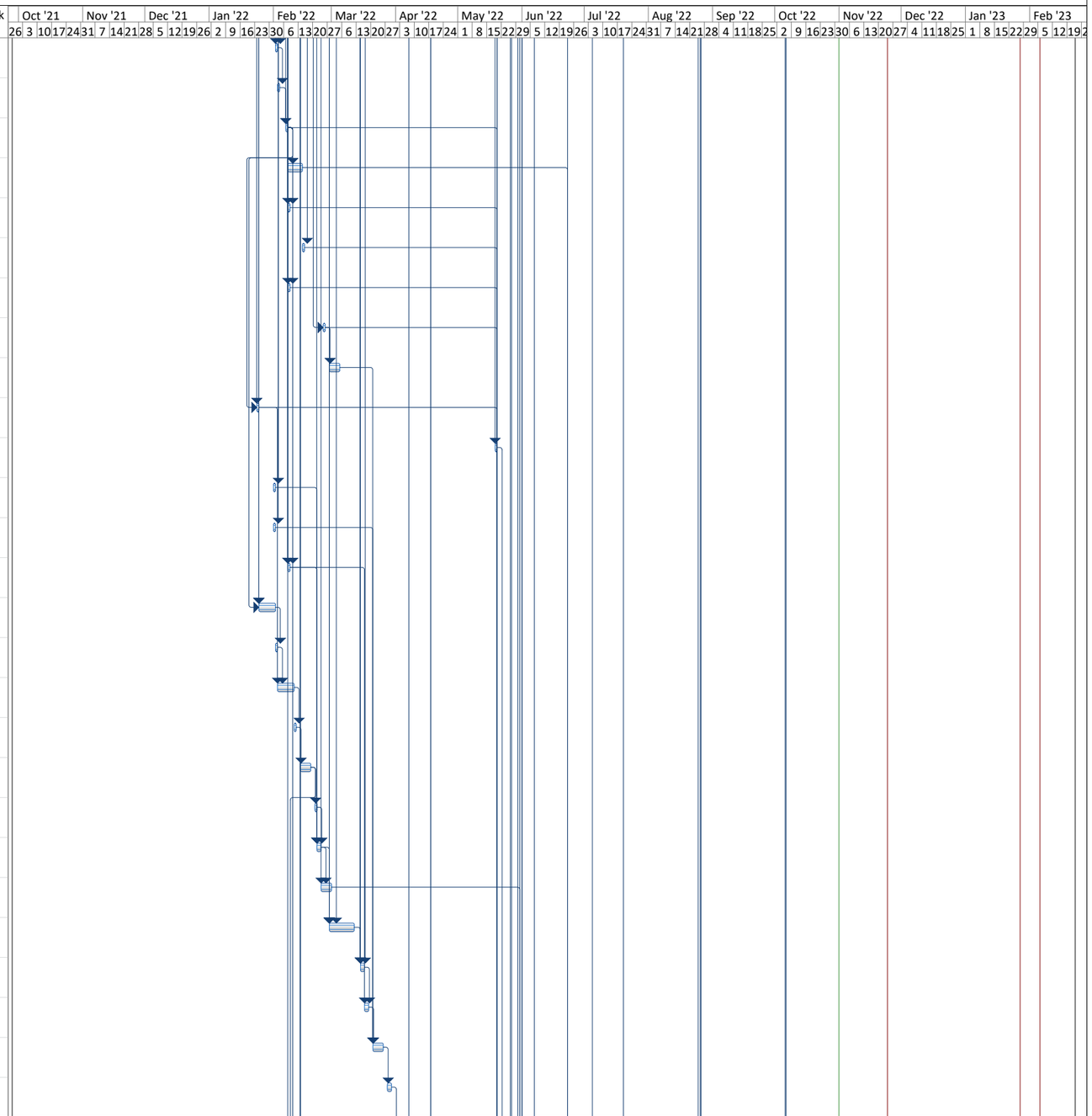
Milestone	External Tasks	Inactive Milestone	Duration-only	Start-only	Critical	

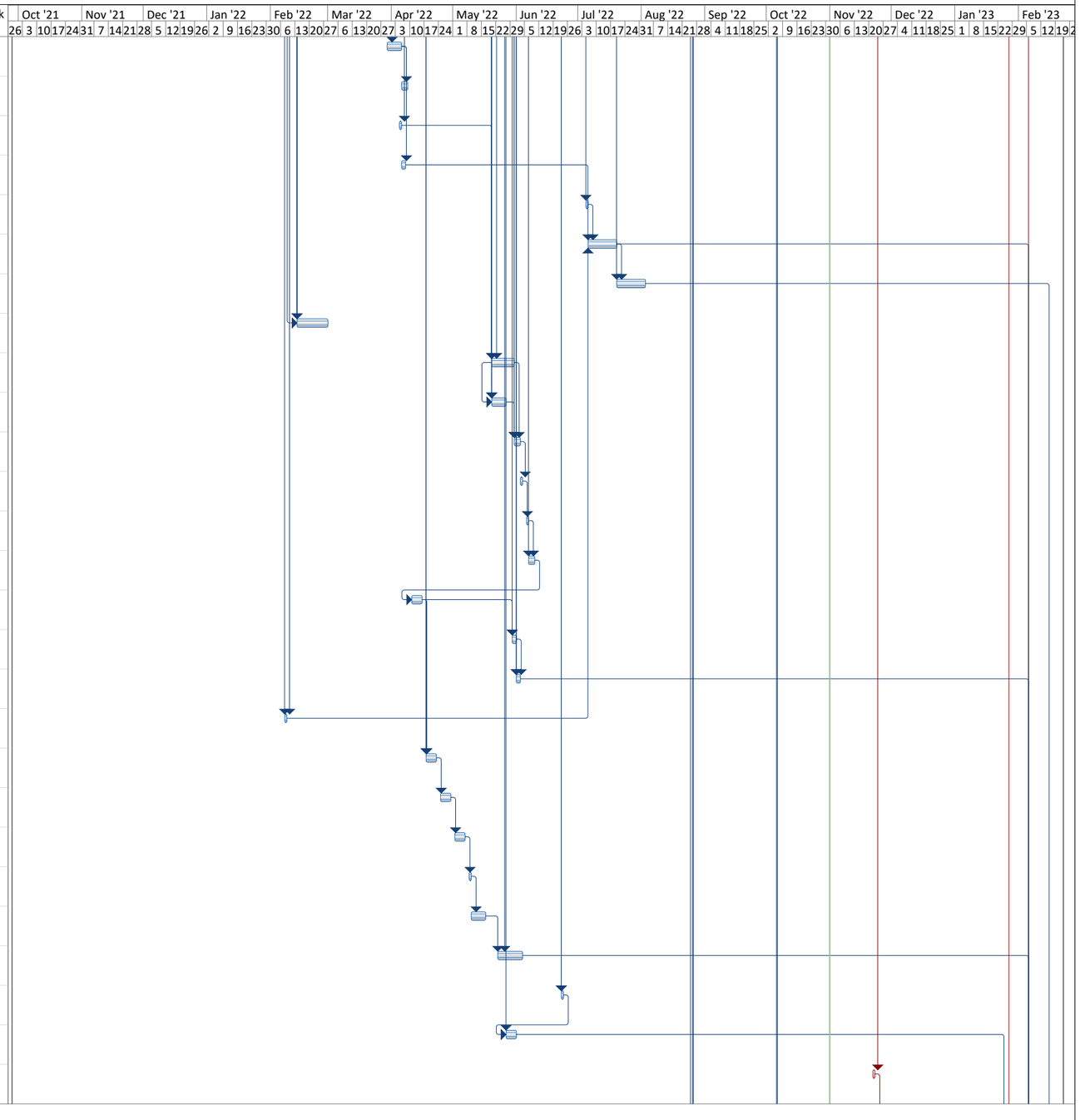
ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Successors	Total Slack
244		INSTALL FORMS	1 day	Wed 2/2/22	Wed 2/2/22	243,50	245	0 days
245		INSTALL REBAR	1 day	Thu 2/3/22	Thu 2/3/22	244	246FS+1 da	0 days
246		POUR CONCRETE	1 day	Mon 2/7/22	Mon 2/7/22	245FS+1 day,!	247,258FS-	0 days
247		CURE TIME	5 days	Tue 2/8/22	Mon 2/14/22	246	295	0 days
248		DELIVER ORIFICE PLATE	1 day	Tue 2/8/22	Tue 2/8/22	190,246	279	0 days
249		DELIVER FLOW CONTROL VALVE	1 day	Tue 2/15/22	Tue 2/15/22	142	279	0 days
250		DELIVER DISMANTLING JOINT	1 day	Tue 2/8/22	Tue 2/8/22	110,246	279	0 days
251		DELIVERY STEEL PIPE	1 day	Fri 2/25/22	Fri 2/25/22	20FS-17 days	279,252	0 days
252		PAINT EPOXY COATED STEEL PIPE	5 days	Mon 2/28/22	Fri 3/4/22	251	269	0 days
253		DELIVER C900 PIPE	1 day	Mon 1/24/22	Mon 1/24/22	16,246FS-11 c	260,279	0 days
254		DELIVER BUTTERFLY VALVE	1 day	Thu 5/19/22	Thu 5/19/22	70FS+17 days	279	0 days
255		DELIVER PRESSURE REDUCING VALVE	1 day	Tue 2/1/22	Tue 2/1/22	102	264	0 days
256		DELIVER PRESSURE RELIEF VALVE	1 day	Tue 2/1/22	Tue 2/1/22	106	269	0 days
257		DELIVER PIPE SUPPORTS	1 day	Tue 2/8/22	Tue 2/8/22	162,246,114	264,268	0 days
258		INSTALL C900 PIPE FROM 10+00 TO 13+00	6 days	Tue 1/25/22	Tue 2/1/22	246FS-10 day:	259	0 days
259		INSTALL BLOWOFF	1 day	Wed 2/2/22	Wed 2/2/22	258	260	0 days
260		INSTALL C900 FROM 13+00 TO 15+79	6 days	Thu 2/3/22	Thu 2/10/22	259,253	261	0 days
261		INSTALL 2" AIR VAC	1 day	Fri 2/11/22	Fri 2/11/22	260	262	0 days
262		INSTALL C900 PIPE FROM 15+79 TO 17+10	5 days	Mon 2/14/22	Fri 2/18/22	261	263,278FS-	0 days
263		INSTALL BLOWOFF	1 day	Mon 2/21/22	Mon 2/21/22	262	264	0 days
264		INSTALL A/G PRESSURE REDUC. VALVE AND PIPING	2 days	Tue 2/22/22	Wed 2/23/22	263,255,257,:	266,265	0 days
265		INSTALL BOLLARDS AROUND PRV	3 days	Thu 2/24/22	Mon 2/28/22	264,186	281	0 days
266		INSTALL CMLC PIPE FROM 17+20 TO 19+51	10 days	Mon 2/28/22	Fri 3/11/22	264,58,86FS-1	267	0 days
267		DIG/SET VAULT FOR FLEX TEND	2 days	Tue 3/15/22	Wed 3/16/22	266,146,150,:	268	0 days
268		INSTALL PIPE HANGERS UNDER BRIDGE	2 days	Thu 3/17/22	Fri 3/18/22	267,257	269	0 days
269		INSTALL EPOXY PIPE UNDER BRIDGE	5 days	Mon 3/21/22	Fri 3/25/22	268,256,252	270	0 days
270		DIG/SET VAULT FOR FLEX TEND	2 days	Mon 3/28/22	Tue 3/29/22	269	271	0 days



Project: C2120 October 2022 Upd
Date: Tue 11/1/22

Task	Summary	External Milestone	Inactive Summary	Manual Summary Rollup	Finish-only	Critical Split
Split	Project Summary	Inactive Task	Manual Task	Manual Summary	Deadline	Progress
Milestone	External Tasks	Inactive Milestone	Duration-only	Start-only	Critical	

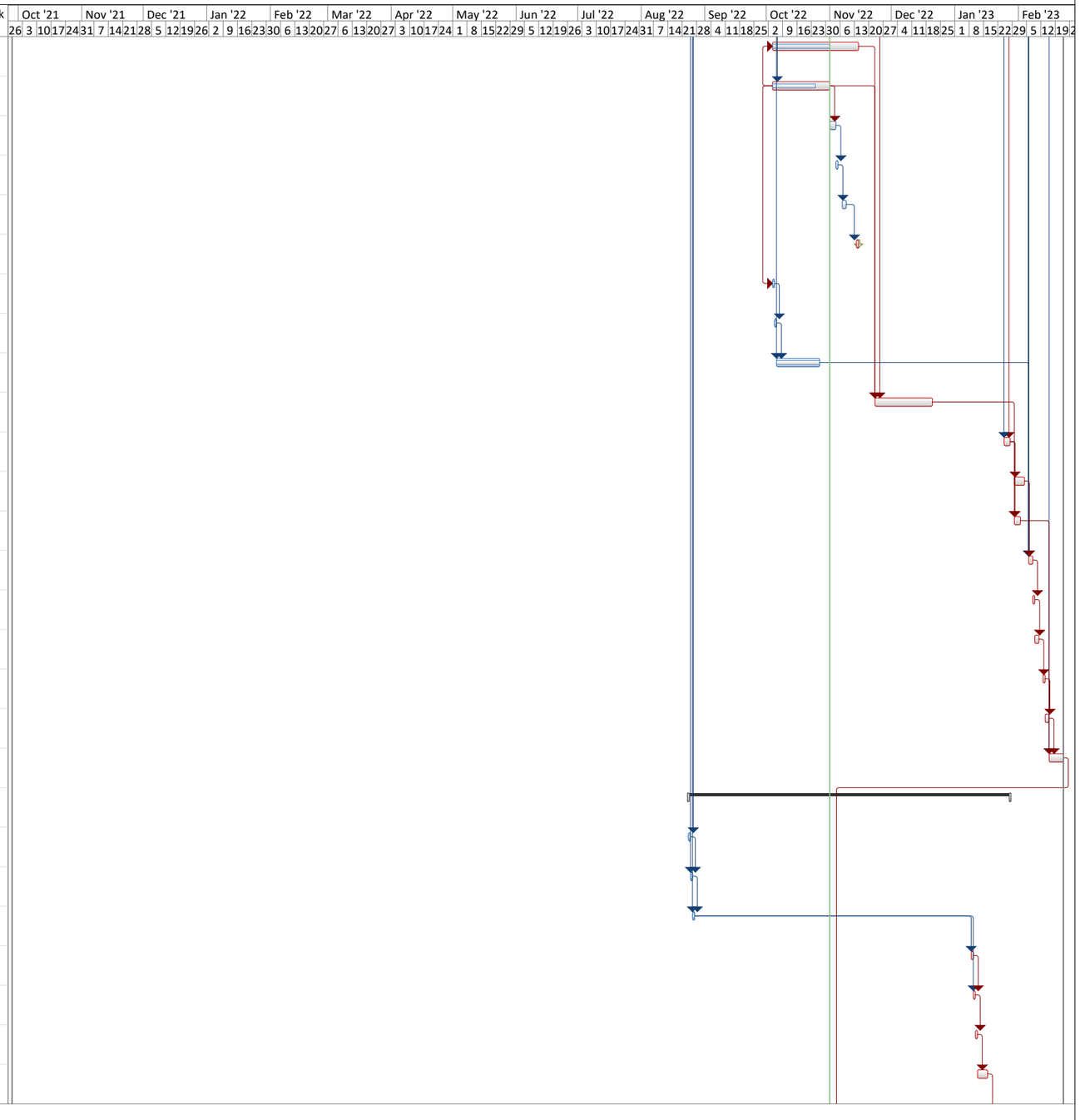
ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Successors	Total Slack
271		INSTALL CMLC PIPE FROM 21+84 TO 23+25	5 days	Wed 3/30/22	Tue 4/5/22	270	274,272	0 days
272		PATCH ASPHALT	3 days	Wed 4/6/22	Fri 4/8/22	271		0 days
273		DELIVER 8" FLOW METER	1 day	Tue 4/5/22	Tue 4/5/22	24	279	0 days
274		PRESSURE TEST PIPELINE	2 days	Wed 4/6/22	Thu 4/7/22	271	276	0 days
275		DELIVER MOV BUTTERFLY VALVE	1 day	Tue 7/5/22	Tue 7/5/22	74FS+55 days	276	0 days
276		INSTALL 12" PW PIPE NEAR AMMONIA REMOVAL TANK	10 days	Wed 7/6/22	Tue 7/19/22	275,288,274	277,311	0 days
277		PAINTING AND COATING	10 days	Wed 7/20/22	Tue 8/2/22	276,134	316	0 days
278		INSTALL ELECT DUCT BANK 10+00 TO 17+00	11 days	Mon 2/14/22	Mon 2/28/22	46,42,166,26		0 days
279		INSTALL 8"PW PIPE TO AMMONIA REMOVAL TANK	7 days	Fri 5/20/22	Mon 5/30/22	251,254,250,	280SS,281	0 days
280		INSTALL 1", 1/2" & 2" SAMPLE LINES	5 days	Fri 5/20/22	Thu 5/26/22	246,170,279S	281	0 days
281		INSTALL 1-1/2" PW LINE	3 days	Tue 5/31/22	Thu 6/2/22	170,279,280,	282	0 days
282		INSTALL EYEWASH	1 day	Fri 6/3/22	Fri 6/3/22	281	283	0 days
283		INSTALL 1" PW LINE	1 day	Mon 6/6/22	Mon 6/6/22	282	284	0 days
284		INSTALL 1/2" AND 1" SBS LINE	3 days	Tue 6/7/22	Thu 6/9/22	283,170	285FS-44 d	0 days
285		INSTALL 1/2" SHC LINE	5 days	Mon 4/11/22	Fri 4/15/22	284FS-44 day	286FS+30 d	0 days
286		INSTALL SAMPLE PUMPS	2 days	Mon 5/30/22	Tue 5/31/22	285FS+30 day	287	0 days
287		INSTALL 3/4" HDPE TUBING IN EXISTING PIPE	2 days	Wed 6/1/22	Thu 6/2/22	286,174,78	311	0 days
288		DELIVER WALL THIMBLES	1 day	Tue 2/8/22	Tue 2/8/22	194,246	276	0 days
289		INSTALL DOWELS FOR CONCRETE WALLS	5 days	Mon 4/18/22	Fri 4/22/22	178,182,285	290	0 days
290		FORM WALLS	5 days	Mon 4/25/22	Fri 4/29/22	289	291	0 days
291		REBAR WALS	5 days	Mon 5/2/22	Fri 5/6/22	290	292	0 days
292		POUR WALLS	1 day	Mon 5/9/22	Mon 5/9/22	291	293	0 days
293		CURE TIME	5 days	Tue 5/10/22	Mon 5/16/22	292	294	0 days
294		INSTALL BAFFLES	10 days	Mon 5/23/22	Fri 6/3/22	293,122FS-1 d	311	0 days
295		SET CHEMICAL SHED	1 day	Thu 6/23/22	Thu 6/23/22	247,126FS+82	296FS-20 d	0 days
296		SET CHEMICAL PUMPS	3 days	Fri 5/27/22	Tue 5/31/22	295FS-20 day	308	0 days
297		DELIVER ELECTRICAL EQUIPMENT	1 day	Tue 11/22/22	Tue 11/22/22	38	307	-36 days



Project: C2120 October 2022 Upd
Date: Tue 11/1/22

Task | Split | Milestone | Summary | Project Summary | External Tasks | External Milestone | Inactive Task | Inactive Milestone | Inactive Summary | Manual Task | Duration-only | Manual Summary Rollup | Manual Summary | Start-only | Finish-only | Deadline | Critical | Critical Split | Progress

ID	Task Mode	Task Name	Duration	Start	Finish	Predecessors	Successors	Total Slack
298		INSTALL ELECTRICAL CONDUIT	30 days	Tue 10/4/22	Mon 11/14/22	299SS	307	-30 days
299		INSTALL INSTRUMENTATION	20 days	Tue 10/4/22	Mon 10/31/22	34	298SS,304S	-20 days
300		INSTALL LE/LIT-102	3 days	Tue 11/1/22	Thu 11/3/22	299	301	3 days
301		WIRE LE/LIT-102	1 day	Fri 11/4/22	Fri 11/4/22	300	302	3 days
302		DISTRICT TO PROGRAM LIT 102	2 days	Mon 11/7/22	Tue 11/8/22	301	303	3 days
303		LE/LIT-102 READING FLOW OVER WEIR WALL	1 day	Mon 11/14/22	Mon 11/14/22	302		0 days
304		INSTALL DRUM SPILL CONTAINMENT PALLET	1 day	Tue 10/4/22	Tue 10/4/22	299SS	305	0 days
305		INSTALL CHEMICAL DRUM	1 day	Wed 10/5/22	Wed 10/5/22	304	306	0 days
306		INSTALL CHEMICAL PIPING IN SHED	15 days	Thu 10/6/22	Wed 10/26/22	305,138	311	0 days
307		PULL WIRES AND TERMINATE	20 days	Wed 11/23/22	Tue 12/20/22	299,297,298	310	-36 days
308		SET ANALYZERS	3 days	Wed 1/25/23	Fri 1/27/23	296,30	309,310	-64 days
309		FINISH CHEM PIPING IN SHED	5 days	Mon 1/30/23	Fri 2/3/23	308	311	0 days
310		PERFORM I/O CHECKS	3 days	Mon 1/30/23	Wed 2/1/23	308,307	316	-64 days
311		CHLORINATE/DISINFECT PIPING	2 days	Mon 2/6/23	Tue 2/7/23	287,276,30,29	312	-74 days
312		FLUSH PIPE	1 day	Wed 2/8/23	Wed 2/8/23	311	313	-74 days
313		PULL SAMPLES	2 days	Thu 2/9/23	Fri 2/10/23	312	314	-74 days
314		RESULTS	1 day	Mon 2/13/23	Mon 2/13/23	313	315	-74 days
315		MAKE FINAL CONNECTIONS	2 days	Tue 2/14/23	Wed 2/15/23	314	316	-74 days
316		STARTUP AND TEST SYSTEM	5 days	Thu 2/16/23	Wed 2/22/23	315,310,277	327	-74 days
317		**SCHEDULE B WORK**	**113 days**	**Wed 8/24/22**	**Fri 1/27/23**			**-56 days**
318		DELIVER 6" FLOW METER	1 day	Wed 8/24/22	Wed 8/24/22	202	319	0 days
319		DELIVER FLANGED PIPE SUPPORTS	1 day	Thu 8/25/22	Thu 8/25/22	222,318	320	0 days
320		DELIVER DI PIPE	1 day	Fri 8/26/22	Fri 8/26/22	214,319	322,321	0 days
321		EXPOSE EXISTING METER AND VALVES	1 day	Mon 1/9/23	Mon 1/9/23	320	322	-56 days
322		REMOVE EXISTING 6" METER AND VALVE BOXES	1 day	Tue 1/10/23	Tue 1/10/23	320,321	323	-56 days
323		INSTALL NEW 6" PIPE AND FLOW METER	1 day	Wed 1/11/23	Wed 1/11/23	322	324	-56 days
324		FORM/REBAR/POUR 6" CONCRETE SLAB	3 days	Thu 1/12/23	Mon 1/16/23	323	325	-56 days

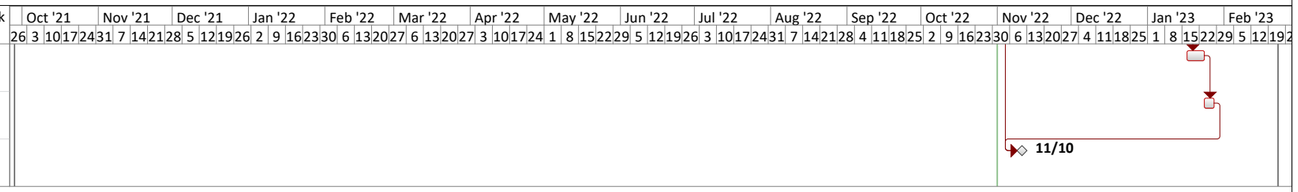


Project: C2120 October 2022 Upd
Date: Tue 11/1/22

Task | Split | Milestone | Summary | Project Summary | External Tasks | External Milestone | Inactive Task | Inactive Milestone | Inactive Summary | Manual Task | Duration-only | Manual Summary Rollup | Manual Summary | Start-only | Finish-only | Deadline | Critical | Critical Split | Progress

Tapia Water Reclamation Facility Summer Discharge Compliance

ID		Task Mode	Task Name	Duration	Start	Finish	Predecessors	Successors	Total Slack
325			PATCH CONCRETE/ASPHALT	5 days	Tue 1/17/23	Mon 1/23/23	324	326	-56 days
326			PUNCHLIST	4 days	Tue 1/24/23	Fri 1/27/23	325	327	-56 days
327			CONTRACT COMPLETION	0 days	Thu 11/10/22	Thu 11/10/22	326,316		-74 days



Project: C2120 October 2022 Upd
Date: Tue 11/1/22

Task	Summary	External Milestone	Inactive Summary	Manual Summary Rollup	Finish-only	Critical Split
Split	Project Summary	Inactive Task	Manual Task	Manual Summary	Deadline	Progress
Milestone	External Tasks	Inactive Milestone	Duration-only	Start-only	Critical	

AGENDA ITEM NO. 4.E

DATE: December 13, 2022

TO: JPA Board of Directors

FROM: Engineering and External Affairs

SUBJECT: Tapia Aluminum Sulfate Tank Replacement Project: Award of Design

---

SUMMARY:

In 1979, aluminum sulfate (alum) was introduced to the wastewater treatment process at the Tapia Water Reclamation Facility (Tapia) as a flocculant for the tertiary filtration process. The existing alum storage tank is now over 40 years old and has reached the end of its useful life. In 2021, the tank began to leak and had to be decommissioned. To maintain operations, staff installed a temporary dosing system from a 250-gallon tote that has been in service pending replacement of the original storage tank.

In September 2022, staff advertised a Request for Proposals (RFP) for the design of the Tapia Aluminum Sulfate Tank Replacement Project. The successful consultant will be responsible for developing a technical memorandum, preparing plans and specifications, and providing engineering support during construction. The design scope includes, but is not limited to, plans for a new alum tank, pump system, piping and controls. Two proposals were received from qualified engineering firms. Based on an evaluation of proposals, staff recommends accepting the proposal from Pacific Advanced Civil Engineering, Inc. (PACE), in the amount of $87,965, for the design of the Tapia Aluminum Sulfate Tank Replacement Project.

RECOMMENDATION(S):

Accept the proposal from Pacific Advanced Civil Engineering, Inc.; and authorize the Administering Agent/General Manager to execute a professional services agreement, in the amount of $87,965, for design and engineering services during construction for the Tapia Aluminum Sulfate Tank Replacement Project.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

The total cost of this action is $87,965, which is allocated 70.6% to LVMWD and 29.4% to

Triunfo Water and Sanitation District. Sufficient funds for the work are available in the adopted Fiscal Year 2022-23 JPA Budget.

DISCUSSION:

In 1979, aluminum sulfate (alum) was introduced to the wastewater treatment process at the Tapia Water Reclamation Facility (Tapia) as a flocculant for tertiary filtration process. The existing liquid alum tank has a 7,500-gallon capacity and is constructed of steel with a PVC lining. The original tank has reached the end of its useful life and needs to be replaced. Staff decommissioned the existing alum tank last year and are currently dosing alum from a 250-gallon tote.

Staff outlined the design scope in a Request for Proposals (RFP) that included replacing the liquid alum tank, associated piping, chemical feed pump and associated parts, as well as the selection of a new controller system. The first task for the successful consultant will be to produce a technical memorandum evaluating the existing alum system, confirm the appropriate tank size based on storage and dosing requirements and provide formal recommendations. The consultant and JPA staff will use the technical memorandum as the basis to proceed with the preparation of plans and specifications for bidding and construction. The selected consultant will also support JPA staff through construction and project closeout.

In September 2022, staff issued the RFP for the design of the Tapia Aluminum Sulfate Tank Replacement Project. The RFP was advertised on LVMWD's website and sent directly to several qualified engineering firms. Two firms submitted proposals for design and engineering support during construction.

Following is a summary of the proposal costs:

Consultants	Proposal Cost	Total Hours	Cost per Hour
PACE	$87,965.00	493	$178.43
MNS	$162,735.00	575	$283.02

The two firms are well qualified to complete the design plans and support the JPA during construction. Their proposals included the necessary elements of design as identified in the RFP. Both proposals were well-prepared and comparable in their approach. Staff thoroughly evaluated the proposals for project understanding, approach, resource allocation, cost and team experience.

Based on the evaluation of proposals, staff recommends accepting the proposal from PACE, in the amount of $87,965, for the design of the Tapia Aluminum Sulfate Tank Replacement Project. The timeline for design, as provided in the attached proposal, is approximately four months, which places a call for bids in May 2023 and construction award in August 2023. JPA staff recently worked with PACE on the Tapia Sodium Hypochlorite Tank Replacement Project. The firm is capable of successfully completing the project in a cost-effective manner.

Prepared by: Veronica Hurtado, Assistant Engineer

ATTACHMENTS:
PACE Proposal - Las Virgenes Tapia WRF Aluminum Sulfate Tank and Piping .._.pdf

PROFESSIONAL DESIGN ENGINEERING SERVICES PROPOSAL FOR

TAPIA WATER RECLAMATION FACILITY

DESIGN OF ALUMINUM SULFATE TANK AND PIPING REPLACEMENT

PREPARED FOR:

LAS VIRGENES MUNICIPAL WATER DISTRICT

TRIUNFO WATER & SANITATION DISTRICT

ATTN: VERONICA HURTADO
LAS VIRGENES – TRIUNFO JOINT POWERS AUTHORITY
4232 LAS VIRGENES ROAD, CALABASAS, CA 91302

PREPARED BY:

PACE Advanced Water Engineering

17520 NEWHOPE STREET, SUITE 200
FOUNTAIN VALLEY, CA 92708
714.481.7300 | WWW.PACEWATER.COM

C052 | OCTOBER 19, 2022

October 19, 2022

Veronica Hurtado
Las Virgenes – Triunfo Joint Powers Authority
4232 Las Virgenes Road
Calabasas, CA 91302
Phone (818) 251-2332

Re: Tapia Water Reclamation Facility: Design of Aluminum Sulfate Tank and Piping Replacement #C052

Dear Veronica,

Faced with aging equipment at the LVMWD Water Reclamation Facility (WRF), the Las Virgenes – Triunfo Joint Powers Authority (JPA) is seeking an evaluation, recommendations, construction plans and bidding and construction support services from engineering consultants for replacement of the WRF's existing Aluminum Sulfate (Alum) tank, chemical pumps, and their associated piping. The existing Alum steel tank was installed in 1979 and have reached the end of its useful life.

PACE has supported the JPA with several facility upgrades and rehabilitation modification projects similar to this, including the recent replacement of the Sodium Hypochlorite tanks. We proposed to support the JPA with development of recommendations leading to formal bid plans and specs, development of construction sequencing, and with engineering services during both the bidding and construction process for this project. For this proposal, our team will consist of the same experience team members involved in the Sodium Hypochlorite Tank Project, which will allow for seamless continuation of the Project Team (both PACE and JPA staff).

Project Team & Key Qualifications

Our team is made up of senior-level engineers with backgrounds in not only design, but also construction and operation who will efficiently perform a thorough tank replacement evaluation leading to sound improvement recommendations and selection of ideal equipment and construction sequencing strategies in support of the JPA's operation and maintenance staff objectives. This will ensure that eventual subsequent design and improvement construction phases are executed seamlessly, based on a well-defined plan.

As the Project Manager, and I have significant experience with design, construction, and start-up, of a vast range of wastewater treatment and chemical handling and disinfection facility types. I will be hands-on throughout the project and the main contact with the JPA's team.

We invite you to review the enclosed proposal we prepared closely following the instructions of the RFP document. The fee proposal enclosed separately is valid for a period of 90 days. We look forward to partnering with you and other JPA team members to deliver the best solutions for the Tapia WRF Aluminum Sulfate Tank and Piping Replacement Project.

Sincerely,

Robert Murphy, PE – Project Manager

KEY CONTACTS

Robert Murphy, PE - Project Manager
Direct Line: (714) 481-7226
Cell: **(**714) 376-6943
Email: rmurphy@pacewater.com
Duong Do, PE - Vice President / Principal
Direct Line: (714) 481-7223
Cell: (714) 514-8812
Email: ddo@pacewater.com
Legal Name: Pacific Advanced Civil Engineering, Inc. (PACE)
17520 Newhope Street, Suite 200,
Fountain Valley, CA 92708

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Project Understanding and Approach

Project Understanding

The Las Virgenes – Triunfo Joint Powers Authority (JPA) is currently seeking a qualified engineering consultant to assist the Las Virgenes Municipal Water District (District) with recommendations, design, and bidding and construction support for a chemical storage tank, pumps, and piping replacement project at the Tapia Water Reclamation Facility (WRF). The project (*Tapia WRF: Design of Aluminum Sulfate Tank and Piping Replacement*) includes existing tank and equipment removal and new replacement installations for the Aluminum Sulfate (Alum) storage tank, chemical feed pumps, and their associated process piping and appurtenances.

The District has determined that the Alum tank to be replaced with this project has exceeded its useful service life and is currently decommissioned. This is understandable, considering that the tank has been in use for over 40 years. With the tank replacement project, existing tank fill, vent, and drain piping will need to be replaced and designed around and based on the new tank installations. This also includes replacement of the chemicals pumps and associated appurtenances for process piping, mechanical, and electrical and controls.

The original tank is a steel tank with PVC liner. Even though replacement in kind can be done, steel tanks are expensive compared to other type of tanks, such as UV-protected fiberglass tanks or cross-link polyethylene. As such, the District is requesting a list of manufacturers that meet the requirements for the new supplied tank. Based on past project experience, there are several tank suppliers capable of meeting the requirements. During the Sodium Hypochlorite (SHC) Tank Replacement Project, PACE identified several tank manufacturers, of which the District selected Midwestern Fabricator to provide the District with the tanks for that project. PACE will follow the same procedure in procuring the new tank for this project.

The engineering consultant will be tasked with providing services to evaluate existing operational and design data, develop formal recommendations leading to development of bid plans, specs, and cost estimates for the rehabilitation project. This includes providing the District with assistance during bidding and technical services during construction of the overall replacement project elements.

Project Approach

Site Investigations and Data Gathering

As the project design consultant, Pacific Advanced Civil Engineering, Inc. (PACE) will approach this project as a team player and provide the technical and production capacity for implementing the design solutions of the project team. Our first focus will be on researching and reviewing the documentation provided by the District, as well as documentation PACE obtained or developed as part of the previous SHC Tank Project. In collaboration with the project team, we will determine the next steps leading to the preparation of the formal recommendations technical memorandum, and resulting project design plans / contract documents. From the research, the project team will work to define overall project scope for the tank and pump replacement. The initial background research and discussions with the project team will also allow for development of a preliminary construction phasing and bypass plan, used to sequence specific construction work efforts.

As an option, PACE has also included structural services, with our subconsultant Paul Kohler with PK Associates (PK). Structural modifications are not anticipated for this project, but if needed, PK can provide modifications and retrofits of the structural elements in the existing tank and chemical storage areas to allow for ease of access, installation, and long-term servicing of the tank and equipment. Costs for structural design options are not included with the fee worksheet but can be discussed further with the development of the design recommendations.

Design Services

Following delivery and discussion of the recommendations and technical memorandum with the District, PACE will develop 90% plans, specifications, and cost estimates for the Alum tank and chemical pump replacement project. A majority of the design work will include using previous plans as-built and record information provided by the District for the development of new Alum tank and piping replacement plans outlining "in-kind replacement." Where improved operational efficiency, streamlined installation methods, or cost saving opportunities are available, PACE will present and discuss these opportunities with the District as design options for the replacement construction. One such improvement opportunity is the use of double-wall polyethylene piping within the chemical building.

The bid plans, specifications, and cost estimate will be provided to the District in a 100% design package for review. The design plans and specifications will include a formal construction phasing, continued from the technical memorandum. Following meeting with the District to discuss the 100% design deliverables, PACE will refine the Design Plans, Specifications, Cost Estimate, and produce a 100% Design / Issued for Bid package which will be used as part of the Project Bid and Contract Document Package.

Bidding and Construction Support Services

During the bid solicitation process, PACE will work with the District to clarify design intent and layout the scope of work to be performed by the bidding contractors. PACE will also work with the District to develop any required addendums needed in response to bidding contractor questions or plan and specification modifications.

PACE will provide the services of its staff to assist the District with the construction kick-off meeting. PACE will also be present for other required construction coordination meetings. PACE will provide review of contractor submitted shop drawings, schedules, and construction change orders as needed for the project. Following construction, PACE will develop Record Drawings for submission to the District.

PACE has the resource capacity to perform work on several projects simultaneously. The work efforts and approach for this project will be carefully coordinated and managed to ensure that project deadlines and deliverables meet the District's expectations and schedule. Coordination efforts also include reserving staff for expediting shop drawing reviews, specifically considering the overall project schedule, phasing considerations, and the potential for long lead times for particular project materials, as well as for "getting in-queue" with installers for tank fabrication / installation.

Scope of Work

List of Project Deliverables:

- **Formal Recommendations Technical Memorandum:**
  - Tank and piping replacement / sizing / materials
  - Chemical pump type/ performance
  - Installation methods / construction sequence
  - List of qualified tank suppliers / chemical pump supplier
  - Process design and controls / instrumentation
- **90% Design Package:**
  - 90% Plans, Specifications and Cost Estimate
- **100% Issued for Bid Design Package:**
  - 100% Plans, Specifications, Cost Estimate
- **Project Closeout:**
  - Record Plans in Electronic Format (PDF and AutoCAD)

TASK 1.0 – PROJECT MANAGEMENT AND DESIGN MEETINGS

1.1 Project Management, Billing, and Invoices

This task includes management functions for all activities of this Project. Project Manager, Robert Murphy, PE, will allocate the project team's resources and establish all staff responsibilities. Project management will be developed according to each project task. Invoices shall be prepared and submitted to cover the previous month's work.

1.2 Kickoff Meeting, Technical Memorandum Review Meeting, and Design Progress Meeting

A project kickoff meeting will be held with the Project team and the District to confirm 1) project objectives, 2) the interrelationship between objectives and work tasks, and 3) the responsibility for activities and schedule to help ensure a successful Project. Feedback from the kickoff meeting will be used as the basis for the technical memorandum preparation.

Following submittal and District review of the technical memorandum, PACE will meet with the District to discuss the Alum tank, chemical pumps, and piping replacement alternatives and recommendations.

The plans, specs, and construction cost estimate will be delivered first as a 90% set. Following submittal and District review of the draft set, PACE will meet with the District to discuss all items to be modified and adjusted for development of the final 100% bid package.

PACE shall prepare an agenda and the minutes from each of the meetings for distribution to the attendees within five (5) working days of the meeting.

TASK 2.0 – REVIEW OF PROJECT INFORMATION AND DISTRICT OBJECTIVES

2.1 Site Investigation, Data Gathering, and Review of Available Documents

PACE, with assistance from the District's Staff, will conduct a thorough on-site field investigation and assessment of the Alum tank area and the chemical room. All existing available record documents will also be gathered, copied, and/or uploaded onto a flash drive, if available in electronic format, for use by all project team members. The site investigation will be used to evaluate existing site civil (tanks, chemical room, and building/structure features), and mechanical (piping/ventilation) for the recommended improvements provided in the formal technical memorandum.

TASK 3.0 – FORMAL EVALUATION / RECOMMENDATIONS TECHNICAL MEMORANDUM

3.1 Technical Memorandum

PACE will develop sizing and selection criteria for the new replacement Alum tank and chemical pumps, from existing engineering reports, record drawings, and operational data available from the District. PACE will then provide recommendations for new tank, pumps, piping, vent and valve equipment, as well as any potential structure modifications (options available) to accommodate new recommended tank and equipment. PACE shall prepare a formal consolidated Technical Memorandum (TM) to memorialize the findings and recommendations for the tank replacements.

Based on the information gathered and the development of the recommended improvement alternatives, PACE shall prepare a preliminary sequence of construction and rough order of magnitude cost estimates based on the tank installation alternatives. The validity of the estimates presented will be based on limited level of design detail and shall provide a basis for further evaluating or eliminating alternatives from consideration. Preliminary layouts and information for the replacement tank alternatives and chemical pump layouts will also be presented in the TM. As part of the technical memorandum PACE will provide a contact list for tank equipment suppliers / manufacturers who can be used to meet the project's requirements.

TASK 4.0 – DESIGN SERVICES

Tasks 4.1-4.5 – 100% Design

Following meeting with the District to discuss the Technical Memorandum and preferred project delivery option, PACE will prepare 100% design plans. The design plans will include the following major elements:

1) Preliminary General Provisions, Project Notes, and Construction Sequencing/Phasing and Bypass Plan
2) Preliminary Process Mechanical Design and Design Details – process Alum tank, chemical pump, and piping replacement and modifications
3) Preliminary Electrical and Controls Design

- PACE shall prepare a Preliminary (100%) Set of Construction Specifications in CSI format.
- PACE shall prepare a Preliminary Engineer's Estimate of Probable Construction Cost based on the completed 100% design drawings.
- 100% PS&E Review Meeting – Following submittal and District review of the 100% design plans, specifications and cost estimate, PACE will meet with staff on site for a design plan walk-through prior to proceeding to the next design stage. This meeting will serve to provide the basis for further development of the next milestone submittal.

Following review and approval of the 100% plans, specifications, and cost estimate, PACE will prepare a set of stamped/signed Final Bid Documents to be delivered to the District for reproduction into a formal public bid set. Plans and specifications will be delivered in electronic format (PDF) for rapid reproduction along with an original stamped and signed printed set. PACE shall also provide to the District an electronic copy of all AutoCAD drawing files used for the project, as needed.

TASK 5.0 – BIDDING AND CONSTRUCTION SUPPORT SERVICES

Task 5.1 – Bid Solicitation Services

PACE shall attend a Pre-Bid conference to assist the District with describing the scope of work to be performed by bidding contractors. This includes describing the planned phasing or sequencing of construction activities to perspective bidding parties.

PACE will provide the services of its engineering staff to supply written responses to questions from bidding contractors. Our responses will be provided to the District for incorporation in the District-issued bid addendums. We have assumed one addendum period.

Task 5.2 – Construction Progress Meetings

PACE will attend construction meetings via conference calls and onsite (as necessary) over the course of construction of the project. The following meetings are anticipated during construction:

1. One (1) onsite preconstruction meeting
2. One (1) project construction meetings (site/conference call)
3. One (1) project site punch-list walk through meeting

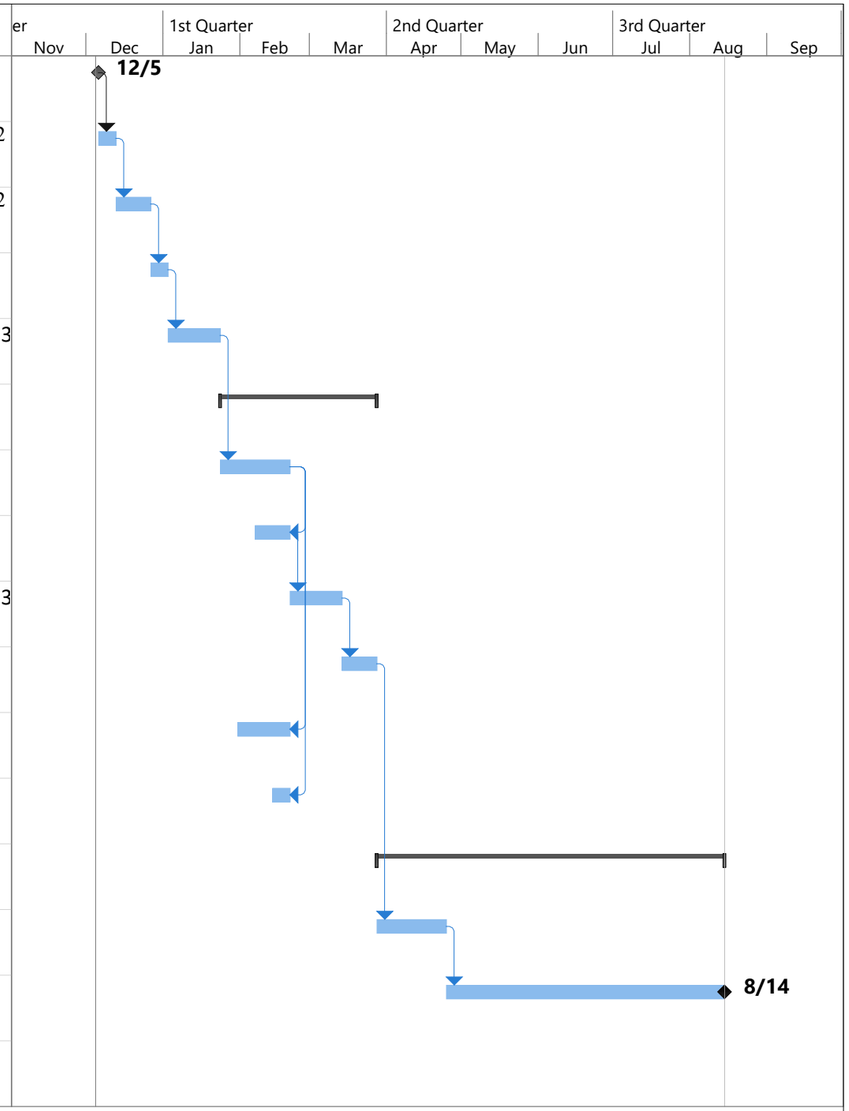
Task 5.3 – Construction Support Services

PACE will provide the services of its engineering staff during construction to review RFIs and Shop Drawings submitted by the selected contractor and/or District. It is assumed that an additional review will also be required for each submitted shop drawing. PACE will review and certify draw and change order requests as submitted to the District. When required, PACE will provide field engineering services as requested by the District to verify site conditions and answer contractor's questions or requested modifications.

Task 5.4 – Preparation of Record Drawings

PACE will complete and provide Record Drawings to the District following completion of construction. Record Drawings shall be prepared using the provided contractor's as-built information. The Record Drawings will be prepared and provided to the District via one set of hard copy plans and in electronic format (AutoCAD and PDF).

ID	Task Mode	Task Name	Duration	Start	Finish
1		Project NTP/ Kickoff	1 day	Mon 12/5/22	Mon 12/5/22
2		Site Investigation, Data Gathering, and Review of Available Documents	1 wk	Tue 12/6/22	Mon 12/12/22
3		Tank System Evaluation	2 wks	Tue 12/13/22	Mon 12/26/22
4		Technical Memorandum	1 wk	Tue 12/27/22	Mon 1/2/23
5		District Recommendation Review and Comment Period	3 wks	Tue 1/3/23	Mon 1/23/23
6		**Design Services**	45 days	**Tue 1/24/23**	**Mon 3/27/23**
7		100% Design	4 wks	Tue 1/24/23	Mon 2/20/23
8		Electrical and Instrumentation Design	2 wks	Tue 2/7/23	Mon 2/20/23
9		District Design Review and Comment Period	3 wks	Tue 2/21/23	Mon 3/13/23
10		100% Design Revision	2 wks	Tue 3/14/23	Mon 3/27/23
11		Project Specifications	3 wks	Tue 1/31/23	Mon 2/20/23
12		Engineer Construction Estimate	1 wk	Tue 2/14/23	Mon 2/20/23
13		**Bidding and Construction Support Services**	100 days	**Tue 3/28/23**	**Mon 8/14/23**
14		Bid Solicitation	1 mon	Tue 3/28/23	Mon 4/24/23
15		Construction Period	4 mons	Tue 4/25/23	Mon 8/14/23
16					



Project: Aluminum Sulfate Tank
Date: Thu 10/13/22

Task	Project Summary	Manual Task	Start-only	Deadline
Split	Inactive Task	Duration-only	Finish-only	Progress
Milestone	Inactive Milestone	Manual Summary Rollup	External Tasks	Manual Progress
Summary	Inactive Summary	Manual Summary	External Milestone	

Itemized List of Cost

See the Fee Schedule to view the itemized list of cost for the investigation, evaluation, identification of options, and recommendation listed in the scope of work.

Assumptions and Exclusions

- It is assumed the existing tank area and chemical room building structures are in a sound structural condition, and the no structural modifications is needed for the project. If needed, our structural subconsultant, PK Associates, is available to perform structural design for an additional fee.

- Considering this is a rehabilitation/replacement to existing facility project, it assumed that the overall project is exempt from requiring a formal CEQA study to be performed. This proposal does not include filing of documentation related to CEQA.

- No new electrical services will be needed to service the new chemical pumps and instrumentation. The new chemical pumps are assumed to be similar in size and capacity and will required similar electrical requirements that are existing.

Key Team Members

About PACE

PACE is a mid-sized water resources civil engineering firm formed in 1987, and headquartered in Fountain Valley, California with a regional office in Phoenix, Arizona. With extensive water and wastewater treatment design experience, PACE provides ***proven, creative and cost-effective solutions*** through the application of advanced engineering technology and analysis techniques.

Within the wastewater treatment arena, PACE is experienced in:

- Wastewater treatment facility planning
- Wastewater treatment process design
- Treatment facility upgrades and expansions
- Sewage collection and reclaimed water distribution systems
- Storage and pumping systems
- Treatment facility construction and operation
- Energy and process efficiency evaluations and strategy implementation
- Complex local and remote Supervisory Control and Data Acquisition (SCADA) systems
- EPA 503 bio-solids reuse permitting, sludge digestion and dewatering
- Permitting for Effluent Title 22 reuse, NPDES discharge and groundwater recharge

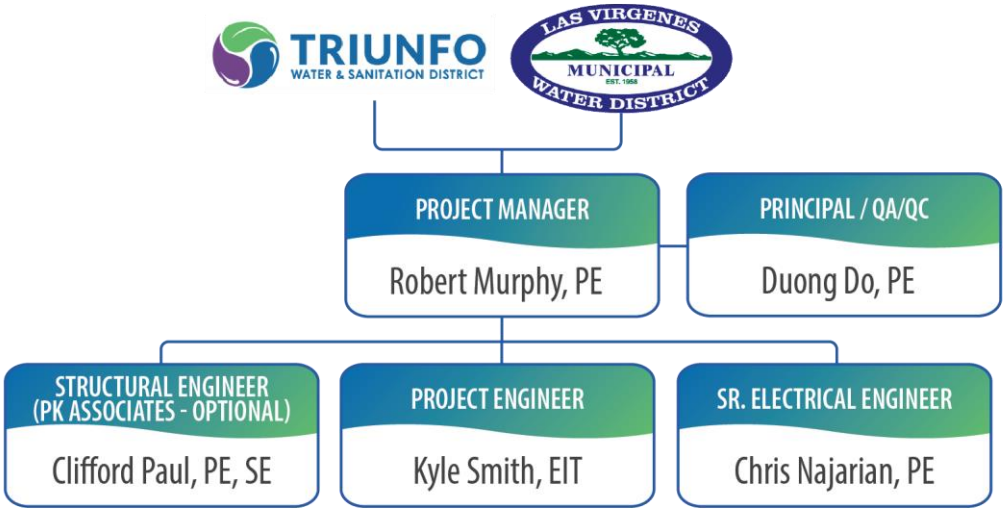
Within the past 10 years, our team has designed and provided construction and operations assistance services on more than 40 new or expanded treatment facilities. All of these facilities included advanced biological nutrient removal (BNR) activated sludge systems, process mechanical and electrical, and controls and automation systems designs. Clients benefit from PACE's experience with advanced wastewater treatment facility design and our experience working with contractors in all facets of project delivery structures including design-bid-build, design-build, design-build-operate and Construction Management at Risk (CMAR). This background leads us to place major emphasis on the ***compatibility, constructability, costs and long-term ease in operations*** of the treatment systems. Clients also gain from the direct involvement from our principals who bring innovation, creativity, and up-front value engineering to every project.

Unique Qualifications of Team

- Extensive experience with water and wastewater upgrades while facilities remain in service.
- Our Principal for this project is both a licensed engineer and a former wastewater treatment plant operator. PACE provides "engineers with calluses on their hands" who know what it takes to design, build, and operate wastewater facilities.
- Our entire project team is based locally in Southern California, which ensures quick, direct access for the District to all levels of our team.
- Our approach has been proven effective on facility upgrade projects and will benefit the District with the highest quality materials and equipment at the best capital costs and will be in support of the District's long-term objectives.

Organizational Chart

For this project, PACE is presenting to Las Virgenes Municipal Water District an in-house team of engineers highly experienced and specialized in replacement and retrofit design and construction. PACE staff is well versed in providing practical, cost-effective solutions to both simple and complex problems and work as a tight-knit unit with expertise in many different technical areas. PK Associates' support has been included as a subconsultant for optional structural elements.



Key Team Members

PACE will perform a majority of the project tasks including the overall project management and oversight responsibility for the project with the following key team members. **All of these key team members are committed to the project throughout the duration of each task through to successful start-up of operations of the facilities.**

ROBERT MURPHY, PE – PROJECT MANAGER

Robert Murphy has civil and environmental engineering experience spanning back to 2006. He has managed the engineering design in several areas including wastewater and water treatment mechanical process design, water conveyance and distribution, and surveying services. Mr. Murphy is adept at providing comprehensive civil and mechanical designs that are inventive, cost effective, and practical. His experiences also include process equipment selection, construction administration, and coordinating project plans, specifications, and reports with multiple consultants to obtain an efficient buildable and operable system.

DUONG DO, PE – PRINCIPAL / QA/QC

Duong Do has civil and environmental engineering experience spanning back to 1996. His areas of expertise include water and wastewater treatment processes and design, water and wastewater distribution and infrastructure design, water reservoir and lakes, water resource master planning and permitting. Mr. Do has served as the Principal / QA/QC for numerous water and wastewater treatment facilities, and as a former WWTP operator he has dedicated himself to operator-focused designed and value engineering.

KYLE SMITH, EIT – PROJECT ENGINEER

Kyle Smith is a design engineer with experience in design and construction support dating back to 2018. With a bachelor's degree emphasis in Civil Engineering, Mr. Smith has worked on several projects involving the rehabilitation of wastewater treatment plants, potable water storage tanks, and sewer, stormwater, and potable water infrastructure. In addition to design work, Mr. Smith has also provided services during construction on several projects and is experienced with the construction administration process, reviewing contractor submittals and requests for information.

CHRIS NAJARIAN, PE – SR. ELECTRICAL ENGINEER

Mr. Najarian received his Bachelor of Science degree in Electrical Engineering from the Illinois Institute of Technology in 2010 and is a licensed electrical contractor in the state of California. He has extensive experience testing and installing electrical equipment during construction such as wastewater and water treatment plants, pumps, motors, control panels and instrumentation at industrial sites, oil refineries, generating stations and manufacturing plants. His background in electrical field service and troubleshooting allows him to effectively design drawing packages in various water applications. He has prepared electrical drawing packages for wastewater neutralization systems, pumping stations, aeration treatment, reverse osmosis, and chemical injection.

OPTIONAL - Subconsultant

PK ASSOCIATES
CONSULTING STRUCTURAL ENGINEERS

PK Associates LLC provides a full range of Structural Engineering Services from conceptual design through construction administration. Since 1992, they have been dedicated to exceeding client expectations and providing effective program design concepts and alternative structural system solutions. They are continually involved with complex and challenging structural design, using traditional methods combined with advanced computerized analysis and modeling techniques. PK Associates is registered in 49 states and provides exceptional service to our clients from 3 offices located in Arizona, Southern California and Colorado.

CLIFFORD R. PAUL, PE, SE – PK ASSOCIATES LLC STRUCTURAL ENGINEER (OPTIONAL)

Principal and co-founder of PK Associates LLC, Mr. Paul has been performing analysis, design, project management, value engineering and structural system selection for over 37 years. Mr. Paul has experience with a wide variety of projects including public works projects, medical centers, laboratories, large convention centers, public facilities, and central plant facilities. Mr. Paul and PK Associates will be providing assistance to PACE as needed for reviewing project background information/inspection report, and review of design of prep and patchwork where major structural repairs are determined to be required for the primary clarifiers rehabilitation.

EDUCATION

B.S. / Civil Engineering
California State University, Long Beach
2007

YEARS OF EXPERIENCE

16+ Years
Joined PACE in 2006

REGISTRATIONS

Professional Engineer
2014 / C83207

AFFILIATIONS

Water Environment Federation (WEF)

American Society of Civil Engineers (ASCE)

PUBLICATIONS

Peterson, J.D., Murphy, R.R., Jin, Y., Wang, L., Nessl, M.B., Ikehata, K. (2011) Health effects associated with wastewater treatment, reuse, and disposal. Water Environment Research 83:10, 1853-1875.

Robert Murphy has Civil Engineering experience spanning back to 2006. His experience includes design of wastewater treatment plants, sewer / stormwater / potable / reclaimed pump stations, water treatment and storage design. Mr. Murphy has served as the resident engineer for the construction of several wastewater treatment facilities, water distribution, and sewer collection and pump station projects. He has developed several equipment performance-based equipment specifications for process equipment selection prior to design, and the creation of operation and maintenance manuals for several water and wastewater conveyance and treatment systems and facilities. Mr. Murphy is adept in coordinating project plans, specifications, and reports with multiple consultants to obtain an efficient buildable and operable system.

RELATED EXPERIENCE

Tapia WRF Sodium Hypochlorite Tank and Piping Replacement – Calabasas, CA

The Las Virgenes Municipal Water District (District) determined that the 12 MGD Tapia Water Reclamation Facility (WRF) sodium hypochlorite (SHC) storage tanks and their associated process pipes had exceeded their useful service life after about 20 years of service. The existing SHC storage tank system used three tanks, with two tanks (Tanks 1 and 2) housed within one building room and one tank (Tank 3) housed in another, for a combined volume close to 20,000 gallons. As the Project Manager / Engineer-of-Record, Mr. Murphy made recommendations and designed a new layout to replace the three SHC tanks with four equally-sized Fiberglass Reinforced Plastic (FRP) material tanks based on the current physical design constraints, overall ease in installation, and long-term operation and maintenance for the SHC storage and feed system. This design included new level control equipment, specialized piping, and valving. Since the SHC is used with various treatment processes for the WRF, and specifically to meet the facility's permit objectives, PACE also developed a customized construction sequencing plan centered around minimizing any operational interruptions.

El Toro Water District Disinfection System Improvements – Laguna Hills, CA

The El Toro Water District (ETWD) existing 2MG and 3MG potable water tank reservoirs had difficulty with chlorine residual due to temperature stratification. Mr. Murphy served as the Sr. Project Engineer to assist in design of new tank mixing systems with a residual sampling system, a liquid chemical injection system and storage facility, and a new building with automation and site security. PACE evaluated numerous mixing equipment manufacturers and chose an external pump, which is easily accessible when the system requires maintenance. The high mixing rate of 7,500 gpm mixes the tank within 12 hours, and features built-in chemical monitoring. PACE provided calculations for disinfection storage requirements, as well as a process flow diagram for routing of flows of water, chemicals, analyzer lines, and the flow for mixing.

Lost Canyon Main Irrigation Pump Station – Simi Valley, CA

Mr. Murphy served as the Sr. Project Engineer to assist with project recommendations and design for the Lost Canyons Country Club Main Irrigation Pump Station. The new pump station will replace an older system and serve to provide pressure boosting and chemical treatment/injection into an existing non-potable irrigation force main serving the club's golf course needs. This pump station includes a pH dosing control system on the discharge of the pump station, as well as pH monitoring system, which allows for automated adjustment of chemical dosing accordingly. A chemical storage room was also integrated into the pump station which houses three chemical storage tanks (one 500-gallon, and two 1,000-gallon tanks). PACE has finished final design of the plans. Construction is pending.

Tartesso Water Reclamation Facility – Buckeye, AZ

PACE provided engineering design and construction services for the Phase I Tartesso Water Reclamation Facility (WRF) in the Tartesso Development in Buckeye, Arizona. Mr. Murphy served as the Design Engineer for the design of the 1.2 MGD WRF, which includes a sequencing batch reactor that treats wastewater to Arizona Department of Environmental Quality levels of A+ effluent. The facility includes a 14,000 CFM odor control unit which includes a three-stage

chemical scrubber, using both caustic / sodium hydroxide and bleach / sodium hypochlorite additions for treatment of odorous compounds. The chemical tanks use cross-linked polyethylene (XLPE) chemical tanks, consisting of one 1,000-gallon caustic tank and one 1,500-gallon bleach tank. PACE provided sizing and design of the tanks, process piping and vents, instruments, spill containment area, and safety features, including the anchorage design to account for wind and seismic activity.

Lathrop Consolidated Treatment Facility – Phase 2 Expansion – Lathrop, CA

As Sr. Project Engineer, Mr. Murphy developed and coordinated process design, and plan preparation for the expansion of the Lathrop Consolidated Treatment Facility, an MBR wastewater treatment facility, for the City of Lathrop, California. The existing facility was 1.0 MGD and its expanded capacity is 2.5 MGD with an ultimate build-out capacity of 9.0 MGD. Upgrades included new high-speed turbo blower and fine bubble aeration diffuser system, as well as upgrades and improvements to the existing chlorine contact basin and its associated equipment.

Tapia Water Reclamation Facility Blower and Aeration Equipment Improvements – Calabasas, CA

Mr. Murphy served as Sr. Project Engineer for the evaluation, design and permitting services of new blower and aeration equipment to improve energy and operational efficiency while reducing maintenance costs. He developed Performance-Based Specifications to evaluate major equipment, which helped reduce more than $300,000 in capital cost for the aeration project alone. He also coordinated permitting assistance to the District.

Winslow Wastewater Treatment Plant Renovations – Winslow, AZ

Mr. Murphy served as the Project Engineer for the Winslow WWTP renovation project and provided process, mechanical, and civil design. PACE identified options that will reduce current O&M costs, reduce capital improvement costs, and improve effluent quality without triggering regulatory delays due to existing permits. The plant upgrades included the replacement of its clarifiers and headworks, modifications to its oxidation ditch with a new aeration and blower system, and a complete overhaul of the plant's support and control infrastructure components.

San Clemente Wastewater Treatment Plant Upgrades – San Clemente, CA

Mr. Murphy was the Project Engineer and coordinator of the engineering design for several plant improvement projects on the City of San Clemente's 7.2 MGD facility in response to aging equipment and operational challenges. For the blower replacement project, Mr. Murphy performed preliminary design, equipment selection / procurement using performance-based specifications, final design and integration of the new blower system within the City's existing DO control system. The new blower system produced a 15% reduction in the plant's overall power use, reducing annual energy consumption by over 650,000 kW/hrs per year and reducing demand charges by 75 kW per month, netting $130K in annual energy savings.

Mountain House Water Reclamation Facility Expansion Phase III – Mountain House, CA

Mr. Murphy is currently serving as the Sr. Project Engineer for the Phase III expansion from 3.0 MGD to 5.4 MGD average dry weather flow. The expansion converts the secondary treatment process to a Membrane Bio Reactor (MBR) plant, with use of existing process tankage. Performance specifications were developed for new high efficiency blowers, and he analyzed and repurposed existing diffusers at the facility. Additionally, the design includes use of existing FRP tanks for clean-in-place aspects with the membrane equipment.

Santa Paula MBR Water Recycling Facility – Santa Paula, CA

Mr. Murphy served as both the Design Engineer and as the assistant Resident Project Representative for the new Santa Paula Water Recycling Facility (WRF). The existing wastewater treatment plant had reached the end of its service life and was no longer in compliance with current regulatory requirements. The City replaced the existing facility with a new WRF and percolation basin effluent disposal system. Mr. Murphy assisted on design of the civil, grading, mechanical, and utility plans, as well as construction administration for the duration of the project. The WRF is designed as a Membrane Bio Reactor (MBR) with an initial capacity of 3.4 MGD and readily expandable to 4.2 MGD to meet wastewater flow projections for the year 2025. Also included in the new WRF design were three percolation basins with a combined surface area of about 15 acres located to the west of the WRF site. The Santa Paula WRF is the largest Koch MBR facility in the United States, and is also the first DBOF municipal WRF in California. As part of the design process, an operator-engineer forum was used to develop plans and the equipment layout. This included customizing sludge thickening equipment to allow for an overall ease in sampling and operations. High speed turbo blowers and new high efficiency aeration diffusers

Show Low Wastewater Treatment Plant Upgrades – Show Low, AZ

Mr. Murphy was the Sr. Project Engineer and coordinated the engineering design for a complete WWTP overhaul design project for the City's expanded 2.5 MGD facility in response to aging equipment, operational challenges, and new governing agency compliance measurements. Upgrades to the City WWTP process included new high-speed turbo blowers, headworks equipment, a new secondary treatment and clarification process, new aeration equipment, and new sludge dewatering equipment. Mr. Murphy prepared, solicited and

evaluated all of the major equipment system performance-based specifications, which allowed for a significant reduction from original quotes the City had received. Following equipment evaluation and selection, Mr. Murphy developed plans and specifications, and served as the head construction administration engineer during construction.

Dateland Water Treatment Plant – Dateland, AZ

Mr. Murphy was the design engineer for a new multi-well groundwater treatment plant in Southwestern Arizona. The project consists of two new VFD-driven wells controlled to operate at constant pressure into a pre-treatment system followed by a desalination RO system. Post treatment including disinfection and storage is also provided. The entire system is highly automated included pre-treatment backwash and regeneration, and controls automation.

Santa Margarita Water District Oso Creek Wastewater Treatment Plant Upgrades and Automation – Rancho Santa Margarita, CA

Mr. Murphy served as Project Engineer preparing and coordinating complete engineering plans, specifications, and cost estimates for a new secondary process upgrade at the 2.5 MGD Oso Creek WWTP using high efficiency turbo blowers. The system included a new control strategy to further enhance efficiency using "most open valve" system control.

Adelanto Wastewater Treatment Plant Upgrades – Adelanto, CA

Mr. Murphy was the Project Engineer for the City of Adelanto WWTP Improvement Plan and provided process, mechanical, and civil design. The WWTP receives an average flow of 1.8 MGD, of which only 0.5 MGD can be treated with the existing plant in its current state. PACE provided engineering design and consulting services to construct new infrastructure and rehabilitate existing systems to not only regain the original plant capacity, but to increase the rated capacity to 4.0 MGD. New infrastructure included new screening and washing systems in the headworks, all new aeration and blower equipment in the existing secondary basins, two new 70' diameter circular clarifiers, an RAS/WAS pump station and new internal recycle pumping on the biological process. Modifications were made to the existing effluent filters and chlorine contact basin to produce full Title 22 compliant recycled water as well as improvements to the solids handling to improve dewatering performance and reduce cake volumes.

Burbank WRP Aeration and Headworks Rehabilitation Projects – Burbank, CA

Mr. Murphy served as the Engineer of Record for both the Burbank WRP Aeration and Headworks Rehabiliation Projects. PACE was contracted to provide design services for the replacement of the WRPs existing aeration and headworks systems under two separate plan contracts. Upgrades for the aeration project included installation of new high-speed turbo blowers to replace the older multi-stage centrifugal blowers. Upgrades to the headworks system included replacing the aging and cumbersome single-rake and grinder system with new multi-rake bar screens and washer/compactors. Both projects also included integration and controls for the new systems, as well as development of a comprehensive sequencing/construction phasing plan to allow for the operating plant to remain online during construction improvements.

Riverside Regional Water Quality Control Plant – Blower No. 2 Replacement - Riverside, CA

As the Project Engineer, Mr. Murphy was involved in the City of Riverside's Regional Water Quality Control Plant (RWQCP) Blower No.2 Replacement Project to replace of one of the existing 700 HP Integrally Geared Turblex Blowers with a new 600 HP Dual Core, Single Stage High-Speed Turbo blower. The design plans included the demolition of mechanical and electrical infrastructure, structural foundation improvements for the new blower's housekeeping pad, modifications to the mechanical piping and air intake/filtration system, and electrical improvements. Additionally, the improvement design included modifications to the existing complex fiber optic Ethernet and ModbusPlus communication network to allow for control and monitoring of the new blower in unison with the existing DO control program and the other remaining Turblex blowers.

Escalon Wastewater Treatment Plant Expansion Study – Escalon, CA

The City of Escalon has an increasing demand for new housing throughout the region, but are restricted due to treatment facility capacity limitations. PACE provided the City a thorough and creative assessment and formulation to expand the capacity and maximize the value of the existing Wastewater Treatment Plant. Mr. Murhpy served as the Sr. Project Engineer to design an effective treatment process and develop concepts to retrofi t the existing open ponds into Parkson "Biolac®" basins containing modern swing air diff users with hydraulic retention times of 24-36 hours, allowing similar philosophy compared to existing pond operation, but much more efficient waste processing and flexibility with varying inflows, including combining domestic and industrial flows after upstream primary treatment. This upgraded Biolac system freeboard in the secondary process will allow equalization of flows within the basin, eliminating the need for offline equalization, as well as provide the ability to treat lower flows when the basin level was decreased intentionally.

EDUCATION

B.S./Environmental Engineering
California Polytechnic University, San Luis Obispo, CA

YEARS OF EXPERIENCE

26+ Years
Joined PACE in 2000
With others over 4 years

REGISTRATIONS

Professional Engineer / AZ
2003 / 40050
Professional Engineer / CA
2002 / C62802

AFFILIATIONS

American Society of Civil Engineers (ASCE)

Water Environment Federation (WEF)

PRESENTATIONS

"Solar Application for Water and Wastewater Treatment Facilities"
AZWater Conference, 2016

Value Engineering Improves Water Quality and Reduces Capital and Operational Costs"
APWA Conference, 2015

Low Pressure Membranes, PEARL, PACE Internal Training Program, 2007

Duong Do has civil and environmental engineering experience spanning back to 1996. His areas of expertise include water and wastewater treatment processes and design, water and wastewater distribution and infrastructure design, effluent recharge design and implementation, water resource master planning and permitting. Mr. Do has served as the Engineer-of-Record and Project Manager for numerous wastewater treatment facilities, and as a former WWTP operator he has dedicated himself to operator-focused design, value engineering and energy efficiency improvements. His current responsibilities include managing design and engineering of water and wastewater treatment projects.

RELATED EXPERIENCE

Tapia WRF Sodium Hypochlorite Tank and Piping Replacement – Calabasas, CA

The Las Virgenes Municipal Water District (District) determined that the 12 MGD Tapia Water Reclamation Facility (WRF) sodium hypochlorite (SHC) storage tanks and their associated process pipes had exceeded their useful service life after about 20 years of service. The existing SHC storage tank system used three tanks, with two tanks (Tanks 1 and 2) housed within one building room and one tank (Tank 3) housed in another, for a combined volume close to 20,000 gallons. Mr. Do served as the Principal for the recommendations that were made and the design of a new layout to replace the three SHC tanks with four equally-sized Fiberglass Reinforced Plastic (FRP) material tanks based on the current physical design constraints, overall ease in installation, and long-term operation and maintenance for the SHC storage and feed system. This design included new level control equipment, specialized piping, and valving. Since the SHC is used with various treatment processes for the WRF, and specifically to meet the facility's permit objectives, PACE also developed a customized construction sequencing plan centered around minimizing any operational interruptions.

Lost Canyon Main Irrigation Pump Station – Simi Valley, CA

Mr. Do served as the Project Manager to provide the project recommendations and design for the Lost Canyons Country Club Main Irrigation Pump Station. The new pump station will replace an older system and serve to provide pressure boosting and chemical treatment/injection into an existing non-potable irrigation force main serving the club's golf course needs. This pump station includes a pH dosing control system on the discharge of the pump station, as well as pH monitoring system, which allows for automated adjustment of chemical dosing accordingly. A chemical storage room was also integrated into the pump station which houses three chemical storage tanks (one 500-gallon, and two 1,000-gallon tanks. PACE has finished final design of the plans. Construction is pending.

Tartesso Water Reclamation Facility – Buckeye, AZ

PACE provided engineering design and construction services for the Phase I Tartesso Water Reclamation Facility (WRF) in the Tartesso Development in Buckeye, Arizona. Mr. Do served as the Project Manager and Engineer-of-Record to lead the design of the 1.2 MGD WRF which includes a sequencing batch reactor that treats wastewater to Arizona Department of Environmental Quality levels of A+ effluent. The facility includes a 14,000 CFM odor control unit which includes a three-stage chemical scrubber, using both caustic / sodium hydroxide and bleach / sodium hypochlorite additions for treatment of odorous compounds. The chemical tanks use cross-linked polyethylene (XLPE) chemical tanks, consisting of one 1,000-gallon caustic tank and one 1,500-gallon bleach tank. PACE provided sizing and design of the tanks, process piping and vents, instruments, spill containment area, and safety features, including the anchorage design to account for wind and seismic activity.

Tapia WRF Blower and Aeration Equipment Improvements – Calabasas, CA

Mr. Do served as the Project Manager and Engineer-of-Record for the design and design support during construction for numerous projects at the Tapia Water Reclamation Facility (WRF), Rancho Las Virgenes Composting Facility, and other District Facilities for the Las Virgenes Municipal Water District (District). The District wanted to improve the efficiency and reduce operational costs of the existing 12 MGD Tapia Water Reclamation Facility by

implementing new blower and aeration equipment which improves energy and operational efficiency while reducing maintenance costs. Mr. Do evaluated the existing conditions, including the existing treatment process, blower performance, as-built drawings, construction submittal data, O&M manuals and SCADA data (DO Profiles) as well as spent time with the Operations Staff to better understand the challenges and identify any ancillary issues. The Preliminary Engineering Report (PER) identifed the Basis of Design for the Process Air System based on treatment flow and load conditions, effluent requirements and treatment process configurations that will maximize efficiencies and minimize power cost while improving effluent quality. A process control strategy was also developed for the aeration process using the Fully-Open Valve concept to control the air flow to each treatment basin based on DO and ORP control. The Performance-based Specifications included the replacement of (3) 900 HP, 4160 medium voltage Centrifugal Blowers with (3) new 400 HP, 480V, High Speed Turbo Magnetic Bearing Blowers, as well as the installation of new retrievable Fine Bubble Aeration System.

Rancho Las Virgenes Centrate Equalization Tanks and Rehabilitation of Centrate Pipeline – Calabasas, CA

As the Project Manager and Engineer-of-Record, Mr. Do managed the design of a new centrate storage/equalization tank and evaluated potential methods for the rehabilitation of the existing 8-inch DIP centrate line for the Las Virgenes Municipal Water District and Triunfo Sanitation District. Even though there are two existing centrate treatment tanks used to further reduce ammonia concentrate in the sludge dewatering centrate, both tanks were designed and equipment as treatment tanks and did not allow for a separate batch storage tank. As a result, one tank was converted to a batch storage tank and using equipment designed for biological treatment to store and mix the centrate, which was very inefficient, costly to operate, and reduces the treatment capacity of the process by 50%. Mr. Do led the evaluation and design of the new Centrate Equalization Storage Tank, which include a 62' diameter, glass-lined, steel tank with design volume of 450,000 gallon, new feed and process line infrastructure, and the civil for the tank pad and access road.

Winslow WWTP Renovations – Winslow, AZ

Mr. Do served as the Engineer-of-Record to perform an evaluation of the deficiencies and improvement design of the City's WWTP, which was struggling to meet water quality permit requirements. The plant was plagued by operational issues, making the effective treatment capacity roughly half of its design capacity of 2.2 MGD. Through the preparation of a Process, Efficiency, and Alternative Analysis Evaluation, several major process deficiencies were identified, as well as proposed improvements for each that preserved as much of the existing facility. Renovations were recommended to numerous processes including the lift station, headworks, flow equalization basin, oxidation ditches aeration system, blower upgrades, tertieary filters, UV disinfection system, effluent pump station, sludge dewatering process and the SCADA/control system. The improvements recovered the 2.2 MGD average daily flow capacity design. The plant upgrades included the design of new secondary clarifiers and headworks, modifications to its oxidation ditch with a new retrievable fine bubble aeration system and direct-drive mixers, installation of new high speed, hybrid rotary-lobe blower system, and a complete overhaul of the plant's controls and network infrastructure components.

Pinetop WWTP Upgrades – Pinetop/ Lakeside, AZ

As the Engineer-of-Record, Mr. Do led the design team to upgrade the existing 2.0 MGD Oxidation Ditch WWTP for the Pinetop-Lakeside Sanitation District. The WWTP upgrades included improvements to the oxidation ditch aeration and mixing system, 200-HP high speed magnetic bearing blower upgrades and process modification to improve effluent quality, process equalization and energy efficiency. The project also consists of integration and control upgrades to modernize the treatment process controls and to improve process and energy efficiency. The major project challenge is to provide a design that can be implement without taking the single ditch out of service and developing a Maintenance of Plant Operation (MOPO) plan which included the use of divers, treatment system shutdown, and control system shutdown.

Show Low Wastewater Treatment Plant Upgrades – Show Low, AZ

Mr. Do served as the Engineer-of-Record to convert an aerated lagoon into a 2.5 MGD Extended Aeration Activated Sludge WWTP, using Parkson's Biolac Treatment Process. The City of Show Low commissioned PACE to evaluate, design and assist in implementing the most appropriate and cost effective solutions to upgrade and expand the City's existing WWTP. With PACE's design, the new facility was able to produce high effluent water quality with Total Nitrogen consistently averaging less than 3 mg/L. The aeration system implemented included (3) 200 HP high speed air-bearing blowers.

Quartzsite WWTP Upgrades – Quartzsite, AZ

As Engineer-of- Record, Duong Do led the design team for the expansion of this existing 0.45 MGD SBR WWTP. The design upgrades included increasing the capacity to 0.9 MGD, improvement of water quality, process redundancy, and reduced operating cost. The challenge of the project was to provide a design that can be implemented within a 7-month window while maintaining treatment without the use of the existing single-basin SBR. Mr. Do developed a transition plan that converted the existing digester into a temporary SBR, while the existing single-basin SBR was upgraded to a two-basin SBR and equipped with new fine bubble aeration that is coupled with (3) 100 HP high-speed, hybrid screw blowers. The project also included upgrades to the influent lift station, headworks screening, chlorine

gas disinfection system, and the onsite reuse pump system. The Quartzsite WWTP was awarded the **2020 APWA Project of the Year Award -Small Cities/ Rural Communities** and the **2020 AZ Water Association Treatment Plant of the Year – Small Systems.**

Sierra Vista EOP Water Reclamation Facility – Sierra Vista, AZ

As Engineer-of-Record, Mr. Do designed the facility, including overall project coordination, process evaluation and design, plan development and permitting for the City's Environmental Operations Park (EOP), a 4 MGD multi-cell advanced secondary lagoon treatment system. Through the evaluation process, Mr. Do identified improvements to modify the existing lagoons to a biological nutrient removal system utilizing the Modified Ludzack-Ettinger activated sludge process. The modification is design to improve the treatment process performance and reliability to comply with current effluent requirements, reduce power consumption and operational costs, and reduce capital costs. Key upgrades include new headworks, grit removal, and septage receiving station, retrievable fine bubble aeration system coupled with (3) high speed turbo blowers, aerobic digester, sludge dewatering press, and a 5-acre Class A Biosolids Composting facility.

SPA 2 Water Reclamation Facility – Surprise, AZ

PACE provided engineering design and construction services as part of a Design-Build team for the SPA 2 Water Reclamation Facility (WRF) in the Surprise, Arizona. Mr. Do served as the Project Manager and Engineer-of-Record to lead the design of the 1.2 MGD WRF, which included a Hybrid SBR Activated Sludge Process to treats wastewater to meet ADEQ Class A+ Effluent Standards. The facility had an extremely small footprint of less than 15,000 ft^2. This was accomplished by incorporating the main treatment process in an underground structure with common wall construction. An aesthetically pleasing building is constructed above ground to serve as the administrative building, maintenance shop and to house process equipment. Mr. Do led the design of the new WRF, which included screening and grit removal headworks system, a 3.6 MGD reclaimed water pump station, anoxic basin, two SBR basins, cloth disk tertiary filtration, UV Disinfection, two aerobic digesters, sludge dewater centrifuge, and 14,000 SCFM Regenerative Carbon Odor Control System. Effluent from the SPA 2 WRF is reused with excess effluent being recharged through percolation basins and 8 vadose zone wells, which Mr. Do also designed and helped permitted.

SPA 3 Water Reclamation Facility – Surprise, AZ

As Project Manager and Engineer-of-Record, Mr. Do help lead the Design-Build team on the design of the new water reclamation facility servicing the Austin Ranch and surrounding Communities in the SPA 3 region located in Surprise, AZ. The WRF is designed with state-of-the-art technology from the top equipment manufacturers. It features Huber Fine Screens, Kaeser Blowers, Ozonia UV Disinfection, Flygt Pumps and Mixers and Aqua-Aerobic Cloth Filters. The SPA 3 WRF utilizes the Hybrid SBR design and has a design capacity of 1.8 MGD. Effluent is recharged through percolation basins and is designed to meet AZ Title 18 Class A+ Reclaimed Water Quality Standards. The SPA 3 WRF was awarded the **Design-Build Institute of America (DBIA) Western Pacific Region's "Best Project -Water" Regional Award.**

Civita Water Recycling Facility and Influent Pump Station – San Diego, CA

The Civita Water Recycling Facility is a 250,000 GPD MBR Wastewater Treatment facility designed to provide Title 22 recycled water for use in the Civita Development. As the Project Manager and the Engineer-of-Record, Mr. Do's innovative design incorporates the treatment facility within four levels of the underground parking structure that supports a 5-story residential/mixed use building complex. The facility is split into two main levels with the aeration/MBR blowers, UV disinfection, chlorine storage tanks, pumping and electrical equipment on the upper level and MBR tanks, aeration system and 500,000-gallon effluent storage tank on the lower levels. Wastewater enters the facility through a new influent diversion structure constructed over the main trunk sewer and designed to divert the wastewater to the new facility. The diversion acts as an isolated wet well that is hydraulically connected to the influent pumps located over 70 feet away inside the facility. This physical separation minimizes potential sewer gases from entering the facility and eliminated stricter building code requirements. The diversion structure is also equipped with a new pipe screen (patent-pending) that allows debris to bypass the diversion structure. The two influent pumps are rotary lobe pumps, each with a capacity of 0.3 MGD.

Tribute Water Reclamation Facility – Sierra Vista, AZ

As Engineer-of-Record for the Tribute Water Reclamation Facility (WRF), Mr. Do led the design team for this membrane bioreactor (MBR) treatment plant for the City of Sierra Vista, AZ. He provided complete design of the facility, including overall project coordination, process design, plan development and permitting. The Tribute WRF is designed to treat an average wastewater flow of 0.5 million gallons per day (MGD) and expandable to an ultimate capacity of 2.0 MGD. It will divert wastewater from a nearby sewer interceptor and treat the wastewater to Arizona Title 18.

EDUCATION

B.S. / Civil Engineering
California State University, Long Beach
2019

YEARS OF EXPERIENCE

4 Years
Joined PACE in 2018

REGISTRATIONS

Engineer in Training (EIT)
2019 / 168218

Kyle Smith is a design engineer with experience in design and construction support dating back to 2018. With a bachelor's degree emphasis in Civil Engineering, Mr. Smith has worked on several projects involving the rehabilitation of wastewater treatment plants, potable water storage tanks, and sewer, stormwater, and potable water infrastructure. In addition to design work, Mr. Smith has also provided services during construction on several projects and is experienced with the construction administration process, reviewing contractor submittals and requests for information.

RELATED EXPERIENCE

Las Virgenes Municipal Water District Tapia WRF Sodium Hypochlorite Tank and Piping Replacement – Calabasas, CA

PACE provided engineering design services and construction support services for the replacement and rehabilitation of the Sodium Hypochlorite Tank and Piping at the Tapia Water Reclamation Facility. The project included the selection of fiberglass reinforced plastic (FRP) tanks and recommendations of tank sizes and orientations to fit within the constraints of the existing chemical storage rooms. PACE also provided a recommended construction sequencing plan to phase the removal of the existing tanks with the installation of new tanks to maintain storage and supply of SHC to the facility. As the Design Engineer, Mr. Smith created project plans and specifications and provided construction support services.

Las Virgenes Municipal Water District (LVMWD) Digester 2 Rehabilitation Project – Calabasas, CA

Mr. Smith is serving as the Design Engineer for the rehabilitation of the existing LVMWD Digester that was constructed in the early 1990s. PACE prepared project plans and specifications for the rehabilitation including removal and replacement of all interior piping, fittings and supports, exterior valves and actuators, gas handling equipment, and rehabilitating the roof penetrations and hatches. Mr. Smith evaluated and incorporated "lessons learned" from the Digester 1 Rehabilitation Project to improve upon the design and limit potential delays during construction. He also conducted a site investigation and entry into the Digester to evaluate the condition of the existing Digester tank and prepared project plans and specifications. Mr. Smith is currently providing construction support services by reviewing contractor submittals and responding to RFIs.

Burbank Water Reclamation Plant (WRP) Influent Pump Station – Burbank, CA

The City of Burbank sought to install new raw influent pumps at the Burbank Wastewater Reclamation Plant (WRP) to increase the pump station capacity and meet current and future flow conditions. PACE performed a technical evaluation of the existing influent pump station and prepared a performance based design report for recommendations of replacement influent pumps, and minor mechanical, structural, and electrical upgrades. As the Design Engineer, Mr. Smith evaluated the existing influent pump station for required upgrades, prepared a performance based evaluation for recommendations of replacing pumping equipment, and evaluated the hydraulic capacity of the headworks, influent pump station, and primary sedimentation basins to identify potential hydraulic limitations for the plant's influent flow.

Las Virgenes Municipal Water District Tapia Water Reclamation Facility Blower and Aeration Equipment Improvements – Calabasas, CA

PACE performed engineering services for Las Virgenes Municipal Water District (District) by implementing a new blower and aeration equipment for the existing 12 MGD Tapia Water Reclamation Facility to improve the operational efficiency and reduce maintenance costs. PACE evaluated the existing conditions, including the existing treatment process, blower performance, as-built drawings, construction submittal data, O&M manuals and SCADA data (DO Profiles) as well as spent time with the Operations Staff to better understand the challenges and identify any ancillary issues and provided upgrades to the blower system. As the Assistant Design Engineer, Mr. Smith assisted in construction support services by reviewing contractor submittals and responding to RFIs.

Las Virgenes Municipal Water District Tapia Headworks Rehabilitation – Calabasas, CA

PACE provided engineering design services for the replacement of fiberglass grating and process air piping at the existing headworks for the Tapia Water Reclamation Facility. Mr. Smith is serving as the Assistant Design Engineer to provide construction support services by reviewing contractor submittals and responding to RFIs.

Mountain House Water Recycling Facility Phase III Expansion – Tracy, CA

As the Design Engineer, Mr. Smith is currently providing construction support services for the Phase III 5.4 MGD average dry weather flow expansion by reviewing submittals and responding to RFIs. The Phase III expansion converts the secondary treatment process to a membrane bio-reactor treatment process to meet the existing waste discharge requirements and also comply with California Title 22 Recycled Water Requirements for unrestricted reuse. PACE is designing the facility around use of existing infrastructure by repurposing and subdividing the existing SBR process tanks into anoxic, oxic, and post-anoxic tanks prior to feeding the new MBR facility. The design also incorporates the existing UV channel system for tertiary treatment with the modified and expanded facility. New "Generation 2" UV modules will replace the "Generation 1" modules within the existing structure. The new system will deliver 80 mJ/cm2 to 8.5 MGD peak flow and 65% ultraviolet transmission with one module out of service in each channel.

Quartzsite Wastewater Treatment Plant (WWTP) Evaluation and Expansion – Quartzsite, AZ

PACE provided engineering design services to increase the capacity of the Quartzsite WWTP from 0.45 MGD to 0.90 MGD by constructing a new second sequential batch reactor (SBR) basin as well as other ancillary systems necessary to increase the capacity. PACE provided an in-depth evaluation of the proposed expansion and existing system including a detailed hydraulic analysis, biological process modeling, energy consumption analysis, and electrical and control system review. One of the solutions included dividing the existing SBR basin into two smaller basins to allow better summer low flow treatment but still have the capacity to treat the design flow of 0.9 MGD. Mr. Smith served as the Assistant Design Engineer to provide construction support services by reviewing contractor submittals and responding to RFIs.

Potable Water Twin Lakes Booster Pump Station Expansion – Chatsworth, CA

As part of Foremost Companies' proposed 233 acre Deerlake Ranch development, PACE provided Engineering Design Services to make the necessary upgrades to the existing Twin Lakes Pump Station in order to meet the increase in potable water demand created by the new development. The pump station upgrades included the development of a new pump station control scheme, the required pumps in order to meet the demand, new 4,000 gallon surge tank, mechanical equipment and valving, new standby generator, and associated electrical improvements. Mr. Smith served as the Assistant Design Engineer to assist in performing engineering analysis.

Deerlake Potable Water Storage Tank at S1 Site – Chatsworth, CA

As part of Foremost Companies' proposed 233 acre Deerlake Ranch development, PACE provided Engineering Design Services to provide additional 600,000 gallons of potable water storage to the Twin Lakes System. PACE provided engineering services to perform a preliminary evaluation for constructing a 1.0 MG potable water storage tank in replacement of a 0.4 MG storage tank at the existing Twin Lakes tank site. As the Design Engineer, Mr. Smith performed a technical evaluation for providing a larger potable water storage tank at the existing potable water storage tank site. He also conducted a hydraulic analysis of tank feed lines from the potable water pump station to the tank and from the tank to the new Deerlake Development to determine if the proposed tank could deliver adequate capacity and pressure to the new development. In addition, Mr. Smith prepared a preliminary design report for the construction of the proposed 1.0 MG potable water tank, including evaluating the impact of the reduction of storage at the existing tank site during construction. PACE is currently preparing project plans and specifications for construction of the proposed 1.0 MG tank.

Pico Zone A Recycled Water Pump Station, Talega Lift Station Modifications – San Clemente, CA

PACE designed two pump stations to provide pumping at the Pico site and Talega Site to finalize the new permanent shared San Clemente connections for wastewater and recycled water. As the Assistant Design Engineer, Mr. Smith performed the preliminary engineering analysis, assisted in the pump selection, and assisted in preparing a construction sequencing plan.

EDUCATION
B.S. Electrical Engineering
Illinois Institute of Technology /2010

YEARS OF EXPERIENCE
12 Years
Joined PACE in 2019
With others more than 9 years

REGISTRATIONS
Professional Engineer / CA
2018 / 22545

Professional Engineer / AZ
2021 / 72519

Professional Engineer/ UT
2021 / 12046766-2202

C-10 Electrical Contractor / CA
2018 / 1047665

AFFILIATIONS
Institute of Electrical and Electronic Engineers (IEEE)

Mr. Najarian received his Bachelor of Science degree in Electrical Engineering from the Illinois Institute of Technology in 2010 and is a licensed electrical contractor in the state of California. He has extensive experience testing and installing electrical equipment during construction such as wastewater and water treatment plants, pumps, motors, control panels and instrumentation at industrial sites, oil refineries, generating stations and manufacturing plants. His background in electrical field service and troubleshooting allows him to effectively design drawing packages in various water applications. He has prepared electrical drawing packages for wastewater neutralization systems, pumping stations, aeration treatment, reverse osmosis, and chemical injection.

RELATED EXPERIENCE

Tapia Water Reclamation Facility Sodium Hypochlorite Tank and Piping Replacement – Calabasas, CA

The Las Virgenes Municipal Water District (District) determined that the 12 MGD Tapia Water Reclamation Facility (WRF) sodium hypochlorite (SHC) storage tanks and their associated process pipes had exceeded their useful service life after about 20 years of service. The existing SHC storage tank system used three tanks, with two tanks (Tanks 1 and 2) housed within one building room and one tank (Tank 3) housed in another, for a combined volume close to 20,000-gallons. Mr. Najarian served as the Sr. Electrical Engineer for the design of a new layout to replace the three SHC tanks with four equally-sized Fiberglass Reinforced Plastic (FRP) material tanks based on the current physical design constraints, overall ease in installation, and long-term operation and maintenance for the SHC storage and feed system. This design included new level control equipment, specialized piping, and valving.

Burbank WRP Raw Influent Pump Replacement – Burbank, CA

The City of Burbank sought to install new raw influent pumps designed and installed at the Wastewater Reclamation Plant (WRP) to increase the pump station capacity, provide better influent flow control, and more reliable pumping for the feed to the downstream treatment processes. PACE conducted a technical evaluation from an efficiency, process, mechanical, structural, electrical and integration and controls perspective, and developed a Basis of Design Report (BODR) for recommendations of replacement influent pumps, and minor mechanical, structural, and electrical upgrades. PACE also assisted the City and operators, in collaboration with the manufacturer, to select the specific components and materials for the new pumps to best suit their intended application. Mr. Najarian served as the Sr. Electrical Engineer for this project.

Las Virgenes Municipal Water District Tapia Water Reclamation Facility Blower and Aeration Equipment Improvements –Calabasas, CA

As the Sr. Electrical Engineer, Mr. Najarian helped design and review process air improvements which included control panels, instrumentation, aeration blowers and 3-400 HP motors for the Las Virgenes Municipal Water & Triunfo Sanitation District Joint Powers Authority. Site visits and customer meetings helped ensure installations were completed as designed to include all metering and communication equipment were installed as specified. Calculations for voltage drops, harmonics, grounding requirements, breaker sizing, and conduit/wire selection were performed.

Las Virgenes Municipal Water District Reservoir No. 2 Improvements – Calabasas, CA

Reservoir No. 2 is a 45 acre-ft uncovered earthen reservoir used to store recycled water for LVMWD before distribution to the recycled water customers. PACE evaluated the reservoir and pump station operation to develop construction plans and specifications for improvements to the reservoir and process piping. Mr. Najarian served as the Sr. Electrical Engineer for this project.

Las Virgenes Twin Lake Pump Station Upgrades – Calabasas, CA

The Twin Lake Pump Station Upgrades included the installation of two new 100 HP and one new 75 HP vertical turbine pumps, along with the installation of a 4,000-gal surge tank. As the Sr. Electrical Engineer, Mr. Najarian helped with the design plans and specifications for the upgrades of the pump station, including site grading, process yard piping, and new MCC and electrical service transformer.

City of Lathrop Consolidated Treatment Facility (CTF) Evaluation Expansions Phases 2 and 3 – Lathrop, CA

PACE provided project development, studies, design, and bid and construction administration services for two phases of expansion of the City of Lathrop Consolidated Treatment Facility (CTF), an MBR wastewater treatment facility that treats residential and commercial/industrial sewage flows. The phase 2 expansion took the capacity from 1.0 MGD to 2.5 MGD, and the phase 3 capacity currently under design will bring the facility to 4.0 MGD, with an ultimate buildout capacity of 6.0 MGD. PACE provided a creative approach to the Phase 2 upgrade with a new secondary and MBR treatment system. The Phase 3 expansion is currently under design and includes systems to accommodate 4.0 MGD capacity, as well as provisions for the full buildout of the facilities. A new headworks screening train will provide the ultimate and full buildout average day flow capacity of 6.0 MGD, and Peak Hourly Flow capacity of 12 MGD. As the Sr. Electrical Engineer, Mr. Najarian reviewed all plans and specifications for both Phases 2 and 3.

Mountain House Water Recycled Facility Evaluations and Phase II and Phase III Expansions – Tracy, CA

PACE, as the Engineer of Record, provided design, permitting, construction services, and start-up services for Phases II expansion and is currently providing design for the Phase III expansion of the Mountain House Water Reclamation Facility. The Phase II expansion replaced the 0.45 MGD aerated lagoon wastewater treatment plant with a 3.0 MGD advanced SBR Water Reclamation Facility. The expanded facility features a two-tank hybrid SBR process for biological oxidation of organics and secondary clarification. PACE is now designing the Phase III expansion to a build-out the capacity of 5.4 MGD and converting the secondary treatment process to a membrane bio-reactor treatment process to meet the existing waste discharge requirements and also comply with California Title 22 Recycled Water Requirements for unrestricted reuse. The new system will deliver 80 mJ/cm2 to 8.5 MGD peak flow and 65% ultraviolet transmission with one module out of service in each channel. As the Sr. Electrical Engineer, Mr. Najarian reviewed all plans and specifications for both Phases 2 and 3.

City of San Clemente Water Reclamation Facility Sluice Gate Replacement / Automation – San Clemente, CA

The City of San Clemente was seeking to upgrade two existing sluice gates at the Reclamation Storage Bay Structure at the WRP. The existing gate on the 14" line at the structure was operated via an electric actuator, and was used to isolate or feed reclaimed water to the offsite Califia Pump Station. Although, this gate's actuator is only used locally (in hand) for opening and closing the gate. The other gate to be replaced was on the 24" opening on the inlet channel of the Reclamation Storage Bay Structure, which allows for reclaimed water to cycle into and out of the Reclamation Storage Bay from the Chlorine Contact Basin and Reclaimed Water Pump Station. This isolation sluice gate was setup with a handwheel, which operators manually open and close when required. As the Sr. Electrical Engineer, Mr. Najarian provided the design for new automated sluice gates at each of these locations, both complete with new electric actuators. The actuators would be placed on the WRP's network to allow for automation and monitoring of the gate position, allowing for each of the gates to be closed off in a "non-spec" reclaimed water scenario. Mr. Najarian reviewed the existing background project information, the existing mechanical specifications, and has developed electrical and control aspects of the specs, in addition to providing plans.

City of San Clemente Water Reclamation Facility Process Efficiency Upgrade Projects – San Clemente, CA

PACE has provided consulting, design, construction administration, and controls and integration services for the City of San Clemente on several process efficiency upgrade projects for their 7.0 MGD Water Reclamation Facility (WRF). With goals of gaining efficiency and cutting back on power uses and associated operational costs for the WRF, the City looked to upgrade several aspects of their facility. Such projects included replacing aging infrastructure in both the sludge handling and dewatering process areas, and the secondary aeration processes. Mr. Najarian served as the Sr. Electrical Engineer for sludge thickening process upgrades.

Santa Monica Sustainable Water Infrastructure Project (SWIP) Advanced Water Recycling Facility – Santa Monica, CA

Mr. Najarian served as the Sr. Electrical Engineer for the Advanced Water Treatment Facility (AWTF), a key component of the City of Santa Monica's Sustainable Water Infrastructure Project (SWIP). The AWTF treats a combination of raw wastewater and harvested stormwater, producing 1.0 MGD of purified water for groundwater augmentation. The facility is one of the first to take in raw wastewater, fully oxidize the stream via biological treatment, and provide the pathogen reduction requirements to meet California Title 22 regulations for Indirect Potable Reuse (IPR) of 12 log virus, 10 log cryptosporidium, and 10 log giardia all within one facility. The treatment process consists of a five-barrier stream: membrane bioreactor (MBR), cartridge filtration, reverse osmosis (RO), ultraviolet advanced oxidation process (UVAOP), and chlorine disinfection. UVAOP uses free chlorine as the oxidant to reduce the number of chemicals required on-site, with residual chlorine providing downstream process benefits for chlorine disinfection. The AWTF will be located underneath the City's

Civic Center parking lot with the first level below ground serves as the mechanical treatment area and the second level containing the process tanks.

Tuolumne Wastewater Treatment Plant Upgrade – Sonora, CA

Mr. Najarian is serving as the Sr. Electrical Engineer for the upgrade designs to address Sonora Regional Wastewater Treatment Plant's (SRWWTP) declining effluent performance and increase the capacity to 5.0 MGD of Max Day Flows (MDF) and 10.0 MGD Peak Hour Flows (PHF). The facility will convert the secondary treatment process to an Extended Aeration Activated Sludge (EAAS) process utilizing the Parkson's Biolac® mixing and aeration process. All wastewater flows to the proposed SRWWTP process will be treated by a new headworks, primary screening and grit removal, new dual-train extended aeration activated sludge (EAAS) basins, new secondary clarifiers, new chlorine disinfection system, new effluent disk cloth filters and a new sludge dewatering facility. These upgrades will also replace the existing polishing ponds and include a new administration and electrical building, a new headworks and sludge dewatering building and a renovated digestion building where the existing anaerobic digesters will be repurposed into aerobic digesters for solids processing.

Hyperion Water Reclamation Plant – Playa Del Ray, CA

Mr. Najarian served as the lead Field Service Electrical Engineer on the installation of the water filtration system to supply the boiler feedwater at the new Hyperion Water Reclamation plant. This project included multiple holding tanks, filtration systems and pumps. Tasks included drawing/specification review, coordinating installations, field testing and onsite programming. Sensors for water quality such as conductivity, resistivity, pH and turbidity were installed and calibrated.

PepsiCo Gatorade Bottling Wastewater Treatment System – Oakland, CA

As the lead Field Service Electrical Engineer, Mr. Najarian designed and installed a custom wastewater neutralization system that was able to process influent waste up to 1000 gallons per minute, generated at the PepsiCo Gatorade facility. Special attention was made to ensure the startup of the booster pumps would not cause electrical interference throughout the plant by installing Variable Frequency Drives and line reactors. Programming and installing of multiple chemicals pumps were performed to ensure proper dosing. Mixers, valves and timers were all incorporated on a Human Machine Interface to allow operators safe access to the system process.

CLIFFORD R. PAUL, P.E., S.E.

PRINCIPAL

Principal and Co-Founder of PK Associates, LLC, Mr. Paul has been performing analysis, design, project management, value engineering and structural system selection for more than 42 years. His key responsibilities will involve overall design review and project oversight from programming, design through construction.

RELATED EXPERIENCE

City of Anaheim Pressure Regulation Stations Rehabilitation | Anaheim, CA
Provided structural assessment on several of the City of Anaheim's Water Pressure Regulating Stations. Provided recommendations and design plans and specifications for concrete rehabilitation and modifications to the existing deteriorated station structures. Design included coordination to allow for the stations to remain in operation during construction.

Sierra Nevada Aquatic Research Laboratory Hydraulic Structure Rehab| Mammoth, CA
Provided design for concrete repair and rehabilitation work on the facilities hydraulic control/aquatic research structures. Concrete repair work included patch and prep work for installation of a new lining systems for each of the structures.

Adelanto Water Water Treatment | Adelanto, CA
Designed concrete pads to support backwash/holding tank, pre-filtration system (single tank), for RO skid system & chemical feed totes and calcite filter system. Design seismic anchorage slab for tank and equipment.

CCA San Diego Correctional Facility Replacement | San Diego, CA
Provide engineering services to modify size and configuration of new grey water tank and headworks facility. Adjusted tank canopy to accommodate new tank size.

Irvine Spectrum Lighting and Sound Stage Support | Irvine, CA
Provided Engineering design for lighting support trusses.

Meredith Storm Water Pump Station Upgrades | Huntington Beach, CA
Enlarge existing building by 2'-0" to accommodate the larger engine size. Created accommodations for the removal and replacement of the existing and new engines. Revised new support for the existing steel grating.

Quartzsite WWTP Expansion | Quartzsite, CA
Design of concrete dividing wall at existing SBR Basin and Catwalk framing over new divider wall. Created new wall at perimeter of existing SBR Basin, supports for Crane to run along divider wall, and new sludge drying beds (masonry walls and concrete loader ramp slabs). Designed all equipment pads on grade, foundations for prefabricated metal building at Blowers and added fourth block wall to existing Electrical Room. Created foundation for crane at Lift Station and foundation for relocating existing RV Canopy.

San Clemente WRP | San Clemente, CA
Design of concrete pedestal and footing at centrifuge. Created new slab on grade (due to demo of existing slab for new equipment installation).

Santa Paula WRF & Storage Basin | Santa Paula, CA
Design 3.4 MGD tank (below grade) for Wastewater Recycling Facility & Storage Basin, cast-in-place concrete lid over tank footprint, masonry walls with pitched steel roof, 6,000 sq. ft headworks building, masonry walls with pitched steel roof and 1,100 sq. ft. miscellaneous concrete structure.

YEARS WITH FIRM: 29

CONTACT INFO:
7434 East McDonald Drive
Scottsdale, Arizona, 85250
(480) 922-8854
cpaul@pkastructural.com

EDUCATION:
B.S., Structural Engineering,
University of Colorado, 1977

Regular Guest Lecturer for the ASU Del E. Webb School of Construction

PROFESSIONAL REGISTRATIONS:
Licensed Structural Engineer:
California #50390
Arizona #15323

PROFESSIONAL AFFILIATIONS:
American Concrete Institute
American Inst. of Steel Construction
Structural Engineers Association AZ
ASU Council for Design Excellence
ASU CREATE Founding Member
Pre|Cast Concrete Institute

ADDITIONAL INFORMATION:
Guest Lecturer at U of A School of Architecture

Guest Lecturer at ASU School of Construction

Teaches Structural 101 Seminars

Proof of Professional Registrations

MURPHY, ROBERT RUSSELL

LICENSE NUMBER: 83207 **LICENSE TYPE:** CIVIL ENGINEER
LICENSE STATUS: CLEAR **EXPIRATION DATE:** MARCH 31, 2023
SECONDARY STATUS: N/A
CITY: FULLERTON **STATE:** CALIFORNIA **COUNTY:** ORANGE **ZIP:** 92832

DO, DUONG THAI

LICENSE NUMBER: 62802 **LICENSE TYPE:** CIVIL ENGINEER
LICENSE STATUS: CLEAR **EXPIRATION DATE:** JUNE 30, 2024
SECONDARY STATUS: N/A
CITY: GARDEN GROVE **STATE:** CALIFORNIA **COUNTY:** ORANGE **ZIP:** 92843

NAJARIAN, CHRISTOPHER

LICENSE NUMBER: 22545 **LICENSE TYPE:** ELECTRICAL ENGINEER
LICENSE STATUS: CLEAR **EXPIRATION DATE:** DECEMBER 31, 2022
SECONDARY STATUS: N/A
CITY: HUNTINGTON BEACH **STATE:** CALIFORNIA **COUNTY:** ORANGE **ZIP:** 92647

PAUL, CLIFFORD

LICENSE NUMBER: 50390 **LICENSE TYPE:** CIVIL ENGINEER
LICENSE STATUS: CLEAR **EXPIRATION DATE:** JUNE 30, 2023
SECONDARY STATUS: N/A
CITY: SCOTTSDALE **STATE:** ARIZONA **COUNTY:** OUT OF STATE **ZIP:** 85250

References

Our direct experience in design, construction and operations on new and live operating facilities provides us a unique ability to identify and work around site issues while maintaining capital and operational budgets. Listed below are some of PACE's most relevant related projects. Included in the descriptions are projects supported/led by Robert Murphy and Duong Do, the proposed Project Manager and Principal / QA/QC for this project effort.

Tapia WRF Sodium Hypochlorite Tank and Piping Replacement
Calabasas, CA

REFERENCE:

Las Virgenes Municipal Water District
Eric Schlageter, PE, ENV SP, District Principal Engineer
(818) 251-2142

TEAM MEMBERS:

- Duong Do, PE – Principal / QA/QC
- Robert Murphy, PE – Project Manager/Engineer of Record
- Chris Najarian, PE – Sr. Electrical Engineer
- Kyle Smith, EIT – Design Engineer

RELEVANT FEATURES:

- ✓ Chemical storage and distribution
- ✓ Mechanical and electrical design
- ✓ Instrumentation and controls
- ✓ Customized construction sequencing plan centered around minimizing operational interruption

The Las Virgenes Municipal Water District (District) determined that the 12 MGD Tapia Water Reclamation Facility (WRF) sodium hypochlorite (SHC) storage tanks and their associated process pipes had exceeded their useful service life after about 20 years of service. The existing SHC storage tank system used three tanks, with two tanks (Tanks 1 and 2) housed within one building room and one tank (Tank 3) housed in another, for a combined volume close to 20,000 gallons. PACE made recommendations and designed a new layout to replace the three SHC tanks with four equally-sized Fiberglass Reinforced Plastic (FRP) material tanks based on the current physical design constraints, overall ease in installation, and long-term operation and maintenance for the SHC storage and feed system. This design included new level control equipment, specialized piping, and valving. Since the SHC is used with various treatment processes for the WRF, and specifically to meet the facility's permit objectives, PACE also developed a customized construction sequencing plan centered around minimizing any operational interruptions.

El Toro Water District Disinfection System Improvements
Laguna Hills, CA

REFERENCE:

El Toro Water District
Dennis Cafferty, PE, Director of Operations & Engineering
(949) 837-7050

TEAM MEMBERS:

- Andy Komor, PE – Project Manager
- Robert Murphy, PE – Sr. Project Engineer

RELEVANT FEATURES:

- ✓ Liquid chemical injection system and storage facility
- ✓ New building with automation and site security
- ✓ Developed tank and disinfection sizing and storage requirements
- ✓ Improvements on an existing system

The El Toro Water District (ETWD) existing 2MG and 3MG potable water tank reservoirs had difficulty with chlorine residual due to temperature stratification. ETWD contracted PACE to design new tank mixing systems with a residual sampling system, a liquid chemical injection system and storage facility, and a new building with automation and site security. Civil, mechanical, electrical and controls design plans, specifications, and cost estimates were produced for construction, with PACE also serving to provide services during construction.

PACE evaluated numerous mixing equipment manufacturers and ranked each manufacturer based on several criteria including capital cost, mixing rate, and energy consumption. The tank mixer chosen is an external pump, which is easily accessible when the system requires maintenance. The high mixing rate of 7,500 gpm mixes the tank within 12 hours, and features built-in chemical monitoring.

PACE provided calculations for disinfection storage requirements, as well as a process flow diagram for routing of flows of water, chemicals, analyzer lines, and the flow for mixing. The 300 SF liquid chemical storage facility houses a 500-gallon Ammonium Hydroxide tank and a 2,000 gallon tank for Sodium Hypochlorite.

Lost Canyon Main Irrigation Pump Station
Simi Valley, CA

REFERENCE:

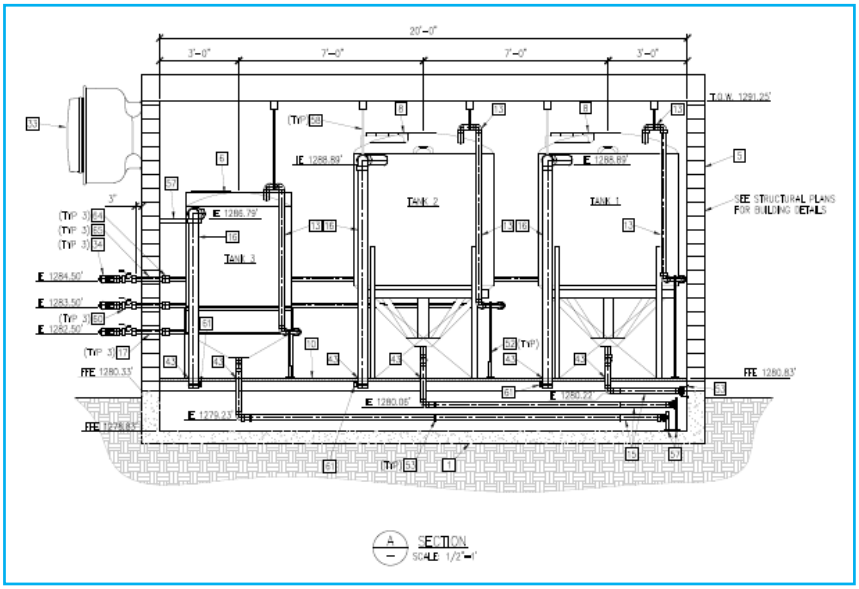
Newport Pacific Land Company
Noah Shih
(949) 945-2295

TEAM MEMBERS:

- Duong Do, PE – Project Manager
- Robert Murphy, PE – Sr. Project Engineer

RELEVANT FEATURES:

- ✓ Chemical storage tanks – sizing and design
- ✓ Chemical fill, vent, drain piping design
- ✓ Liquid chemical injection system and storage facility
- ✓ Small footprint
- ✓ Technical Memorandum with recommendations
- ✓ Bid Plans



PACE provided project recommendations and design for the Lost Canyons Country Club Main Irrigation Pump Station. The new pump station will replace an older system and serve to provide pressure boosting and chemical treatment/injection into an existing non-potable irrigation force main serving the club's golf course needs. PACE has finished final design of the plans. Construction is pending.

The pump station is designed to draw water from an onsite storage lake fed which is fed from a groundwater source. The typical pH and alkalinity of the lake water is high, which can lead to detrimental effects on landscaping when the water is used for irrigation. As such, PACE provided design of a pH dosing control system on the discharge of the pump station, as well as pH monitoring system, which allows for automated adjustment of chemical dosing accordingly.

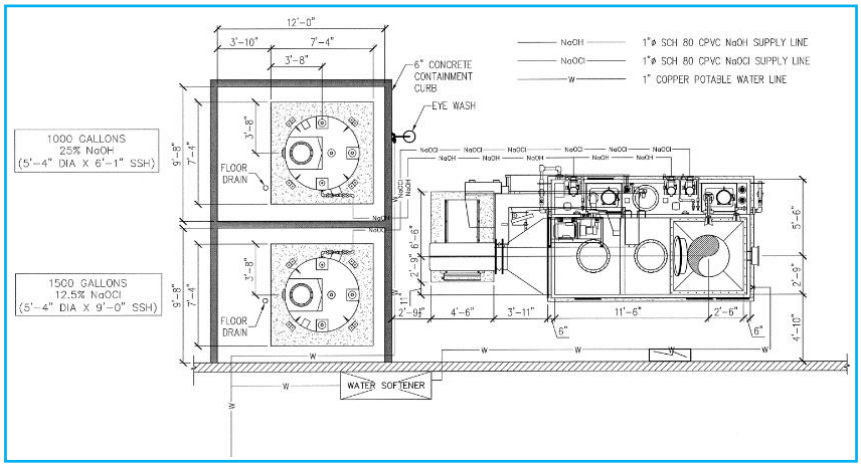
The pump station includes and integrated chemical storage room, which houses three chemical storage tanks (one 500-gallon, and two 1,000-gallon tanks). In addition to matching the Country Club's aesthetic them, PACE designed the building to allow for ease with access in and around the pump station and chemical storage tanks while still maintaining an overall small footprint that does not encroach into the golf course and development areas. The tank sizes were also sized to accommodate ease in filling and draining with use with a conical design and support legs. The building design also includes an integrated sump serving as the chemical containment area in the event of a spill.

Tartesso Water Reclamation Facility
Buckey, AZ

REFERENCE:
PERC Water
Larry Johnson, Technical Services
(714) 514-0155

TEAM MEMBERS:
- Duong Do, PE – Project Manager
- Robert Murphy, PE – Design Engineer

RELEVANT FEATURES:
- ✓ Chemical Tank Sizing
- ✓ Multiple Chemical Storage Tanks
- ✓ Spill Containment Design
- ✓ Chemical Feed Piping and Process



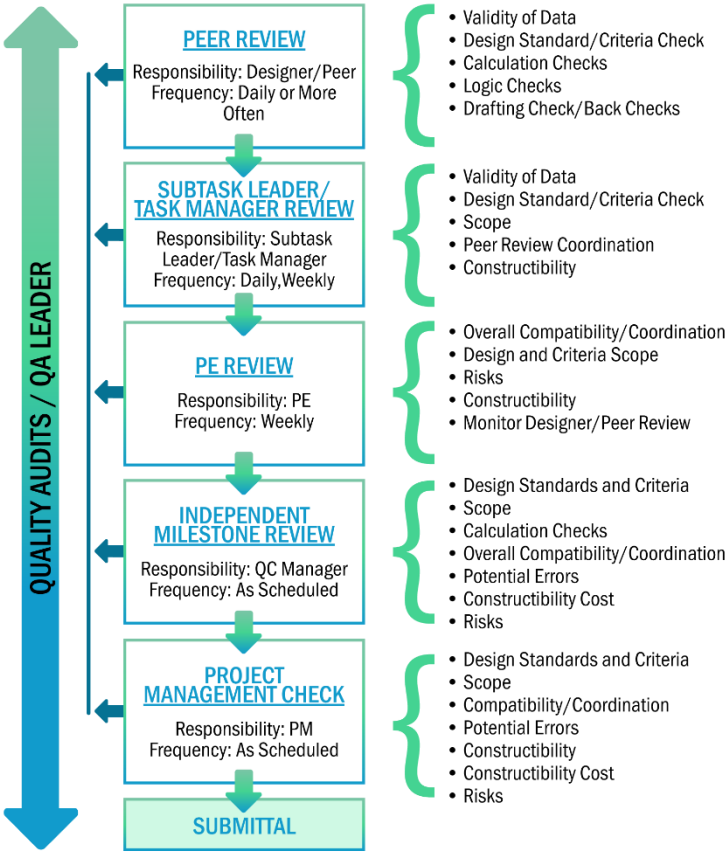
PACE provided engineering design and construction services for the Phase I Tartesso Water Reclamation Facility (WRF) in the Tartesso Development in Buckeye, Arizona. The 1.2 MGD WRF design includes a sequencing batch reactor design, treating wastewater to Arizona Department of Environmental Quality levels of A+ effluent. Due to prevailing winds and proximity to the development, the WRF was designed with a robust odor control unit. The facility includes a 14,000 CFM odor control unit designed to scrub foul air from several areas of the facility. The odor control system was designed to include a three-stage chemical scrubber, using both caustic / sodium hydroxide and bleach / sodium hypochlorite additions for treatment of odorous compounds.

The chemical tanks include use of cross-linked polyethylene (XLPE) chemical tanks, consisting of one 1,000-gallon caustic tank and one 1,500-gallon bleach tank. PACE provided sizing and design of the tanks, process piping and vents, instruments, spill containment area, and safety features, including the anchorage design to account for wind and seismic activity. With capital budget at the forefront for the project owner for all aspects of the project, PACE selected use of XLPE tanks for use with the chemical odor control system.

Quality Control Process

The work for this project will be conducted at PACE's headquarters in Fountain Valley, CA. PACE's Quality Assurance/ Quality Control method will be utilized to coordinate with the District and to maintain the design on schedule.

External Office Coordination: The Project Manager will coordinate all planning and design work with PACE's internal staff. Regular meetings or teleconferences will be held with applicable Project Team members to coordinate engineering study and/ or design issues. Meeting minutes will be kept and retained in project files. All telephone conversations with client, other offices, and consultants will be logged and retained in the project files. All incoming or outgoing correspondence will be through the Project Manager only.



Quality Assurance/ Quality Control

- **The PACE QA/QC Philosophy: PACE's** concept for Quality Assurance/ Quality Control is to remove barriers so that each designer and engineer can design each element of the project correctly, the first time. This starts with the designation of individuals with appropriate experience and availability to manage the project, lead tasks and accomplish technical work. A second element is to gain understanding and commitment from each team member on the scope of work, their responsibilities, within the works scope as well as the budget and schedule. The third element is to provide a structured process for reviews.
- **The QA/QC Process**: The Quality Assurance/ Quality Control Program as stated, places responsibility at the level of the organization closest to production of each work element. The peer reviewer is designed to check/ back check, make conclusions on design methods, calculations, and decisions. The designer and peers are encouraged to discuss approach and identify points of agreement and disagreement. Areas of disagreement will be noted and discussed with the Project Manager.
- **Levels of Review:** Project Managers and independent senior level reviews are designed to go beyond a "2+2" check format to provide guidance on alternatives to the design, logic checks of the design assumptions and conclusions and to review compatibility with other disciplines'' work which may affect the task. The independent reviewers are expected to comment on constructability, compare construction cost to budget and suggest potential cost savings. Finally, the Project Manager checks each submittal to assure design standards and conformance with project concepts as well constructability and construction costs.

The Principal-In-Charge of Quality Assurance/ Quality Control provides an on-going review of the process. This includes spot checks as well as structured audits to assure that the process is fully implemented and working within the entire team.

PACIAQU-01 AALVAREZ2

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 10/13/2022

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER License # 0757776
HUB International Insurance Services Inc.
4695 MacArthur Court
Suite 600
Newport Beach, CA 92660

CONTACT NAME:
PHONE (A/C, No, Ext): (949) 623-3980 FAX (A/C, No): (949) 891-0407
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Evanston Insurance Company	35378
INSURER B : Nationwide Mutual Insurance Company	23787
INSURER C : Oak River Insurance Company	34630
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
Pacific Advanced Civil Engineering
17520 Newhope Street Suite 120
Fountain Valley, CA 92708

COVERAGES **CERTIFICATE NUMBER:** **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
A	X COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	$ 1,000,000
	CLAIMS-MADE X OCCUR	X	X	MKLV5PBC004560	4/30/2022	4/30/2023	DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 300,000
							MED EXP (Any one person)	$ Excluded
							PERSONAL & ADV INJURY	$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 2,000,000
	POLICY X PRO-JECT LOC						PRODUCTS - COMP/OP AGG	$ 2,000,000
	OTHER: CAP:$10,000,000 Annually						EBL AGGREGATE	$ 1,000,000
B	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	X ANY AUTO	X	X	ACP BA 3029722129	4/30/2022	4/30/2023	BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	X HIRED AUTOS ONLY / X NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
A	UMBRELLA LIAB X OCCUR						EACH OCCURRENCE	$ 5,000,000
	X EXCESS LIAB CLAIMS-MADE	X	X	MKLV5EUL104132	4/30/2022	4/30/2023	AGGREGATE	$ 5,000,000
	DED RETENTION $							$
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						X PER STATUTE OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y/N: N (Mandatory in NH)	N / A	X	PAWC332710	3/2/2022	3/2/2023	E.L. EACH ACCIDENT	$ 1,000,000
	If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000
A	Prof & Poll Liab			MKLV5ENV103568	4/30/2022	4/30/2023	Each Poll/Each Claim	3,000,000
A	Retention $150,000	X		MKLV5ENV103568	4/30/2022	4/30/2023	Shared Aggregate	6,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Re: Tapia Water Reclamation Facility: Design of Aluminum Sulfate Tank and Piping Replacement.

Tapia Water Reclamation Facility: Design of Aluminum Sulfate Tank and Piping Replacement required by the subcontract are included as additional Insured as respects to General Liability for Completed and Ongoing Operations as required by written contract as per forms attached. General Liability Blanket Waiver of Subrogation as required by written contract as per form attached.

Automobile Liability Additional Insured applies as required by written contract as per forms attached. Automobile Liability Blanket Waiver of Subrogation as SEE ATTACHED ACORD 101

CERTIFICATE HOLDER

Las Virgenes Municipal Water District
Attn: District Contact
4232 Las Virgenes Road
Calabasas, CA 91302

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

PACE
Advanced Water Engineering

17520 NEWHOPE STREET, SUITE 200
FOUNTAIN VALLEY, CA 92708
714.481.7300 | WWW.PACEWATER.COM

AGENDA ITEM NO. 4.F

DATE: December 13, 2022

TO: JPA Board of Directors

FROM: Engineering and External Affairs

SUBJECT: Tapia Selector Channel Wall Infill Project: Call for Bids

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SUMMARY:

The Tapia Water Reclamation Facility (Tapia) was originally constructed in 1965 and provides tertiary treatment for municipal wastewater from domestic, commercial and industrial sources. Tapia has undergone several expansions and currently treats approximately seven million gallons of wastewater on an average dry-weather day. Tapia has the following treatment processes: coarse screening, grit removal, primary sedimentation, secondary treatment (biological nutrient reduction), secondary sedimentation, tertiary treatment and chlorination/dechlorination. The proper function of these treatment processes is necessary to ensure that treated effluent from Tapia meets or exceeds all water quality requirements under the National Pollutant Discharge Elimination System (NPDES) permit for discharges to Malibu Creek or use as Title 22 recycled water.

Primary effluent (PE) and return activated sludge (RAS) is fed into the aeration tanks through Channel No. 2 as part of the biological treatment process. Existing conditions allow combined PE and RAS to flow through a Selector Channel first and then into Channel No. 2 through five gates. The Selector Channel was originally used as part of the previous biological treatment process before recent upgrades were made, but it is no longer needed. The gates between Channel No. 2 and the Selector Channel have begun to fail, resulting in combined PE and RAS from Channel No. 2 leaking into the Selector Channel, which is disrupting the biological treatment process. Staff recommends authorization of a call for bids to have the unused gates removed and fill in the openings with reinforced concrete to eliminate the leaks.

RECOMMENDATION(S):

Find that the work is exempt from the provisions of the California Environmental Quality Act and authorize the Administering Agent/General Manager to issue a call for bids for the Tapia Selector Channel Wall Infill Project.

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

There is no financial impact associated with a call for bids.

DISCUSSION:

Primary effluent (PE) and return activated sludge (RAS) is fed into the aeration tanks through Channel No. 2. Existing conditions allow combined PE and RAS to flow through the Selector Channel first and then into Channel No. 2 through five gates. There are also two scum gates between Channel No. 2 and the Selector Channel. The Selector Channel was used as part of the previous aeration process and is no longer used as part of the biological treatment process. Over time, the gates between Channel No. 2 and the Selector Channel have begun to fail, resulting in combined PE and RAS from Channel No. 2 leaking into the Selector Channel (the gates are not sealing). There is no means to drain the Selector Channel, which results in septic and odorous conditions. Tapia staff periodically installs a temporary pump to drain the Selector Channel into the aeration tanks, which can disrupt the biological treatment process. The recommended scope will address the leaks and ensure that treated effluent from Tapia meets or exceeds all water quality requirements under the NPDES permit for discharges to Malibu Creek or use as Title 22 recycled water.

Cannon has completed the design of the Tapia Selector Channel Wall Infill Project, which will include removal of the existing gates between Channel No. 2 and the Selector Channel, details and specifications for filling the existing penetrations (infill) and specifications for the bypass pumping that will be required during construction of the project.

Following is a proposed bid schedule:

Notice Inviting Sealed Bids	December 13, 2022
1st Advertisement	December 15, 2022
2nd Advertisement	December 22, 2022
Mandatory Pre-Bid Meeting	10 AM PST, January 11, 2023
Bids Due	January 27, 2023 by 3 PM PST
Award of Contract	March 6, 2023 (JPA Meeting)

CEQA Determination:

The Administering Agent/General Manager has determined that the Tapia Selector Channel Wall Infill Project is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Section 15301(b) of the CEQA Guidelines because it involves the rehabilitation of existing facilities with no expansion of use. Attached is a Notice of Exemption that staff will complete and file with the County Clerk.

GOALS:

Construct, Manage and Maintain all Facilities and Provide Services to Assure System Reliability and Environmental Compatibility

Prepared by: Alex Leu, Senior Engineer

ATTACHMENTS:
Notice Inviting Sealed Bids Tapia Selector Channel
CEQA-NOE-Tapia Selector Channel.pdf

NOTICE INVITING SEALED BIDS
Tapia Water Reclamation Facility
Selector Channel Wall Infills

NOTICE IS HEREBY GIVEN that the Board of Directors of Las Virgenes Municipal Water District invites and will receive sealed bids up to the hour of 3:00PM on January 27, 2023, for furnishing the work described in the contract documents. Bids received after the time stated in the Call for Bids will not be accepted and will be returned, unopened, to the bidder. The time shall be determined by the time on the receptionist telephone console in our Headquarters lobby. Proposals will be publicly opened and read aloud at the office of the District, 4232 Las Virgenes Road, Calabasas, California 91302. Said bids shall conform to and be responsive to the Specifications and Contract Documents for said work as heretofore approved by the District.

*A **mandatory** pre-bid tour will be conducted at 10:00 AM on January 11, 2023. The meeting will begin at the Tapia Water Reclamation at 731 Malibu Canyon Road, Calabasas, CA 91302. Attendance at the pre-bid conference is a condition precedent to submittal of the bid and the District will not consider a bid from any bidder not represented at the pre-bid conference. Questions regarding the project may be directed to Alex Leu, P.E., at (818) 251-2144.*

Sets of contract documents may be downloaded forfree by going to http://www.LVMWD.com/Ebidboard and following the links to this project.

In order to be placed on the plan holder's list, contractors shall register for free as a document holder for this project on Ebidboard by going to www.LVMWD.com/Ebidboard and following the links to this project. Addendum notifications will be issued through Ebidboard.com, but may also be provided by calling the District's Project Manager. Although Ebidboard will fax and/or email all notifications to registered plan holders after the District uploads the information, Bidders are responsible for obtaining all addenda and updated contract documents.

Each bid must be on the District bid form and shall be sealed and filed with the secretary of the District at or before the time stated in the Notice.

No Contractor or Subcontractor may be listed on a bid proposal for a public works project submitted on or after March 1, 2015 unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. No Contractor or Subcontractor may be awarded a contract for public work on a public works project awarded on or after April 1, 2015 unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. Effective January 1, 2016, no Contractor or Subcontractor may perform on a contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. This project is subject to compliance monitoring and enforcement by the DIR.

All terms and conditions contained in the Specifications and Contract Documents shall become part of the contract. The Board of Directors of Las Virgenes Municipal Water District reserves the right to reject any and all bids and to waive any and all irregularities in any bid. No bidder may withdraw his bid after the said time for bid openings until 60-days thereafter or until the District has made a final award to the successful bidder or has rejected all bids, whichever event first occurs.

The Board of Directors of the District reserves the right to select the schedule(s) under which the bids are to be compared and contract(s) awarded.

BY ORDER OF THE GOVERNING BODY OF
LAS VIRGENES MUNICIPAL WATER DISTRICT

_____ _____

Dated _____, *Secretary of the Board*

Print Form

Notice of Exemption

Appendix E

To: Office of Planning and Research
P.O. Box 3044, Room 113
Sacramento, CA 95812-3044

County Clerk
County of: Los Angeles
12400 Imperial Highway
Norwalk, CA 90650

From: (Public Agency): Las Virgenes Municipal Water District
4232 Las Virgenes Road
Calabasas, CA, 91302
(Address)

Project Title: Tapia Water Reclamation Facility - Selector Channel Wall Infill

Project Applicant: Las Virgenes Municipal Water District

Project Location - Specific:
Tapia Water Reclamation Facility - 731 Malibu Canyon Road, Calabasas, CA, 91301

Project Location - City: Calabasas Project Location - County: Los Angeles

Description of Nature, Purpose and Beneficiaries of Project:
Removal of unused gates between Channel No. 2 and the Selector Channel and fill openings to prevent leaking from Channel No.2 in the unused Selector Channel.

Name of Public Agency Approving Project: Las Virgenes Municipal Water District

Name of Person or Agency Carrying Out Project: Las Virgenes Municpal Water District

Exempt Status: **(check one):**

- ☐ Ministerial (Sec. 21080(b)(1); 15268);
- ☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));
- ☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- ☒ Categorical Exemption. State type and section number: 15301.(b) Existing Facilities
- ☐ Statutory Exemptions. State code number: _____

Reasons why project is exempt:
This project will remove the unused gates and fill the existing penetrations between Channel No. 2 and the Selector Channel to prevent leaking and eliminate odor issues.

Lead Agency Contact Person: Alex Leu Area Code/Telephone/Extension: (818) 251-2144

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? ☐ Yes ☐ No

Signature: _____ Date: 12/6/2022 Title: Senior Engineer

▪ Signed by Lead Agency ☐ Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Date Received for filing at OPR: _____

AGENDA ITEM NO. 4.G

DATE: December 13, 2022

TO: JPA Board of Directors

FROM: Engineering and External Affairs

SUBJECT: Title 22 Recycled Water Engineering Report Update: Approval of Scope Change

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SUMMARY:

On March 15, 2022, a professional service agreement (PSA) was administratively approved, in the amount of $34,532, for preparation of a Title 22 Recycled Water Engineering Report Update by Larry Walker Associates (LWA). The update is a regulatory requirement for the continued operation of the JPA's recycled water system. Based on the age of the original document and complexity of the required information for the update, the level of effort originally estimated was insufficient to complete the work. As a result, staff recommends authorization to execute Scope Change No. 1, in the amount of $16,795, for LWA to complete the work.

RECOMMENDATION(S):

Authorize the Administering Agent/General Manager to execute Scope Change No. 1, in the amount of $16,795, to Larry Walker Associates for the Title 22 Recycled Water Engineering Report Update.

FISCAL IMPACT:

Yes

FINANCIAL IMPACT:

The total cost of this action is $16,795, increasing the contract amount from $34,532 to $51,327. The cost of the work is allocated 70.6% to LVMWD and 29.4% to Triunfo Water and Sanitation District. Sufficient funding for the work is available in the adopted Fiscal Year 2022-23 JPA Budget.

DISCUSSION:

As part of the Calleguas-LVMWD Interconnection Project, a new recycled water service was constructed to Canyon Oaks Park in the City of Westlake Village and the existing recycled water main along Lindero Canyon Road was extended north to the entrance of Yerba Buena Elementary School to eliminate a long legacy service line for that customer. During permitting discussions with the Los Angeles Regional Water Quality Control Board (RWQCB), it was

determined that the work would constitute an extension of the JPA's existing recycled water system and require an update to the Title 22 Recycled Water Engineering Report (Report). Attached for reference is a copy of RWQCB's determination and request for an updated report.

The State Water Resources Control Board's regulations for recycled water (Title 22, Article 7, Section 60323) state that "no person shall produce or supply recycled water for reuse from a water reclamation plant without a Department-approved engineering report." The JPA's current Title 22 Recycled Water Engineering Report was authored in 2001 and the last updated in 2004. Staff reviewed the existing Report and reached out to several firms for proposals to update the Report to reflect current industry standards and the existing condition of the JPA's recycled water system. Staff received two proposals of similar cost and scope and accepted the proposals from Larry Walker Associates (LWA), in the amount of $34,532.

After a thorough review of the current Report and the available information, LWA produced and updated the Report for staff to review. The previous Report required an extensive update, and there was a significant amount of information that needed to be reviewed or gathered in to meet the current Title 22 requirements. The additional effort required more time and effort than was scoped in LWA's proposal. LWA submitted a request for a scope change and additional funds to produce a document that properly describes the JPA's existing recycled water production and distribution system, together with meeting all the current requirements of Title 22.

Staff reviewed the attached change order and recommends authorization for the Administering Agent/General Manager to execute Scope Change No. 1, in the amount of $16,795, to LWA. The change order exceeds the maximum amount for administrative authorization and requires Board approval. The change order includes the additional time needed to compile and finalize the report with any comments that may be received by the RWQCB or the State Water Resources Control Board, Division of Drinking Water (DDW).

GOALS:

Construct, Manage and Maintain all Facilities and Provide Services to Assure System Reliability and Environmental Compatibility

Prepared by: Oliver Slosser, Engineering Program Manager

ATTACHMENTS:
Scope Change 1 Request_LWA.docx
Tapia WRRs-Title 22 ER extension approval_CI 6189.pdf

MEMORANDUM

DATE: September 28, 2022

TO: Oliver Slosser, LVMWD

COPY TO:

BETSY ELZUFON
1480 Drew Ave., Suite 100
Davis, CA 95618
530.753.6400
530.753.7030 fax
betsye@LWA.com

SUBJECT: Tapia WRF Engineering Report Scope and Budget Review

LWA has been working with the Las Virgenes Municipal Water District (LVMWD) to update its 2004 Title 22 Engineering Report and prepare an anti-degradation analysis for impacts to groundwater quality.

LWA's scope of work was based on completing the Engineering Report update using readily available information and having a template (i.e., the previous report) to use as a basis for the report. A word version of the previous report was not available which added to the level of effort as did the extent of the modifications to the treatment processes and the distribution system/use areas since 2004. In addition, the scope of work included preparing an antidegradation analysis for impacts to groundwater quality based on recycled water uses for all impacted groundwater basins. The level of effort required was more than anticipated due to the complexity associated with identifying and characterizing the groundwater basins affected and the need to get additional clarification from Regional Board staff. In addition, the budget was based on evaluating impacts to two groundwater basins (i.e., Russell Valley Groundwater Basin and one other basin). However, the analysis was conducted for three groundwater basins (i.e., Russel Valley, San Fernando Valley and Thousand Oaks Area).

The tasks, budget and expenditures through August 2022 are shown below.

Task	Budget	Total spent through August 2022
Task 1 – Title 22 Engineering Report	$14,274	$12,858
Task 2 – Groundwater Quality Impact and Antidegradation Analysis	$13,168	$21,229
Task 3 – Communicate with Regional Board and DDW	$4,618	$2,240
Task 4 – Project Management	$2,472	$0
Total Cost	$34,532	$36, 327

*Includes ~$10,628 not yet invoiced to LVMWD

The level of effort associated with completion of the Engineering Report (Task 1) including work to be completed in September is slightly more than the original budget. LWA is still compiling and adding information from LVMWD to finalize the report. The level of effort for Task 2 is substantially higher than estimated due to the complications noted above. In addition, it is likely that some revisions will be needed based on comments from DDW and the Regional Board.

The estimated remaining effort to complete and submit the Engineering Report and Anti-degradation analysis and respond to one-round of straightforward comments from the Regional Board and DDW is approximately 54 hours for Project staff and 20 hours for Betsy Elzufon and Denise Conners for a total of $15,000. Added to the $36,327 spent through August 2022, this would result in a total cost of $51,327. This estimate is based on receiving facility-specific information from LVWMD to demonstrate compliance with Title 22 requirements.

This budget of $51,327 covers the completion of the Engineering Report and Anti-degradation analysis, approval by the Regional Board, and Engineering Report acceptance by DDW. It assumes that one round of comments are received and that they do not require complex additional analyses.

December 15, 2021

Mr. David Pedersen, P.E., General Manager
Las Virgenes Municipal Water District
4232 Las Virgenes Road
Calabasas, CA 91302

APPROVAL OF REQUEST TO EXTEND SUBMITTAL OF THE TITLE 22 ENGINEERING REPORT UPDATE FOR THE LAS VIRGENES MUNICIPAL WATER DISTRICT (LVMWD)-TAPIA WATER RECLAMATION FACILITY, WATER RECYCLING REQUIREMENTS (ORDER NO. 87-086, CI NO. 6189)

Dear Mr. Pedersen:

On October 20, 2021, the Los Angeles Regional Water Quality Control Board (Los Angeles Water Board) received an extension request for the Title 22 engineering report (Report) update from the Las Virgenes Municipal Water District (LVMWD, Reclaimer) for the Tapia Water Reclamation Facility (Tapia WRF, Facility).

The LVMWD owns and operates the Tapia WRF and is the producer and administrator of the recycled water program. The disinfected tertiary-treated effluent from the Tapia WRF is currently used for landscape irrigation and golf courses. Such uses are regulated by Water Reclamation Requirements (WRRs) contained in Order No. 87-086, which was adopted by the Los Angeles Water Board on June 22, 1987 and readopted as Order No. 97-072 on May 12, 1997.

The LVMWD has proposed an extension of the recycled water pipeline for the Calleguas Municipal Water District (CMWD) - LVMWD Interconnection Project in Westlake Village, California. Per provision D.12. of Order No. 87-086, the Los Angeles Water Board Executive Officer approved the proposed Interconnection Project on August 24, 2021 with conditions. One of the conditions requires LVMWD to provide an updated Title 22 engineering report for distribution and use of recycled water in the LVMWD use areas by November 25, 2021.

In an email dated October 2021, LVMWD indicated that it has started the process of updating the Report (last revised in 2004) but anticipates that more time is needed to complete the update, and therefore requested a year extension of the submittal of the Report. In an email dated November 4, 2021, LVMWD provided key tasks for the Report update including:

- Develop the request for proposals (RFPs): November - December 2021.
- Advertise the RFPs: December 2021 through January 2022.
- Award contract for Report update: February 2022.

- Conduct data collection, hydrologic investigation, report update, internal review, district review, and finalization of the Report: March – October 2022.
- Submit the Report: November 2022.

In consideration of the time needed to update the Report to reflect up-to-date modifications to the Tapia WRF, the Los Angeles Water Board approves your request to extend the submittal of the Report, and requests that LVMWD submit the Report at its earliest convenience but no later than November 25, 2022.

If you have any questions, please contact Xiaofei Cui at xiaofei.cui@waterboards.ca.gov or Jeong-Hee Lim at jeong-hee.lim@waterboards.ca.gov.

Sincerely,

Renee Purdy
Executive Officer

cc: State Water Resources Control Board, DDW: Su-Fang Orr, Bill Liang
LVMWD: Oliver Slosser, John Zhao, Eric Schlageter, Frank Almaguer, Darrell Johnson, James Korkosz, and Brett Dingman

To: Las Virgenes-Triunfo JPA Board of Directors and Staff
From: John Freshman, Ana Schwab, Lowry Crook, and Samantha Sabol
Date: December 2nd, 2022
RE: Federal Report

Midterm Elections Led To A Busy Month For Members of Congress

With midterms almost complete, the month of November came with a busy schedule for Members of Congress. This election season held many unpredictable elections across the United States, including Arizona, California, Michigan, Nevada, Pennsylvania, and many others. The House of Representatives was predicted to take on an overwhelming number of new Republican members, while the Senate balance was still unknown. With two races still waiting to be called, Republicans have won the majority in the House, but with a smaller margin than initially predicted. Republican John Duarte and Democrat Adam Gray are running in California's 13th District, and the election as it currently stands has yet to be called. Duarte is currently leading by only a few hundred votes. Colorado's 3rd district also has yet to call the race between incumbent Lauren Boebert and Adam Frisch. Although Frisch conceded to Boebert, the race still qualifies for a recount under Colorado state law.

Many other close Senate races held the spotlight in November. The Georgia Senate race between incumbent Raphael Warnock and Trump-backed Hershel Walker resulted in neither candidate winning by more than 50% of the vote, leading to a runoff election on December 6th. Nevada's Senate race between incumbent Catherine Cortez Masto and Adam Laxalt, resulted with Cortez Masto winning with a close lead of only 0.9% of votes. Pennsylvania's Senate election between John Fetterman and Mehmet Oz was another close call, with Fetterman finally taking the lead and winning the Senate seat.

Looking ahead, many are watching Senator Dianne Feinstein's seat as her term ends in 2024. She recently became the longest serving woman Senator, and many are wondering how long she will remain in Congress. The Senator has yet to announce her plans for reelection.

Republican and Democratic Leadership Elections Take Center Stage

On November 15th, 2022, the House Republican Conference held leadership elections for the upcoming new Congress. Internally, candidates for Speaker of the House only need a simple majority to become the candidate for their party. In January, with the start of the 118th Congress, candidates must then receive a majority of votes, totaling at least 218. Democrats will hold internal elections for leadership candidates on November 30th. Internally, the Democrat candidate for Speaker or minority leader need a full majority within their party to become candidate. Although they will also put forward a candidate for Speaker of the House, with the Republicans holding the majority this candidate will expectedly lose.

Republican conference election results are as follows:

- Speaker of the House: Kevin McCarthy (CA)
- Majority Leader: Steve Scalise (LA)
- Majority Whip: Tom Emmer (MN)
- Conference Chair: Elise Stefanik (NY)
- Secretary: Lisa McClain (MI)
- Vice Chair: Mike Johnson (LA)
- Chair of the National Republican Congressional Committee: Richard Hudson (NC)

On November 18th, Nancy Pelosi gave a historical and emotional speech on the House Floor, announcing her step down from Democratic Leadership and her position as Speaker. She revealed she will remain Representative of her San Francisco district; a position she has held for 35 years. Ending her historic position as first woman to become Speaker of the House, she received a standing ovation from Members of Congress and was congratulated by a crowd of Members and guests on the House Floor.

As it currently stands, Rep. Steny Hoyer (MD) is the second in command in leadership as House majority leader, but following Pelosi's step down from leadership, he announced his withdrawal as well. Additionally, Rep. Jim Clyburn (SC) is currently House majority whip, Rep. Katherine Clark (MA) serves as assistant Speaker, and Rep. Hakeem Jeffries (NY) is House Democratic Caucus chair. Each of these members were strong candidates for Democratic positions in the new Congress. Internal Democratic elections for the 118th Congress took place on November 30th.

Democrat conference election results are as follows:

- Minority Leader: Hakeem Jeffries (NY)
- Minority Whip: Kathrine Clark (MA)
- Caucus Chair: Pete Aguilar (CA)
- Caucus Vice Chair: Ted Lieu (CA)

House Republicans and Democrats are already receiving attention for potential committee leadership positions in the new Congress, which will determine much of the legislative agenda. Freedom Caucus member Jim Jordan (OH) is expected to take Chairmanship of the House Judiciary Committee, and will likely prioritize policies related to abortion and out southern border. Chairmanship for House Homeland Security Committee will also be determined, with Reps. Dan Crenshaw (TX), Clay Higgins (LA) and Mark Green (Tenn) as front runners. House Oversight Reform Committee will likely be chaired by Rep. James Comer (KY). In the Senate, Rand Paul (KY) will be fighting for chairmanship of Homeland Security and Government Affairs Committee.

End Of The Year Priority Legislation

The 118th Congress and a Republican controlled House will bring many changes to legislation and Congressional action, including providing funding to Ukraine, oversight over the Biden Administration, and efforts to combat climate change. There is still much legislative work to be done during the "lame duck" season of Congress, and democrats feel a greater sense of urgency while they still hold the majority in the House.

The most important piece of legislation to pass will be the FY2023 federal budget. After the passage of a continuing resolution at the end of September, federal funding is set to expire on December 16th. Congress must pass either another continuing resolution to extend current funding levels, or pass FY23 appropriations legislation. The latter is the preferred route for many in Congress, and will likely be brought to the House floor through an omnibus, which packages appropriations bills together and allows for quicker consideration and passage.

As a reminder, in July the House passed H.R.8294, the Transportation, Housing and Urban Development, and Related Agencies Appropriations Act, a six-bill appropriations package that included $400 billion in appropriations for Agriculture-FDA, Energy and Water Development, Financial Services-General Government, Interior-Environment, Military Construction-Veterans Affairs, and Transportation-HUD bills. The House still must pass the Commerce-Justice-Science, Defense, Homeland Security, Labor-HHS-Education, Legislative Branch, and State-Foreign Operations appropriations bills.

In addition to the FY23 appropriations, Congress must pass the National Defense Authorization Act (NDAA) before the end of the year. The House passed the NDAA in July, and the bill currently awaits Senate consideration. It is currently expected that the Water Resources Development Act (WRDA) will be attached to the NDAA.

Additional End-of-Year Items For Congress To Pass

Possible Lands Package in Omnibus

As Chairman of the Senate Committee on Environment and Public Works (EPW), Senator Manchin is pushing for a package of legislation establishing new public land designations and protections. The Senator is still working with EPW Committee to determine which pieces of legislation will be included in the package, and will likely announce the drafted package soon.

Permitting Reform Possibly Included In NDAA

Senator Manchin is also continuing the fight for permitting reform, after extensive negotiations that led to his vote in support of the Inflation Reduction Act, and a promise of permitting reform legislation. This time, the Senator is hoping to attach permitting reform legislation and many of the energy components to the NDAA. The Biden Administration and Senate Majority Leader Chuck Schumer have expressed support for this legislation to pass.

White House Ukraine Package

The Office of Management and Budget (OMB) in the Biden Administration has been pushing Congress to approve $38 billion in FY2023 appropriations. In a letter to Speaker Pelosi, OMB Director Shalanda Young requested the additional financial allocation. This would include $21.7 billion in security assistance, $14.5 billion for the State Department and USAID, $900 million for the Department of Health and Human Services, and $626 million for the Energy Department, all for assistance to Ukraine. The White House is eager for this funding to be approved before the end of the year, after the last $40 billion Ukraine supplemental received opposition from Republicans in the House and Senate.

Data Privacy In California

A Republican controlled House in the new Congress will bring changes to regulations and legislation, including H.R. 8152, the American Data Privacy and Protection Act. Privacy and data protection have been a priority for both Democrats and Republicans in Congress, and next year this will likely be a priority. The state of California was the first to draft and pass a comprehensive data privacy law, and as a leader in the nation, a new federal law may mean changes for the state.

Background: H.R. 8152, the American Data Privacy and Protection Act

This legislation was introduced on June 21st, 2022, by Congressman Frank Pallone (D-NJ). The bill establishes restrictions and certain requirements for how various businesses, organizations, and platforms can gather and use an individual's personal data. It limits collection of data to only "reasonably necessary" and prohibits the transfer of data without personal consent. The bill also mandates companies impose security measures, regulated by the Federal Trade Commission (FTC) regarding security practices. The bill outlines civil actions for violations of the bill. Lastly, this legislation preempts state law, with some exceptions for Illinois and California.

On July 20th, the House Committee on Energy and Commerce held a mark-up session, and passed the bill in a 53-2 vote.

House Votes On Legislation To Avert A Railroad Strike

On November 30th, the House passed legislation to prevent a costly and economically dangerous rail strike. The legislation is titled H.J. Res. 100, *To provide for a resolution with respect to the unresolved disputes between certain railroads represented by the National Carriers' Conference Committee of the National Railway Labor Conference and certain of their employee.* The bill was passed with bipartisan support in a 290 -137 vote, which included 79 Republicans voting in favor and eight Democrats voting against.

In an additional vote, the House added a provision that will increase the number of paid sick days for rail workers from one to seven. This measure passed in a 221 – 207 vote, with only three Republicans voting in favor.

The bill is now waiting for Senate consideration.

Funding Opportunities

EPA is seeking applications for $40 million through its Solid Waste Infrastructure for Recycling Grant Program. EPA anticipates awarding approximately 25 assistance grants ranging from $500,000 to $4 million each, with at least one award per EPA Region. No costsharing is required. An informal Notice of Intent to Apply is requested by December 15 and applications are due January 16. More information can be found here.

EPA announced the availability of $30 million through its Recycling Education and Outreach Grant Program. EPA anticipates awarding approximately 25 assistance grants ranging from $250,000 to $2 million each, with at least one award per EPA Region. No cost-sharing is required. An informal Notice of Intent to Apply is requested by December 15 and applications are due January 16. More information can be found here.

FEMA announced the availability of $800 million for its Flood Mitigation Assistance program, which provides rants to projects designed to reduce the risk of repetitive flood damage to structures insured under the National Flood Insurance Program. Applications are due on January 27, 2023. More information can be found here.

FEMA also announced the availability of $2.3 billion for the Building Resilient Infrastructure and Communities (BRIC) program, which is designed to fund pre-disaster hazard mitigation activities. Applications are due on January 27, 2023. More information can be found here.

LAS VIRGENES-TRIUNFO - HIGH PRIORITY LEGISLATION IN THE 117TH CONGRESS
THROUGH DECEMBER 2, 2022

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.202 SALT Fairness Act of 2021	This bill repeals the temporary restrictions in taxable years 2018 through 2025 on the deductibility of state and local taxes.	Introduced by Rep. Mike Garcia (R-CA) – January 5, 2021	
S.29 Local Water Protection Act	This bill reauthorizes through FY2025 programs within the Environmental Protection Agency that award grants to states for managing nonpoint source water pollution or protecting groundwater quality. Water pollution from nonpoint sources is caused by precipitation picking up pollution as it moves over or through the ground.	Introduced by Sen. Amy Klobuchar (D-MN) – January 22, 2021	
S.Res.17 A resolution expressing the sense of the Senate that clean water is a national priority and that the April 21, 2020, Navigable Waters Protection Rule should not be withdrawn or vacated.	This bill reauthorizes through FY2025 programs within the Environmental Protection Agency that award grants to states for managing nonpoint source water pollution or protecting groundwater quality. Water pollution from nonpoint sources is caused by precipitation picking up pollution as it moves over or through the ground.	Introduced by Sen. Joni Ernst (R-IA) – January 27, 2021	
H.R.616 Emergency Water is a Human Right Act	This bill creates a grant program, administered by the Department of Health and Human Services, to provide funds to states and Indian tribes to assist low-income households that pay a high proportion of household income for drinking water and wastewater services. Further, any entity receiving financial assistance under this grant program must ensure that no home energy service or public water system service is or remains disconnected or interrupted during the COVID-19 (i.e., coronavirus disease 2019) public health emergency.	Introduced by Rep. Rashida Tlaib (D-MI) – January 28, 2021	
S.85 SALT Deductibility Act	This bill repeals the temporary restrictions in taxable years 2018 through 2025 on the deductibility of state and local taxes. *Companion bill to H.R.613*	Introduced by Sen. Chuck Schumer (D-NY) – January 28, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.613 SALT Deductibility Act	This bill repeals the temporary restrictions in taxable years 2018 through 2025 on the deductibility of state and local taxes. *Companion bill to S.85*	Introduced by Rep. Thomas Suozzi (R-NY) – January 28, 2021	
S.101 Environmental Justice Mapping and Data Collection Act of 2021	This bill establishes an interagency Environmental Justice Mapping Committee that must create a tool to identify environmental justice communities. Environmental justice communities are communities with significant representation of communities of color, low-income communities, or tribal and indigenous communities that experience, or are at risk of experiencing, higher or more adverse human health or environmental effects, as compared to other communities. The Environmental Protection Agency (EPA) must establish an environmental justice data repository to maintain the data collected by the committee. The EPA must make the repository available to regional, state, local, and tribal governments. *Companion bill to H.R.516*	Introduced by Sen. Edward Markey (D-MA) – January 28, 2021	
H.R.516 Environmental Justice Mapping and Data Collection Act of 2021	This bill establishes an interagency Environmental Justice Mapping Committee that must create a tool to identify environmental justice communities. Environmental justice communities are communities with significant representation of communities of color, low-income communities, or tribal and indigenous communities that experience, or are at risk of experiencing, higher or more adverse human health or environmental effects, as compared to other communities. The Environmental Protection Agency (EPA) must establish an environmental justice data repository to maintain the data collected by the committee. The EPA must make the repository available to regional, state, local, and tribal governments. *Companion bill to S.101*	Introduced by Rep. Cori Bush (D-MO) – January 28, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.535 Special District Provide Essential Services Act	The bill would require the state's to direct at least five percent of future Coronavirus Relief Fund (CRF) allocations to special districts within their state. *Companion bill to S.91*	Introduced by Rep. John Garamendi (D-CA) – January 28, 2021	*SUPPORT*
S.91 Special Districts Provide Essential Services Act	This bill makes special districts eligible for the Coronavirus Relief Fund and the Municipal Liquidity Facility program. Specifically, the bill makes special districts eligible for payments from amounts paid to states from any new appropriations to the fund. A special district must submit a request for payment to the state with information demonstrating that the special district has experienced or is likely to experience during the COVID-19 (i.e., coronavirus disease 2019) emergency • reduced revenue or operational funding derived from provided services, taxes, fees, or other sources of revenue; • reduced indirect funding from the federal government, the state, or a unit of general government below the state level; or • as a result of the COVID-19 emergency, increased expenditures necessary to continue operations. The Board of Governors of the Federal Reserve System shall include special districts as eligible issuers in the Municipal Liquidity Facility program, which was created in response to the COVID-19 emergency to buy municipal securities. *Companion bill to H.R. 535*	Introduced by Sen. Kyrsten Sinema (D-AZ) – January 28, 2021	*SUPPORT*

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.737 RENEW WIIN Act	This bill extends the authority of certain federal agencies to provide support for western water infrastructure and extends consultation requirements concerning projects in California. Specifically, the bill extends through 2031 the authority of the Bureau of Reclamation to provide support for federal or state-led water storage projects in certain western states. It also extends provisions specific to California, including drought relief and the operations of the Central Valley Project (a hydropower and water management project in California that is operated by Reclamation). Further, the bill extends through 2036 consultation requirements concerning biological assessments and the coordinated operations of the Central Valley Project and the State Water Project in California.	Introduced by Rep. David Valadao (R-CA) – February 2, 2021	*SUPPORT*
H.R. 692 Recognition of Local Interests in NEPA Decision Making	This bill sets forth requirements for determining the venue for judicial review of an agency action under the National Environmental Policy Act of 1969 (NEPA). Specifically, the bill requires a proceeding for judicial review of an agency's compliance with NEPA to be brought in the U.S. district court for a district in which the authorized activity is proposed to be carried out or the U.S. District Court for the District of Columbia.	Introduced by Rep. Liz Cheney (R-WY) – February 2, 2021	
H.R.848 GREEN Act of 2021	This bill provides tax incentives for investment in renewable energy resources and energy efficiency programs.	Introduced by Rep. Mike Thompson (D-CA) – February 4, 2021	
H.Res.104 Recognizing the duty of the Federal Government to implement an agenda to Transform, Heal, and Renew by Investing in a	This resolution expresses the sense of the House of Representatives that the federal government has a duty to develop a holistic agenda to respond to racial injustice, unemployment, the COVID-19 (i.e., coronavirus disease 2019) pandemic, and climate change. The resolution further outlines the goals of this agenda to build a society with greater racial, economic, and gender justice; dignified work; healthy	Introduced by Rep. Debbie Dingell (D-MI) – February 5, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
Vibrant Economy ("THRIVE")	communities; and a stable climate. Additionally, the resolution identifies efforts to support these goals. *Companion bill to S.Res.43.*		
S.Res.43 A resolution recognizing the duty of the Federal Government to implement an agenda to Transform, Heal, and Renew by Investing in a Vibrant Economy ("THRIVE")	This resolution expresses the sense of the Senate that the federal government has a duty to develop a holistic agenda to respond to racial injustice, unemployment, the COVID-19 (i.e., coronavirus disease 2019) pandemic, and climate change. The resolution further outlines the goals of this agenda to build a society with greater racial, economic, and gender justice; dignified work; healthy communities; and a stable climate. Additionally, the resolution identifies efforts to support these goals. *Companion bill to H.Res.104.*	Introduced by Rep. Edward Markey (D-MA) – February 8, 2021	
H.R.946 SALT Act	This bill repeals the limitation on the deductibility of state and local taxes during 2018-2025. It also increases from $250 to $1,000 the tax deduction for certain expenses of elementary and secondary school teachers and allows a deduction from gross income (above-the-line) for certain training and uniform expenses of first responders (i.e., individuals who are law enforcement officers, firefighters, paramedics, or emergency medical technicians for at least 1,000 hours during a taxable year). The bill expands individual income tax brackets and increases the top income tax rate for individual taxpayers to 39.6%.	Introduced by Rep. Bill Pascrell (D-NJ) – February 8, 2021	
H.R.1015 Water Recycling Investment and Improvement Act	This bill makes permanent, and otherwise revises, the Bureau of Reclamation's grant program for the funding of water recycling and reuse projects. Specifically, the bill removes priority under the program for projects in areas that, in the preceding four-year period, have been (1) identified as experiencing severe, extreme, or exceptional drought; or (2) designated as a disaster area by a state.	Introduced by Rep. Grace Napolitano (D-CA) – February 11, 2021	*SUPPORT*

LEGISLATION	SUMMARY	STATUS	POSITION
	Additionally, the bill increases through FY2025 the authorization of appropriations for the program and otherwise revises provisions related to program funding.		
H.R.988 Recreational Lands Self-Defense Act of 2021	This bill requires the U.S. Army Corps of Engineers (USACE) to allow an individual to possess a firearm at a USACE water resources development project as long as the individual's possession of the firearm is in compliance with federal and state law.	Introduced by Rep. Bob Gibbs (R-OH) – February 11, 2021	
H.R.1066 Wildfire Recovery Act	This bill makes changes with respect to the federal cost share for Fire Management Assistance Grants and provides that the federal share shall be not less than 75% of the eligible cost. Specifically, the bill directs the Federal Emergency Management Agency (FEMA) to conduct and complete a rulemaking to develop guidelines and a rule that establishes thresholds for cases in which the federal cost share for such grants may be increased. Such thresholds shall use a fire-specific metric to determine fire damage and recommend a federal share adjustment for fire damage that meets the established thresholds.	Introduced by Rep. Joe Neguse (D-CO) – February 15, 2021	
S.421 Western Tribal Water Infrastructure Act of 2021	This bill reauthorizes through FY2024, and expands, the Indian Reservation Drinking Water Program. Specifically, the bill directs the Environmental Protection Agency to connect, expand, or repair existing public water systems that are on Indian reservations or off-reservation sites that serve tribes in the Columbia River Basin or its adjacent coastal river basins. Currently, only projects that are on Indian reservations in the Upper Missouri River Basin or the Upper Rio Grande Basin are eligible for the program.	Introduced by Sen. Ron Wyden (D-OR) – February 24, 2021 Placed on the Senate Legislative Calendar – April 28, 2021	
H.R.1319 American Rescue Plan Act of 2021	This bill provides additional relief to address the continued impact of COVID-19 (i.e., coronavirus disease 2019) on the economy, public health, state and local governments, individuals, and businesses.	Introduced by Rep. John Yarmuth (D-KY) – February 24, 2021 Became Public Law No: 117-2 – March 11, 2021	*SUPPORT*

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.1352 Water Affordability, Transparency, Equity, and Reliability Act of 2021	This bill increases funding for water infrastructure, including funding for several programs related to controlling water pollution or protecting drinking water. Specifically, it establishes a Water Affordability, Transparency, Equity, and Reliability Trust Fund. The fund may be used for specified grant programs. The bill increases the corporate income tax rate to 24.5% to provide revenues for the fund. In addition, the bill revises requirements concerning the clean water state revolving fund (SRF) and the drinking water SRF. It also creates or reauthorizes several grant programs for water infrastructure.	Introduced by Rep. Brenda Lawrence (D-MI) – February 25, 2021	
S.479 Lifting Our Communities through Advance Liquidity for Infrastructure (LOCAL Infrastructure) Act of 2021	This bill reinstates tax provisions relating to advance refunding bonds. An advance refunding bond is a tax-exempt bond issued by a state or municipality to refinance or consolidate existing bond obligations.	Introduced by Sen. Roger Wicker (R-MS) – February 25, 2021	*SUPPORT*
H. R. 1438 FLOODS Act	This bill addresses forecasting and the communication of flood, tornado, and hurricane events by the National Oceanic and Atmospheric Administration (NOAA). Among other provisions, the bill • requires NOAA to estimate and communicate the frequency of precipitation; • establishes an Interagency Coordinating Committee on Water Management to ensure that federal agencies that engage in water-related matters, including water storage and supplies, water quality and restoration activities, water infrastructure, transportation on rivers and inland waterways, and water forecasting, work together where such agencies have joint or overlapping responsibilities; and • directs NOAA to conduct an analysis of gaps in the availability of snow-related data to assess and predict floods and flood impacts.	Introduced by Rep. Mikie Sherrill (D-NJ) – February 26, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
	Companion bill to S.558.		
S.498 A bill to amend title 54, United States Code, to limit the authority to reserve water rights in designating a national monument	This bill prohibits the President, in designating a national monument, from reserving any implied or expressed water rights associated with it. Water rights for an associated national monument may only be acquired in accordance with the laws of the state in which the water rights are to be located.	Introduced by Sen. Mike Lee (R-UT) – March 1, 2021	
S.558 FLOODS Act	This bill addresses forecasting and the communication of flood, tornado, and hurricane events by the National Oceanic and Atmospheric Administration (NOAA). Among other provisions, the bill • requires NOAA to estimate and communicate the frequency of precipitation; • establishes an Interagency Coordinating Committee on Water Management to ensure that federal agencies that engage in water-related matters, including water storage and supplies, water quality and restoration activities, water infrastructure, transportation on rivers and inland waterways, and water forecasting, work together where such agencies have joint or overlapping responsibilities; and directs NOAA to conduct an analysis of gaps in the availability of snow-related data to assess and predict floods and flood impacts.	Introduced by Sen. Roger Wicker (R-MS) – March 3, 2021 Passed the Senate; Received in the House - October 1, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
	Companion bill to H.R.1438.		
H.R.1563 To extend the authorities under the Water Infrastructure Improvements for the Nation Act of 2016 providing operational flexibility, drought relief, and other benefits to the State of California	This bill extends the authority of certain federal agencies to provide support for western water infrastructure and extends consultation requirements concerning projects in California. Specifically, the bill extends through 2028 the authority of the Bureau of Reclamation to provide support for projects in certain western states related to federal or state-led water storage, water desalination, and water recycling and reuse. It also extends provisions specific to California, including drought relief and the operations of the Central Valley Project (a hydropower and water management project in California that is operated by Reclamation). Further, the bill extends through 2033 consultation requirements concerning biological assessments and the coordinated operations of the Central Valley Project and the State Water Project in California.	Introduced by Rep. Mike Garcia (R-CA) – March 3, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.1679 To prohibit the Secretary of the Interior and the Secretary of Agriculture from conditioning any permit, lease, or other use agreement on the transfer of any water right to the United States, and for other purposes	This bill prohibits the Departments of the Interior and Agriculture from • conditioning the issuance, renewal, amendment, or extension of any permit, approval, license, lease, allotment, easement, right-of-way, or other land use or occupancy agreement (permit) on the transfer of any water right to the United States or on any impairment of title granted or otherwise recognized under state law by federal or state action; or • requiring any water user (including a federally recognized Indian tribe) to apply for or acquire a water right in the name of the United States under state law as a condition of the issuance, renewal, amendment, or extension of such a permit.	Introduced by Rep. Lauren Boebert (R-CO) – March 9, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
	When developing any rule or similar federal action relating to the issuance, renewal, amendment, or extension of any permit, such departments (1) shall recognize the longstanding water use authority of the states and coordinate with the states to ensure that any federal action is consistent with applicable state water law, and (2) shall not adversely affect the authority of a state in permitting the beneficial use of water or adjudicating water rights.		
H.R.1804 Community Cleanup Act	This bill expands existing notice and publication requirements related to remedial action plans for Superfund sites (sites contaminated with hazardous substances). Specifically, the bill requires the notice and analysis of a proposed plan to be transmitted to the highest ranking official of the local government with jurisdiction over the facility subject to the plan. During the public comment period, written and oral comments may be submitted regarding the use of the facility at issue after the remedial action is taken. Notice of the final remedial action plan must be transmitted to the local government officials with jurisdiction over the facility at issue. Finally, the bill expands the minimum publication requirements for proposed and final plans to include (1) an announcement via a radio or television station in the broadcast area surrounding the facility at issue, (2) digital or social media publications, and (3) a posting to the website of the person proposing to adopt a plan for remediation.	Introduced by Rep. Earl Carter (R-GA) – March 11, 2021	
H.R.1844 STOP CSO Act of 2021	This bill revises the National Pollutant Discharge Elimination System permit program to require certain publicly owned water treatment facilities to monitor, report on, and notify the public of sewer overflows. For example, the facilities must notify the public within a specified number of hours after (1) sewer overflows that have the potential to affect human health, and (2) sewer overflows that may imminently and substantially endanger human health.	Introduced by Rep. Seth Moulton (D-MA) – March 11, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.715 NEPA Data Transparency and Accountability Act	This bill requires federal agencies to annually report on their environmental review activities under the National Environmental Policy Act of 1969 (NEPA). The agencies must also include the cost of their NEPA activities in the annual reports after the Council on Environmental Quality and the Office of Management and Budget have developed a methodology to assess the comprehensive costs of the NEPA process.	Introduced by Sen. Mike Lee (R-UT) – March 11, 2021	
S.716 NEPA Legal Reform Act	This bill establishes requirements concerning the judicial review of cases about the environmental review process required under the National Environmental Policy Act of 1969 (NEPA). Specifically, the bill establishes standing requirements for NEPA claims, including a requirement that a plaintiff must personally suffer, or will likely personally suffer, a direct, tangible harm. In addition, the bill sets a statute of limitations for all claims related to NEPA. The bill also provides statutory authority for certain evidentiary standards concerning motions for temporary restraining orders, preliminary injunctions, and permanent injunctions. In addition, the bill limits fees that may be awarded to environmental attorneys.	Introduced by Sen. Mike Lee (R-UT) – March 11, 2021	
S.717 UNSHACKLE Act	This bill revises the environmental review process required under the National Environmental Policy Act of 1969 (NEPA), including by • establishing deadlines for federal agencies to complete reviews of the environmental effects of proposed major federal actions; • establishing penalties for agencies that do not comply with these deadlines; • limiting the number of assessment documents required for proposed major federal actions, requiring agencies to reuse certain research or documents, and allowing agencies to adopt environmental documents prepared by states or third parties;	Introduced by Sen. Mike Lee (R-UT) – March 11, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
	• requiring agencies to only consider alternatives to proposed actions that are technically and economically feasible; • prohibiting agencies from considering whether proposed actions or alternatives to those actions will have an effect on climate change; and • establishing requirements concerning the judicial review of NEPA cases..		
S.718 NEPA Agency Process Accountability Act	This bill revises the environmental review process required under the National Environmental Policy Act of 1969 (NEPA), including by limiting the number of assessment documents required for proposed major federal actions, requiring agencies to reuse certain research or documents in the NEPA process, and allowing agencies to adopt environmental documents prepared by states or third parties as specified under the bill. In addition, the bill requires agencies to only consider alternatives to proposed major federal actions that are technically and economically feasible. Agencies must track and report on specified NEPA data, such as the comprehensive costs of the NEPA process.	Introduced by Sen. Mike Lee (R-UT) – March 11, 2021	
S.719 NEPA State Assignment Expansion Act	This bill allows certain states to enter into agreements with federal agencies to assume federal responsibilities regarding the environmental review of proposed major federal actions under the National Environmental Policy Act of 1969.	Introduced by Sen. Mike Lee (R-UT) – March 11, 2021	
S.722 Wastewater Efficiency and Treatment Act of 2021	This bill requires the Department of Energy (DOE) to establish a Water and Energy Efficiency Program. Under the program, DOE must award grants to certain small public wastewater treatment facilities that serve disadvantaged communities or populations that do not exceed 10,000. The facilities must use the grants to conduct energy efficiency audits of the facilities and update equipment based on the audits. In addition, DOE must provide loan guarantees to eligible municipalities and Indian tribes for (1) projects that convert waste in the treatment process of	Introduced by Sen. Jeff Merkley (D-OR) – March 11, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
	wastewater treatment facilities into renewable fuels, biosolids, or other byproducts; and (2) projects that will assist in transitioning facilities towards the use of energy-efficient technologies. In carrying out the program, DOE must establish a small-scale extension services program to provide assistance to rural communities through grants, outreach, training, and technical assistance regarding energy-efficient technologies at wastewater treatment facilities in eligible municipalities and tribes.		
H.R.1820 RETROACTIVE Policy Act	This bill limits the period during which the Environmental Protection Agency may prohibit the specification, or restrict the use, of an area as a disposal site for discharges of dredged or fill materials into waters of the United States.	Introduced by Rep. Bob Gibbs (R-OH) – March 11, 2021	
H.R. 1821 RURAL Act	This bill modifies requirements governing the use of pesticides in or near navigable waters. Specifically, the bill prohibits the Environmental Protection Agency or states from requiring permits under the National Pollutant Discharge Elimination System for discharges of pesticides into navigable waters if the pesticides are (1) registered, (2) used for their intended purposes, and (3) used in compliance with their pesticide label requirements. The bill establishes exemptions from this prohibition.	Introduced by Rep. Bob Gibbs (R-OH) – March 11, 2021	
H.R.1848 Leading Infrastructure for Tomorrow's America Act	This bill establishes several programs and incentives to modernize the nation's communications, drinking water, energy, transportation, health care, and other related infrastructure. In addition, it supports drinking water programs, including the drinking water state revolving fund program. Further, it provides grants to treat perfluoroalkyl or polyfluoroalkyl substances (commonly referred to as PFAS) in drinking water and to replace lead service lines.	Introduced by Rep. Frank Pallone (D-NJ) – March 11, 2021 Committee on Energy and Commerce held a hearing – March 22, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
	The bill establishes a variety of programs to support clean energy infrastructure and address climate change, including efforts to (1) modernize the electric grid and make it more resilient, efficient, and secure; (2) increase energy efficiency in buildings; and (3) support renewable energy infrastructure. Further, it provides incentives for vehicle infrastructure, such as incentives to develop infrastructure for electric vehicles and grants to reduce air pollution at ports by electrifying port infrastructure. Additionally, the bill establishes grants and programs for health care infrastructure, including by providing support for the Centers for Disease Control and Prevention, laboratories, and state, local, tribal, and territorial health departments. Finally, the bill reauthorizes grant programs to remediate brownfield sites (i.e., sites contaminated with hazardous substances) through FY2026.		
H.R.1881 To amend the Federal Water Pollution Control Act with respect to permitting terms, and for other purposes	This bill revises the National Pollutant Discharge Elimination System (NPDES) program. Under the program, the Environmental Protection Agency issues permits to discharge pollutants into waters of the United States. The bill extends the maximum term for NPDES permits issued to states or municipalities from 5 to 10 years.	Introduced by Rep. John Garamendi (D-CA) – March 12, 2021	*SUPPORT*

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.1889 Environmental Justice for Coronavirus Affected Communities Act	This bill reauthorizes through FY2022 (1) the Environmental Justice Small Grants Program; (2) the Environmental Justice Collaborative Problem-Solving Cooperative Agreement Program, which provides financial assistance to address local environmental or public health issues; and (3) the Community Action for a Renewed Environment grant program, which assists communities address multiple sources of toxic pollutants.	Introduced by Rep. Raul Ruiz (D-CA) – March 12, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.1915 Water Quality Protection and Job Creation Act of 2021	This bill creates, reauthorizes, and revises several grant programs for infrastructure to treat water pollution, such as wastewater or stormwater. Specifically, the bill reauthorizes through FY2026 and revises the Clean Water State Revolving Fund program, which provides communities low-cost financing for water quality infrastructure projects. It also reauthorizes through FY2026 grants for • programs to control water pollution; • pilot projects related to watershed management of wastewater discharges (e.g., sewer overflows or stormwater discharges) during wet weather; • alternative water source projects, including projects to reclaim stormwater; or • measures to manage, reduce, treat or recapture stormwater, such as sewer overflows. In addition, the Environmental Protection Agency must award grants to owners of publicly owned treatment works (i.e., sewage treatment plants) for the treatment of contaminants of emerging concern, such as perfluoroalkyl or polyfluoroalkyl substances, commonly referred to as PFAS. These substances are man-made and may have adverse human health effects. A variety of products contain the compounds, such as nonstick cookware or weatherproof clothing.	Introduced by Rep. Peter DeFazio (D-OR) – March 16, 2021 Passed via legislative vehicle H.R. 3684 – July 1, 2021	
S.804 SALT Deduction Fairness Act	This bill increases the limitation on the deduction for state and local taxes to $20,000 for individuals filing a joint tax return. The limitation applies to taxable years 2018 through 2025.	Introduced by Rep. Susan Collins (D-ME) – March 17, 2021	
H.R.2021 Environmental Justice For All Act	This bill establishes several environmental justice requirements, advisory bodies, and programs to address the disproportionate adverse human health or environmental effects of federal laws or programs on communities of color, low-income communities, or tribal and indigenous communities. The bill prohibits disparate impacts on the basis of race, color, or national origin as discrimination. Aggrieved persons may seek legal remedy when faced with such discrimination.	Introduced by Rep. Raul Grijalva (D-AZ) – March 18, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
	In addition, the bill directs agencies to follow certain requirements concerning environmental justice. For example, agencies must prepare community impact reports that assess the potential impacts of their actions on environmental justice communities under certain circumstances. Further, it creates a variety of advisory bodies and positions, such as the White House Environmental Justice Interagency Council. Among other things, the council must issue an environmental justice strategy. It also establishes requirements and programs concerning chemicals or toxic ingredients in certain products. For example, the bill (1) requires certain products (e.g., cosmetics) to include a list of ingredients or warnings; and (2) provides grants for research on designing safer alternatives to chemicals in certain consumer, cleaning, toy, or baby products that have an inherent toxicity or that are associated with chronic adverse health effects. Finally, it creates a variety of funding programs, such as a grant program to enhance access to park and recreational opportunities in an urban areas. *Companion bill to S.872.*	Committee on Natural Resources hearing held. Ordered to be reported – July 27, 2022	
S.855 Water Rights Protection Act of 2021	This bill prohibits the Departments of the Interior and Agriculture from • conditioning the issuance, renewal, amendment, or extension of any permit, approval, license, lease, allotment, easement, right-of-way, or other land use or occupancy agreement (permit) on the transfer of any water right to the United States or on any impairment of title granted or otherwise recognized under state law by federal or state action;	Introduced by Sen. John Barrasso (R-WY) – March 18, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
	• requiring any water user (including a federally recognized Indian tribe) to apply for or acquire a water right in the name of the United States under state law as a condition of the issuance, renewal, amendment, or extension of such a permit; or • conditioning or withholding the issuance, renewal, amendment, or extension of such a permit on limiting the date, time, quantity, location of diversion or pumping, or place of use of a state water right beyond any limitations under state water law, or on the modification of the terms and conditions of groundwater withdrawal, guidance and reporting procedures, or conservation and source protection measures established by a state. In developing any rule or similar federal action relating to the issuance, renewal, amendment, or extension of any permit, such departments (1) shall recognize the longstanding water use authority of the states and coordinate with the states to ensure that any federal action is consistent with applicable state water law, and (2) shall not adversely affect the authority of a state in permitting the beneficial use of water or adjudicating water rights.		

LEGISLATION	SUMMARY	STATUS	POSITION
S.872 Environmental Justice For All Act	This bill establishes several environmental justice requirements, advisory bodies, and programs to address the disproportionate adverse human health or environmental effects of federal laws or programs on communities of color, low-income communities, or tribal and indigenous communities. The bill prohibits disparate impacts on the basis of race, color, or national origin as discrimination. Aggrieved persons may seek legal remedy when faced with such discrimination. In addition, the bill directs agencies to follow certain requirements concerning environmental justice. For example, agencies must prepare community impact reports that assess the potential impacts of their actions on environmental justice communities under certain circumstances. Further, it creates a variety of advisory bodies and positions, such as the White House Environmental Justice Interagency Council. Among other things, the council must issue an environmental justice strategy. It also establishes requirements and programs concerning chemicals or toxic ingredients in certain products. For example, the bill (1) requires certain products (e.g., cosmetics) to include a list of ingredients or warnings; and (2) provides grants for research on designing safer alternatives to chemicals in certain consumer, cleaning, toy, or baby products that have an inherent toxicity or that are associated with chronic adverse health effects. Finally, it creates a variety of funding programs, such as a grant program to enhance access to park and recreational opportunities in an urban areas. *Companion bill to H.R.2021.*	Introduced by Sen. Tammy Duckworth (D-IL) – March 18, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.2095 To require the Secretary of the Army to conduct a study to determine the costs for the Corps of Engineers to ensure that certain project activities authorized under Nationwide Permit 14 comply with public safety conditions, and for other purposes.	This bill reauthorizes through FY2026 or establishes a variety of programs for water infrastructure. Specifically, it supports programs to provide safe drinking water or treat wastewater, such as sewer overflows or stormwater. For example, the bill reauthorizes and revises the clean water state revolving fund (SRF) and the drinking water SRF.	Introduced by Rep. Billy Long (R-MO) – March 22, 2021	
S.914 Drinking Water and Wastewater Infrastructure Act of 2021	This bill reauthorizes through FY2026 or establishes a variety of programs for water infrastructure. Specifically, it supports programs to provide safe drinking water or treat wastewater, such as sewer overflows or stormwater. For example, the bill reauthorizes and revises the clean water state revolving fund (SRF) and the drinking water SRF..	Introduced by Sen. Tammy Duckworth (D-IL) – March 24, 2021 Passed in the Senate. Report filed by Sen. Tom Carper (D-DE) - May 10, 2021	
H.R.2008 Local Water Protection Act	This bill reauthorizes through FY2026 grants to states for (1) programs that manage and control nonpoint source pollution (e.g., runoff from a variety of sources) added to navigable waters, and (2) groundwater quality protection activities to advance state implementation of such programs.	Introduced by Rep. Angie Craig (D-MN) – March 24, 2021 Passed House. Received in the Senate – June 16, 2021	
H.R.2173 Wastewater Workforce Investment Act	This bill allows states to reserve a portion of the sums allotted to them under the clean water state revolving fund to address the workforce development needs of publicly owned treatment works.	Introduced by Rep. Greg Stanton (D-AZ) – March 23, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.939 IMAGINE Act	This bill encourages the use of innovative construction materials and techniques to accelerate the deployment, extend the service life, improve the performance, and reduce the cost of domestic transportation and water infrastructure projects. Among other things, the bill • establishes an Interagency Innovative Materials Standards Task Force to assess existing standards and test methods for the use of innovative materials in infrastructure, identify key barriers in the standards area that inhibit broader market adoption, and develop new methods and protocols to better evaluate innovative materials; • requires the Department of Transportation to enhance the development of innovative materials in the United States by providing awards to entities for establishing and operating new innovative material innovation hubs; • directs the Federal Highway Administration to provide grants to states' departments of transportation, tribal governments, public toll authorities, and units of local government for coastal or rural infrastructure bridge projects and value engineering projects to enhance the performance of bridges through the use of innovative materials; and • provides grants for the design and installation of water infrastructure projects. *Companion bill to H.R.2197.*	Introduced by Sen. Sheldon Whitehouse (D-RI) – March 24, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.953 Water for Conservation and Farming Act	This bill establishes a funding source for certain water resources development projects in western states. The bill also reauthorizes and expands existing water resources development programs, as well as establishes new programs. Specifically, the bill establishes the Bureau of Reclamation Infrastructure Fund to fund water-related programs, including water reclamation and reuse projects, dam safety projects, and the WaterSMART program (which provides assistance to eligible government entities to increase water supply). Each year from FY2031-FY2061, the Department of the Treasury must deposit $300 million of revenues into this fund that would otherwise be deposited into the Reclamation Fund (which currently funds irrigation works in western states). The bill also expands the allowable uses for grants under the WaterSMART program. Next, the bill revises the Reclamation Climate Change and Water program (which assesses the impact of climate change on water supplies) by requiring Reclamation to develop a strategy to address sustaining native biodiversity during periods of drought. The bill also reauthorizes through FY2028 the Fisheries Restoration and Irrigation Mitigation program (which funds fish passage projects in certain areas that drain into the Pacific Ocean). Finally, the bill establishes new programs directed at western states to • provide assistance to agricultural producers to create and maintain waterbird and shorebird habitats, • award grants to eligible government entities and nonprofit conservation organizations for habitat restoration projects that improve watershed health, and • prepare plans to sustain the survival of critically important fisheries during periods of drought.	Introduced by Sen. Ron Wyden (D-OR) – March 24, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.2197 IMAGINE Act	This bill encourages the use of innovative construction materials and techniques to accelerate the deployment, extend the service life, improve the performance, and reduce the cost of domestic transportation and water infrastructure projects. Among other things, the bill • establishes an Interagency Innovative Materials Standards Task Force to assess existing standards and test methods for the use of innovative materials in infrastructure, identify key barriers in the standards area that inhibit broader market adoption, and develop new methods and protocols to better evaluate innovative materials; • requires the Department of Transportation to enhance the development of innovative materials in the United States by providing awards to entities for establishing and operating new innovative material innovation hubs; • directs the Federal Highway Administration to provide grants to states' departments of transportation, tribal governments, public toll authorities, and units of local government for coastal or rural infrastructure bridge projects and value engineering projects to enhance the performance of bridges through the use of innovative materials; and • provides grants for the design and installation of water infrastructure projects. *Companion bill to S.939.*	Introduced by Rep. David Cicilline (D-RI) – March 26, 2021	
H.R.2288 Investing in Our Communities Act	This bill reinstates the exclusion from gross income for interest on certain bonds issued to advance the refunding of a prior bond issue. The exclusion was repealed for bonds issued after 2017.	Introduced by Rep. Dutch Ruppersberger (D-MD) – March 29, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.2397 Protection from Cumulative Emissions and Underenforcement of Environmental Law Act of 2021	This bill directs the Environmental Protection Agency (EPA) to address the cumulative public health risks associated with multiple environmental stressors and recommend measures to reduce the number of violations of environmental law in certain environmental justice communities. Environmental justice communities are communities with significant representation of communities of color, low-income communities, or tribal and indigenous communities that experience, or are at risk of experiencing, higher or more adverse human health or environmental effects, as compared to other communities. In addition, the EPA must publish and implement a proposal for a protocol that assesses and addresses the cumulative public health risks associated with multiple environmental stressors, such as impacts associated with global climate change. Further, the EPA must identify at least 100 communities that (1) are environmental justice communities; and (2) have had more environmental law violations than the national average, as determined by the EPA. The EPA must then identify the causes of the violations, identify measures to reduce the number of violations, and implement such measures.	Introduced by Diana DeGette (D-CO) – April 8, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.2434 Environmental Justice Act of 2021	This bill requires agencies to address and mitigate the disproportionate impact of environmental and human health hazards on communities of color, indigenous communities, and low-income communities resulting from agencies' programs and policies. The bill also requires agencies to address cumulative impacts of pollution in permitting decisions and expands the types of legal actions available to individuals regarding charges of federal discriminatory practices. Specifically, the bill provides statutory authority for a variety of existing programs, executive orders, federal guidance, and committees concerning environmental justice, including • Executive Order 12898; • a guidance issued in 1997 by the Council on Environmental Quality titled Environmental Justice Guidance Under the National Environmental Policy Act; • a guidance issued in 2016 by the Environmental Protection Agency titled EPA Policy on Consultation and Coordination with Indian Tribes: Guidance for Discussing Tribal Treaty Rights; • the National Environmental Justice Advisory Council; • the Environmental Justice Small Grants Program; and • the Environmental Justice Collaborative Problem-Solving Cooperative Agreement Program. • In addition, the bill requires agencies renewing or issuing specified permits under the Clean Water Act or the Clean Air Act to consider the cumulative impacts of pollution. The bill also allows individuals to bring actions under the Civil Rights Act against entities that receive federal assistance and engage in discriminatory practices that have a disparate impact. Currently, individuals must request that federal agencies bring such actions on their behalf.	Introduced by Rep. Raul Ruiz (D-CA) – April 8, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.2442 Climate Justice Grants Act	This bill requires the Environmental Protection Agency to establish a grant program to assist tribal governments, local governments, nonprofits, or community-based organizations in addressing issues relating to climate justice and carrying out activities that address climate justice concerns of environmental justice communities. Environmental justice communities refers to any population of color, community of color, indigenous community, or low-income community that experiences a disproportionate burden of the negative human health and environmental impacts of pollution or other environmental hazards.	Introduced by Rep. Nanette Diaz Barragan (D-CA) – April 12, 2021	
H.R.2467 PFAS Action Act of 2021	This bill establishes requirements and incentives to limit the use of perfluoroalkyl and polyfluoroalkyl substances, commonly referred to as PFAS, and remediate PFAS in the environment. PFAS are man-made and may have adverse human health effects. A variety of products contain PFAS, such as nonstick cookware or weatherproof clothing. The bill directs the Environmental Protection Agency (EPA) to designate the PFAS perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) as a hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, thereby requiring remediation of releases of those PFAS into the environment. Within five years, the EPA must determine whether the remaining PFAS should be designated as hazardous substances. The EPA must also determine whether PFAS should be designated as toxic pollutants under the Clean Water Act. If PFAS are designated as toxic, then the EPA must establish standards to limit discharges of PFAS from industrial sources into waters of the United States. In addition, the EPA must issue a national primary drinking water regulation for PFAS that, at a minimum, includes standards for PFOA and PFOS. Among other requirements, the EPA must also issue a final rule adding PFOA and PFOS to the list of hazardous air pollutants, test all PFAS for toxicity to human health, and regulate the disposal of materials containing PFAS. Finally, the bill provides incentives to address PFAS, such as grants to help community water systems treat water contaminated by PFAS.	Introduced by Rep. Debbie Dingell (D-MI) – April 13, 2021 Passed by the House; received in the Senate – July 22, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.Res.318 Expressing the sense of the House of Representatives that clean water is a national priority and that the April 21, 2020, Navigable Waters Protection Rule should not be withdrawn or vacated.	This resolution expresses the sense of the House of Representatives that (1) clean water is a national priority, and (2) the 2020 final rule titled The Navigable Waters Protection Rule: Definition of "Waters of the United States" should not be withdrawn or vacated.	Introduced by Rep. Mariannette Miller-Meeks (R-IA) – April 14, 2021	
H.R.2468 Made in America Act of 2021	This bill requires that materials used in carrying out federal infrastructure aid programs are made in the United States. The term produced in the United States means, in the case of • iron or steel products, that all manufacturing processes for the iron or steel product, from the initial melting stage through the application of coatings, occurred in the United States; • manufactured products, that the product was manufactured in the United States and that the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 50% of the total cost of all components of the manufactured product; and • construction materials, that all manufacturing processes for the construction material occurred in the United States. The Department of Commerce must (1) issue uniform standards that define the term all manufacturing processes for purposes of this bill, and (2) take into consideration and seek to maximize the jobs benefited or created in the production of the construction material. The bill requires that all steel, iron, manufactured products, non-ferrous metals, plastic, concrete and aggregates, glass (including optical glass), lumber, and drywall used in these programs be produced in the United States. Includes within infrastructure addressed by this bill federal-aid highways, railroads, public transportation, civil aviation, drinking water, and stormwater. *Companion bill to S.1094.*	Introduced by Rep. John Garamendi (D-CA) – April 13, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.1094 Made in America Act of 2021	This bill requires that materials used in carrying out federal infrastructure aid programs are made in the United States. The term produced in the United States means, in the case of • iron or steel products, that all manufacturing processes for the iron or steel product, from the initial melting stage through the application of coatings, occurred in the United States; • manufactured products, that the product was manufactured in the United States and that the cost of the components of the manufactured product that are mined, produced, or manufactured in the United States is greater than 50% of the total cost of all components of the manufactured product; and • construction materials, that all manufacturing processes for the construction material occurred in the United States. The Department of Commerce must (1) issue uniform standards that define the term all manufacturing processes for purposes of this bill, and (2) take into consideration and seek to maximize the jobs benefited or created in the production of the construction material. The bill requires that all steel, iron, manufactured products, non-ferrous metals, plastic, concrete and aggregates, glass (including optical glass), lumber, and drywall used in these programs be produced in the United States. Includes within infrastructure addressed by this bill federal-aid highways, railroads, public transportation, civil aviation, drinking water, and stormwater. *Companion bill to H.R.2468.*	Introduced by Sen. Tammy Baldwin (D-WI) – April 13, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.1121 PFAS Registry Act of 2021	This bill directs the Department of Veterans Affairs (VA) to establish a registry for current or past members of the Armed Forces who may have been exposed to per- and polyfluoroalkyl substances due to the environmental release of aqueous film-forming foam at a military installation or other Department of Defense (DOD) location. Additionally, the VA must consult with DOD and the Environmental Protection Agency to make recommendations for additional chemicals that should be included in the registry.	Introduced by Sen. Jeanne Shaheen (D-NH) – April 14, 2021	
H.R.2660 WATER Act	This bill directs the Department of Veterans Affairs (VA) to establish a registry for current or past members of the Armed Forces who may have been exposed to per- and polyfluoroalkyl substances due to the environmental release of aqueous film-forming foam at a military installation or other Department of Defense (DOD) location. Additionally, the VA must consult with DOD and the Environmental Protection Agency to make recommendations for additional chemicals that should be included in the registry.	Introduced by Rep. Robert Latta (R-OH) – April 19, 2021	
H.Res.320 Recognizing the critical importance of access to reliable, clean drinking water for Native Americans and Alaska Natives and confirming the responsibility of the Federal Government to ensure such water access.	This resolution expresses the sense of the House of Representatives that access to reliable and clean drinking water is critically important to the health and welfare of American Indians and Alaska Natives. Further, the resolution calls upon the federal government to provide water access to tribal members and communities.	Introduced by Rep. Joe Neguse (D-OH) – April 15, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.Res.166 A resolution recognizing the duty of the Federal Government to create a Green New Deal	This resolution calls for the creation of a Green New Deal with the goals of • achieving greenhouse gas and toxic emissions reductions needed to stay under 1.5 degrees Celsius of warming; • establishing millions of high-wage union jobs and ensuring economic security for all; • investing in infrastructure and industry; • securing clean air and water, climate and community resiliency, healthy food, access to nature, and a sustainable environment for all; and • promoting justice and equality. The resolution calls for accomplishment of these goals through a 10-year national mobilization effort. The resolution also enumerates the goals and projects of the mobilization effort, including • building smart power grids (i.e., power grids that enable customers to reduce their power use during peak demand periods); • upgrading all existing buildings and constructing new buildings to achieve maximum energy and water efficiency; • removing pollution and greenhouse gas emissions from the transportation and agricultural sectors; • cleaning up existing hazardous waste and abandoned sites; • ensuring businesspersons are free from unfair competition; and • providing higher education, high-quality health care, and affordable, safe, and adequate housing to all. *Companion bill to H.Res.332.*	Introduced by Sen. Ed Markey (D-MA) – April 20, 2021	
H.R.2673 CERCLA Liability Expansion and Accountability for Negligent and Unjust Pollution Act	This bill includes petroleum products under the definition of hazardous substances for purposes of Superfund, the program that directs and funds the cleanup of sites contaminated with hazardous substances. Additionally, the release of a petroleum product shall be considered as a release under Superfund if liability for such release is established by any other federal law. Per the bill, a petroleum product is petroleum or oil of any kind, in any form, or any fraction thereof, and includes fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil.	Introduced by Earl Blumenauer (D-OR) – April 20, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.Res.332 Recognizing the duty of the Federal Government to create a Green New Deal	This resolution calls for the creation of a Green New Deal with the goals of • achieving greenhouse gas and toxic emissions reductions needed to stay under 1.5 degrees Celsius of warming; • establishing millions of high-wage union jobs and ensuring economic security for all; • investing in infrastructure and industry; • securing clean air and water, climate and community resiliency, healthy food, access to nature, and a sustainable environment for all; and • promoting justice and equality. The resolution calls for accomplishment of these goals through a 10-year national mobilization effort. The resolution also enumerates the goals and projects of the mobilization effort, including • building smart power grids (i.e., power grids that enable customers to reduce their power use during peak demand periods); • upgrading all existing buildings and constructing new buildings to achieve maximum energy and water efficiency; • removing pollution and greenhouse gas emissions from the transportation and agricultural sectors; • cleaning up existing hazardous waste and abandoned sites; • ensuring businesspersons are free from unfair competition; and • providing higher education, high-quality health care, and affordable, safe, and adequate housing to all. *Companion bill to S.Res.166.*	Introduced by Rep. Alexandria Ocasio-Cortez (D-NY) – April 21, 2021	
S.1239 A bill to amend the Internal Revenue Code of 1986 to provide an exclusion from gross income for certain waste water management subsidies	This bill excludes from gross income, for income tax purposes, a taxpayer subsidy provided by a state or local government to a resident for the purchase or installation of any wastewater management measure intended solely for the taxpayer's principal residence	Introduced by Sen. Kirsten Gillibrand (D-NY) – April 20, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.2674 Superfund Reinvestment Act	This bill authorizes the use of amounts in the Hazardous Substance Superfund for environmental cleanup costs under the Superfund program (which provides funding to clean up sites contaminated with hazardous substances). Receipts and disbursements of the Hazardous Substance Superfund must (1) not be counted for purposes of the President's budget, the congressional budget, the Balanced Budget and Emergency Deficit Control Act of 1985, or the Statutory Pay-As-You-Go Act of 2010; (2) be exempt from general budget limitations imposed by statute on expenditures and net lending (budget outlays); and (3) be available only for the allowable uses specified for the Superfund. This bill (1) reinstates and adjusts for inflation annually after 2021, the Hazardous Substance Superfund financing rate and the corporate environmental income tax threshold amount; and (2) extends the borrowing authority of the Superfund through 2029.	Introduced by Rep. Earl Blumenauer (D-OR) – April 21, 2021	
H.R.2742 PFAS Registry Act of 2021	This bill directs the Department of Veterans Affairs (VA) to establish a registry for current or past members of the Armed Forces who may have been exposed to per- and polyfluoroalkyl substances due to the environmental release of aqueous film-forming foam at a military installation or other Department of Defense (DOD) location. Additionally, the VA must consult with DOD and the Environmental Protection Agency to make recommendations for additional chemicals that should be included in the registry.	Introduced by Rep. Chris Pappas (D-OH) – April 21, 2021	
S.1334 PFAS Accountability Act of 2021	A bill to amend the Toxic Substance Control Act to codify a Federal cause of action and a type of remedy available for individuals significantly exposed to per- and polyfluoroalkyl substances, to encourage research and accountability for irresponsible discharge of those substances, and for other purposes. *Companion legislation to H.R.2751.*	Introduced by Sen. Kirsten Gillibrand (D-NY) – April 22, 2021	
H.R.2751 PFAS Accountability Act of 2021	A bill to amend the Toxic Substance Control Act to codify a Federal cause of action and a type of remedy available for individuals significantly exposed to per- and polyfluoroalkyl substances, to encourage research and accountability for irresponsible discharge of those substances, and for other purposes. *Companion legislation to S. 1334.*	Introduced by Rep. Madeleine Dean (D-PA) – April 22, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.1341 Water Resources Research Amendments Act	This bill reauthorizes through FY2025 the Water Resources Research Act Program and otherwise revises the program, including by increasing the federal share of grant funding under the program for water resources research and technology institutes.	Introduced by Sen. Ben Cardin (D-MD) - April 22, 2021	
S.1303 Build America, Buy America Act	This bill requires federal infrastructure programs to provide for the use of materials produced in the United States. Each federal agency must submit to the Office of Management and Budget and to Congress a report that identifies each federal financial assistance program for infrastructure administered by the agency and (1) identify domestic content procurement preferences applicable to the assistance, (2) assess the applicability of such requirements, (3) provide details on any applicable domestic content procurement preference requirement, and (4) include a description of the type of infrastructure projects that receive funding under the program. Each agency shall ensure that none of the funds made available for such a program may be used for a project unless all of the iron, steel, and manufactured products used in the project are produced in the United States, subject to waivers where inconsistent with the public interest, where not produced in sufficient quantities or satisfactory quality, or where such inclusion will increase the cost of the project by more than 25%. *Companion bill to H.R.2810.*	Introduced by Sen. Sherrod Brown (D-OH) – April 22, 2021 Ordered to be reported – May 21, 2021	
H.R.2781 Water Resources Research Amendments Act	This bill reauthorizes through FY2025 the Water Resources Research Act Program and otherwise revises the program, including by increasing the federal share of grant funding under the program for water resources research and technology institutes. *Companion bill to S.1341.*	Introduced by Rep Josh Harder (D-CA) – April 22, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.2810 Build America, Buy America Act	This bill requires federal infrastructure programs to provide for the use of materials produced in the United States. Each federal agency must submit to the Office of Management and Budget and to Congress a report that identifies each federal financial assistance program for infrastructure administered by the agency and (1) identify domestic content procurement preferences applicable to the assistance, (2) assess the applicability of such requirements, (3) provide details on any applicable domestic content procurement preference requirement, and (4) include a description of the type of infrastructure projects that receive funding under the program. Each agency shall ensure that none of the funds made available for such a program may be used for a project unless all of the iron, steel, and manufactured products used in the project are produced in the United States, subject to waivers where inconsistent with the public interest, where not produced in sufficient quantities or satisfactory quality, or where such inclusion will increase the cost of the project by more than 25%. *Companion bill to S.1303*	Introduced by Rep. Tim Ryan (D-OH) – April 22, 2021 Committee on Natural Resources hearing – May 4, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.2895 REPAIR Act	This bill addresses the financing of infrastructure projects through the establishment of the Infrastructure Financing Authority (IFA) and increases the national limitation on the amount of tax-exempt highway or surface freight transfer facility bonds. Specifically, the bill • directs the IFA to provide direct loans and loan guarantees to facilitate certain infrastructure projects that are economically viable, in the public interest, and of regional or national significance, including the construction, consolidation, alteration, or repair of airports and air traffic control systems, highway facilities, and transmission or distribution pipelines; • sets forth terms and limitations on direct loans and loan guarantees; • establishes a funding mechanism to make the IFA a self-sustaining entity, including through fees and risk premiums on loans and loan guarantees; and • increases from $15 billion to $16 billion the national limitation on the amount of tax-exempt highway or surface freight transfer facility bonds.	Introduced by Rep. Scott Peters (D-CA) – April 28, 2021	
H.R.2952 WISE Act	This bill requires each state to use a certain percentage of funds it receives for capitalization of its clean water state revolving fund for projects to address green infrastructure, water or energy efficiency improvements, or other environmentally innovative activities.	Introduced by Rep. Nikema Williams (R-GA) – April 30, 2021	
H.R.2979 To amend the Water Infrastructure Finance and Innovation Act of 2014 with respect to the final maturity date of certain loans, and for other purposes	This bill allows certain federal water infrastructure loans to have maturity dates of up to 55 years. For a secured loan for a water infrastructure project with a useful life of more than 35 years, the final maturity date of the loan shall be no later than the earlier of (1) 55 years after the project's substantial completion, or (2) the useful life of the project. Currently, the latest possible maturity date for this type of loan is 35 years from the project's substantial completion.	Introduced by Rep. John Garamendi (D-CA) – May 4, 2021	
H.R.3023 Restoring WIFIA Eligibility Act	To amend the Water Infrastructure Finance and Innovation Act of 2014 with respect to budgetary treatment of certain amounts of financial assistance, and for other purposes.	Introduced by Rep. Jim Costa (D-CA) – May 10, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.3112 Western Water Recycling and Drought Relief Act of 2021	This bill authorizes the Department of the Interior to participate in the design, planning, and construction of specified recycled water system facilities in California.	Introduced by Rep. Jerry McNerney (D-CA) – May 11, 2021	
H.R.3113 MAPLand Act	This bill directs the Department of the Interior, the Forest Service, and the U.S. Army Corps of Engineers to jointly develop and adopt interagency standards to ensure compatibility and interoperability among federal databases for the collection and dissemination of outdoor recreation data related to federal lands. Interior, the Forest Service, and the Corps of Engineers must digitize and publish geographic information system mapping data that includes • federal interests, including easements and rights-of-way, in private land; • status information as to whether roads and trails are open or closed; • the dates on which roads and trails are seasonally opened and closed; • the types of vehicles that are allowed on each segment of roads and trails; • the boundaries of areas where hunting or recreational shooting is regulated or closed; and the boundaries of any portion of a body of water that is closed to entry, is closed to watercraft, or has horsepower limitations for watercrafts.	Introduced by Rep. Blake Moore (R-UT) – May 11, 2021 Became Public Law No. 117-114 – April 29, 2022	
H.R.3218 Wastewater Infrastructure Improvement Act of 2021	This bill sets forth requirements and establishes incentives to control water pollution. Specifically, the bill reauthorizes and revises several existing grant programs that address water pollution, including grants concerning implementing state water quality improvement programs, increasing the resilience of public wastewater utilities to man-made or natural disasters, recycling wastewater or stormwater, constructing sewer overflow and stormwater management projects, and supporting the clean water state revolving fund. In addition, the bill revises requirements concerning the National Pollutant Discharge Elimination System (NPDES) permit program of the Environmental Protection Agency (EPA). The bill allows the EPA to issue certain NPDES permits to states or municipalities for up to 10 years (currently, 5 years).	Introduced by Rep. David Rouzer (R-NC) – May 13, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.1605 National Defense Authorization Act for Fiscal Year 2022	Provides authorizations for the Department of Defense for fiscal year 2022.	Introduced by Sen. Rick Scott (R-FL) – May 13, 2021 Became Public Law No: 117-81– December 27, 2021	
H.R.3267 Protect Drinking Water from PFAS Act of 2021	This bill requires the Environmental Protection Agency (EPA) to address the level of perfluoroalkyl and polyfluoroalkyl substances (PFAS) in drinking water. PFAS are man-made and may have adverse human health effects. A variety of products contain PFAS, such as nonstick cookware or weatherproof clothing. In addition, the EPA must publish a maximum contaminant level goal (MCLG) and promulgate a national primary drinking water regulation for PFAS. The MCLG and regulation must be protective of the health of subpopulations that may be at greater risk than the general population of adverse health effects from exposure to PFAS in drinking water.	Introduced by Rep. Brendan Boyle (D-PA) – May 17, 2021	
H.R.3282 Drinking Water Funding for the Future Act of 2021	This bill reauthorizes through FY2026 several drinking water programs, such as programs concerning efforts to • assess risks to community water systems, • deploy innovative water technologies, • enforce compliance with standards under the Safe Drinking Water Act, • monitor unregulated drinking water contaminants, • assist water systems through the drinking water state revolving fund, • protect source waters, • test water quality in small and disadvantaged communities, and reduce lead in drinking water.	Introduced by Rep. David McKinley (R-WV) – May 17, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.3291 Assistance, Quality, and Affordability Act of 2021	This bill provides support for drinking water infrastructure and requires the Environmental Protection Agency (EPA) to address the safety and affordability of drinking water. The bill reauthorizes and establishes several programs for drinking water infrastructure. For example, it reauthorizes through FY2031 the drinking water state revolving fund. In addition, the bill revises requirements concerning the safety of drinking water, including by requiring the EPA to promulgate national primary drinking water regulations for perfluoroalkyl and polyfluoroalkyl substances (commonly known as PFAS), microcystin toxin, and 1,4–dioxane. PFAS are man-made and may have adverse human health effects. A variety of products contain the compounds, such as nonstick cookware or weatherproof clothing. Microcystin is a toxin that is produced by certain algae. The solvent known as 1,4–dioxane may also have adverse human health effects. It is used in variety of products, such as adhesives, sealants, and printing inks. The EPA must also implement a residential emergency relief program that assists customers of public water systems with paying drinking water bills. Under the program, the EPA must provide payments to public water systems to reimburse them for forgiving their customers' debts or fees for services provided since March 1, 2020. Public water systems that receive payments may not disconnect or interrupt their customer's service because of such debt or fees.	Introduced by Rep. Paul Tonko (D-NY) – May18, 2021 Passed via legislative vehicle H.R. 3684 – July 1, 2021	
H.R.3293 Low-Income Water Customer Assistance Programs Act of 2021	This bill directs the Environmental Protection Agency (EPA) to establish grant programs to assist low-income households in maintaining access to drinking water and wastewater services. Specifically, the EPA must establish a program to assist such households with paying drinking water bills. States and community water systems may apply for grants. In addition, the EPA must establish a program to assist such households with paying wastewater utility bills. States may apply for grants for small community-serving wastewater facilities. Certain municipalities may apply for grants for (1) treatment works for municipal waste, or (2) municipal separate storm sewer systems.	Introduced by Rep. Lisa Blunt Rochester – (D-DE) – May 18, 2021 Passed via legislative vehicle H.R. 3684 – July 1, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.3292 Water Debt Relief Act of 2021	This bill requires the Environmental Protection Agency (EPA) to implement a residential emergency relief program. Under the program, the EPA must reimburse public water systems for providing forgiveness of the debts and fees of customers who incurred new debts on or after March 1, 2020.	Introduced by Rep. Debbie Dingell (D-MI) – May 18, 2021	
H.R.3339 National Infrastructure Bank Act of 2021	This bill creates the National Infrastructure Bank to facilitate the long-term financing of infrastructure projects. Specifically, the bank must provide loans to public and private entities for financing, developing, or operating eligible infrastructure projects. An eligible project must have a public sponsor as well as local, regional, or national significance. The bill treats the bank as a government corporation exempt from tax and treats contributions to the bank as charitable contributions. The bill also provides for criteria and preferences for deciding whether to provide a loan, such as whether a project promotes job creation or provides environmental benefits. Projects that receive a loan must (1) pay all laborers and mechanics locally prevailing wages, and (2) use only certain U.S.-produced construction materials unless a waiver is secured from the bank. The bank shall issue stock and may also issue bonds and maintain a discount line of credit with the Federal Reserve System. The bank must apply for a national bank charter and, once chartered, accept deposits from individuals, corporations, and public entities and pay interest on those deposits. The bill imposes requirements related to the bank's operation, such as minimum reserve requirements and requirements for handling loan losses.In addition, the bank must facilitate the organization of at least seven regional economic accelerator planning groups to, among other activities, identify infrastructure needs and priorities. Within five years, the Government Accountability Office must report on the bank's activities.	Introduced by Rep. Danny Davis (D-IL) – May 19, 2021	
S.1761 Water Quality Certification Improvement Act of 2021	This bill limits the authority of states with respect to water quality certifications. Specifically, the bill limits the authority of states to review federally permitted activities that may result in discharges into navigable waters.	Introduced by Sen. John Barrasso (R-WY) – May 20, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.3404 FUTURE Western Water Infrastructure and Drought Resiliency Act	This bill addresses water-related resources and infrastructure. Among other provisions, the bill" • reauthorizes through FY2026 the California Bay-Delta program, the Water Availability and Use Science Program, and a water desalination program; • reauthorizes through FY2028 the Fisheries Restoration and Irrigation Mitigation program; • creates various grants for water projects and expands the allowable uses of grants for water recycling and reuse projects; • establishes a funding source for certain water resources development projects in western states; • expands the tax exclusion for energy conservation subsidies provided by public utilities to include certain subsidies for water conservation or efficiency measures and stormwater management measures; • establishes prizes for water technology applications; • requires the U.S. Army Corps of Engineers to use specified funds for water control manual updates for forecast-informed water operations projects; and • allows certain funding to be used for the remediation of land formerly used to cultivate marijuana. The Department of the Interior must, within 10 years, make certain streamgages operational. (Streamgages are fixed structures at streams, rivers, lakes, and reservoirs that measure water level and related streamflow.) The bill establishes programs related to ecosystem protection and restoration, including programs to (1) incentivize farmers to keep fields flooded during appropriate periods for waterbird habitat creation and maintenance, and (2) prepare drought plans to sustain critically important fisheries.	Introduced by Rep. Jared Huffman (D-CA) – May 20, 2021	
H.R.3422 Water Quality Certification Improvement Act of 2021	This bill limits the authority of states with respect to water quality certifications. Specifically, the bill limits the authority of states to review federally permitted activities that may result in discharges into navigable waters.	Introduced by Rep. David McKinley (R-WV) – May 20, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.1726 21st Century Buy American Act	This bill modifies domestic product preferences for federal acquisitions. The bill also allows the Department of Defense to make or guarantee loans to manufacturers under the Defense Production Act for specified uses, such as to increase the capacity to produce items that are vital to national security. The bill requires more than 60% of a product's cost to be from domestic components for the product to qualify as American for purposes of the Buy American Act. The bill narrows the circumstances under which the overseas use exception and the public interest exception to domestic content requirements may be made. The General Services Administration must maintain BuyAmerican.gov, which must include and make available to the public (1) information on all waivers and exceptions to domestic product preference laws requested, under consideration, or granted; and (2) publicly available contact information for the contracting agencies. No requested waiver of a domestic product preference law may be granted if (1) the request was not made available to the public, (2) the information available to the agency concerning the request was not made available to the public, or (3) no opportunity for public comment concerning the request was granted. *Companion bill to H.R.3880.*	Introduced by Sen. Chris Murphy (D-CT) – May 20, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.3473 Build Local, Hire Local Act	This bill imposes various requirements on certain federally assisted infrastructure projects. The bill also creates infrastructure-related grant programs and establishes the Buy America Bureau. Such federally assisted infrastructure projects must (1) employ a certain percentage of local workers to the maximum extent practicable; and (2) prioritize hiring certain individuals, such as veterans and those facing barriers to employment. A certain percentage of funds for these projects must be used for contracts with small businesses that have fewer than 10 employees. When applying for a contract, grant, or loan related to a project, the applying entity must disclose whether there are any rulings, such as a civil judgment, finding that the entity has violated certain federal labor and occupational safety laws in the last three years. In addition, the Department of Transportation must award grants to entities in disadvantaged and underserved communities for infrastructure projects that create connected, economically prosperous, and environmentally healthy communities. Further, the Department of Labor must provide grants to workforce development boards and industry partnerships for job training programs to train certain groups, such as individuals with barriers to employment, for jobs in targeted infrastructure industries. The bill also establishes the Buy America Bureau within the Department of Commerce to oversee project compliance with existing laws that require the use of U.S.-made materials in certain federally funded projects. *Companion bill to S.1827.*	Introduced by Rep. Karen Bass (D-CA) – May 25, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.1827 Build Local, Hire Local Act	This bill imposes various requirements on certain federally assisted infrastructure projects. The bill also creates infrastructure-related grant programs and establishes the Buy America Bureau. Such federally assisted infrastructure projects must (1) employ a certain percentage of local workers to the maximum extent practicable; and (2) prioritize hiring certain individuals, such as veterans and those facing barriers to employment. A certain percentage of funds for these projects must be used for contracts with small businesses that have fewer than 10 employees. When applying for a contract, grant, or loan related to a project, the applying entity must disclose whether there are any rulings, such as a civil judgment, finding that the entity has violated certain federal labor and occupational safety laws in the last three years. In addition, the Department of Transportation must award grants to entities in disadvantaged and underserved communities for infrastructure projects that create connected, economically prosperous, and environmentally healthy communities. Further, the Department of Labor must provide grants to workforce development boards and industry partnerships for job training programs to train certain groups, such as individuals with barriers to employment, for jobs in targeted infrastructure industries. The bill also establishes the Buy America Bureau within the Department of Commerce to oversee project compliance with existing laws that require the use of U.S.-made materials in certain federally funded projects. *Companion bill to H.R.3473.*	Introduced by Sen. Kirsten Gillibrand (D-NY) – May 25, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.1907 Clean Water Standards for PFAS Act of 2021	This bill directs the Environmental Protection Agency (EPA) to develop requirements and incentives to limit the discharge of perfluoroalkyl and polyfluoroalkyl substances (PFAS) into certain waters of the United States. PFAS are man-made and may have adverse human health effects. A variety of products contain the compounds, such as nonstick cookware or weatherproof clothing. Within two years, the EPA must publish water quality criteria for each measurable perfluoroalkyl substance, polyfluoroalkyl substance, and class of PFAS. The water quality criteria must determine how much of these substances can be present in water before it is likely to harm human health. Within four years, the EPA must publish a final rule that establishes, for each priority industry category specified in the bill, effluent limitations guidelines and standards for the discharge of each measurable perfluoroalkyl substance, polyfluoroalkyl substance, and class of PFAS. Under the Clean Water Act, effluent limitations restrict the quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources (e.g., a discernible source such as a pipe) into navigable waters, the ocean, or other specified waters. In addition, the EPA must award grants to owners and operators of publicly owned treatment works for implementing the effluent limitations guidelines and standards. *Companion bill to H.R.3622.*	Introduced by Sen. Kirsten Gillibrand (D-NY) – May 27, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.1855 Wildfire Emergency Act of 2021	This bill provides for programs and activities in support of forest restoration, wildfire mitigation, and energy resilience. The Department of Agriculture (USDA) shall select landscape-scale forest restoration projects to implement on National Forest System land and on land adjoining National Forest System land. USDA shall establish a pilot program under which USDA may enter into conservation finance agreements with public or private persons to implement and monitor such projects. The Department of Energy shall establish a program to support critical infrastructure and microgrids, including by improving the energy resilience and power needs of critical facilities (e.g., hospitals) through the use of microgrids, renewable energy, energy efficiency, reduced electricity demand, and on-site storage. USDA and the Department of the Interior shall establish one or more centers in western states to train individuals in methods relevant to the mitigation of wildfire risk. USDA shall establish a competitive grant program to support workforce development in forestry and fire management.	Introduced by Sen. Dianne Feinstein (D-CA) – May 26, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.3622 Clean Water Standards for PFAS Act of 2021	This bill directs the Environmental Protection Agency (EPA) to develop requirements and incentives to limit the discharge of perfluoroalkyl and polyfluoroalkyl substances (PFAS) into certain waters of the United States. PFAS are man-made and may have adverse human health effects. A variety of products contain the compounds, such as nonstick cookware or weatherproof clothing. Within two years, the EPA must publish water quality criteria for each measurable perfluoroalkyl substance, polyfluoroalkyl substance, and class of PFAS. The water quality criteria must determine how much of these substances can be present in water before it is likely to harm human health. Within four years, the EPA must publish a final rule that establishes, for each priority industry category specified in the bill, effluent limitations guidelines and standards for the discharge of each measurable perfluoroalkyl substance, polyfluoroalkyl substance, and class of PFAS. Under the Clean Water Act, effluent limitations restrict the quantities, rates, and concentrations of chemical, physical, biological, and other constituents which are discharged from point sources (e.g., a discernible source such as a pipe) into navigable waters, the ocean, or other specified waters. In addition, the EPA must award grants to owners and operators of publicly owned treatment works for implementing the effluent limitations guidelines and standards. *Companion bill to S.1907.*	Introduced by Rep. Chris Pappas (D-NH) – May 28, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.3684 INVEST in America Act	This bill addresses provisions related to federal-aid highway, transit, highway safety, motor carrier, research, hazardous materials, and rail programs of the Department of Transportation (DOT). Among other provisions, the bill • extends FY2021 enacted levels through FY2022 for federal-aid highway, transit, and safety programs; • reauthorizes for FY2023-FY2026 several surface transportation programs, including the federal-aid highway program, transit programs, highway safety, motor carrier safety, and rail programs; • addresses climate change, including strategies to reduce the climate change impacts of the surface transportation system and a vulnerability assessment to identify opportunities to enhance the resilience of the surface transportation system and ensure the efficient use of federal resources; • revises Buy America procurement requirements for highways, mass transit, and rail; • establishes a rebuild rural bridges program to improve the safety and state of good repair of bridges in rural communities; • implements new safety requirements across all transportation modes; and • directs DOT to establish a pilot program to demonstrate a national motor vehicle per-mile user fee to restore and maintain the long-term solvency of the Highway Trust Fund and achieve and maintain a state of good repair in the surface transportation system.	Introduced by Rep. Peter DeFazio (D-OR) – June 4, 2021 Became Public Law No. 117-58 – November 15, 2021	
H.R.3691 Wastewater Infrastructure Modernization Act	This bill requires the Environmental Protection Agency to establish a program to award grants to municipalities for projects at publicly owned treatment works concerning (1) intelligent sewage or stormwater collection systems, or (2) innovative and alternative combined storm and sanitary sewer projects	Introduced by Rep. Carolyn Bourdeux (D-GA) – June 4, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.3701 PIPE Act	This bill directs the Environmental Protection Agency to establish (1) a wastewater infrastructure discretionary grant program, and (2) a drinking water infrastructure discretionary grant program. Under the programs, state, local, and tribal governments, public water utilities (e.g., systems used to treat wastewater or sewage), and certain water systems may apply for grants for infrastructure projects.	Introduced by Rep. Antonio Delgado (D-NY) – June 4, 2021	
H.R.3722 21st Century Infrastructure Bank Act	To establish the 21st Century American Infrastructure Bank, and for other purposes.	Introduced by Rep. Sean Maloney (D-NY) – June 4, 2021	
H.R.3751 Clean Water Infrastructure Resilience and Sustainability Act of 2021	This bill requires the Environmental Protection Agency to establish a grant program for increasing the resilience of publicly owned treatment works (e.g., systems used to treat wastewater or sewage) to natural hazards, such as extreme weather events. Under the program, the EPA must award grants to (1) a municipality; or (2) an intermunicipal, interstate, or state agency.	Introduced by Rep. Salud Carbajal (D-CA) – June 8, 2021	
H.R.3814 UNSHACKLE Act	This bill revises the environmental review process required under the National Environmental Policy Act of 1969 (NEPA), including by • establishing deadlines for federal agencies to complete reviews of the environmental effects of proposed major federal actions; • establishing penalties for agencies that do not comply with these deadlines; • limiting the number of assessment documents required for proposed major federal actions, requiring agencies to reuse certain research or documents, and allowing agencies to adopt environmental documents prepared by states or third parties; • requiring agencies to only consider alternatives to proposed actions that are technically and economically feasible; • prohibiting agencies from considering whether proposed actions or alternatives to those actions will have an effect on climate change; and • establishing requirements concerning the judicial review of NEPA cases.	Introduced by Rep. Liz Cheney (R-WY) – June 11, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.4018 NEED Water Act	This bill describes which bodies of water fall under federal jurisdiction for purposes of the Clean Water Act. Specifically, the bill redefines navigable waters and establishes a process for the U.S. Army Corps of Engineers to determine, upon request, whether certain waters are navigable waters.	Introduced by Rep. David Valadao (R-CA) – June 17, 2021	
S.2168 Define WOTUS Act of 2021	This bill describes which bodies of water fall under federal jurisdiction for purposes of the Clean Water Act. Specifically, the bill redefines navigable waters and establishes a process for the U.S. Army Corps of Engineers to determine, upon request, whether certain waters are navigable waters. *Companion bill to H.R.4570.*	Introduced by Rep. Mike Braun (R-IN) – June 22, 2021	
H.R.4069 Septic Upgrade Grant Act	To amend the Federal Water Pollution Control Act to provide for additional subsidization assistance to a municipality to carry out on-site wastewater treatment system projects, and for other purposes**.**	Introduced by Thomas Suozzi (D-NY) – June 22, 2021	
H.R.4099 Large-Scale Water Recycling Project Investment Act	To direct the Secretary of the Interior to establish a grant program to provide grants on a competitive basis to eligible entities for large-scale water recycling and reuse projects, and for other purposes.	Introduced by Rep. Grace Napolitano (D-CA) – June 23, 2021 House Natural Resources Subcommittee on Water, Oceans, and Wildlife hearing held – June 29, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.2286 Western Water, Jobs, and Infrastructure Act	This bill provides funding to carry out rural water projects, Indian water rights settlement agreements, and projects related to the Milk River Project in Montana. First, the bill establishes and provides funds through FY2026 for the Reclamation Rural Water Project Construction Fund, from which the Bureau of Reclamation must complete construction of authorized rural water projects. Next, the bill establishes and provides funds through October 1, 2025, for the Indian Water Rights Settlement Completion Fund, from which the Department of the Interior must implement any Indian water rights settlement agreements approved by Congress. In addition, the bill provides FY2022 funding for Reclamation to carry out projects to rehabilitate the Milk River Project, including projects to rehabilitate or replace infrastructure.	Introduced by Sen. Jon Tester (D-MT) – June 24, 2021	
H.R.4224 PFAS Transparency Act	The bill requires an industrial entity that introduces perfluoroalkyl or polyfluoroalkyl substances, commonly referred to as PFAS, into wastewater treatment systems to provide specified advance notices to such systems, including the identity and quantity of such PFAS. PFAS are man-made and may have adverse human health effects. A variety of products contain the compounds, such as nonstick cookware or weatherproof clothing.	Introduced by Rep. Antonio Delgado (D-NY) – June 29, 2021	
H.R.4284 Clean Drinking Water Equity Act	To amend the Safe Drinking Water Act with respect to assistance for disadvantaged communities, and for other purposes.	Introduced by Rep. Raul Ruiz (D-CA) – June 30, 2021	
H.R.4336 NEPA State Assignment Expansion Act	This bill allows certain states to enter into agreements with federal agencies to assume federal responsibilities regarding the environmental review of proposed major federal actions under the National Environmental Policy Act of 1969.	Introduced by Rep. David Schweikert (R-AZ) – July 1, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.4372 Department of the Interior, Environment, and Related Agencies Appropriations Act, 2022	Making appropriations for the Department of the Interior, environment, and related agencies for the fiscal year ending September 30, 2022, and for other purposes.	Introduced by Rep. Chellie Pingree (D-ME) – July 6, 2021 Passed via legislative minibus H.R.4502 – August 3, 2021	
S.2334 Large Scale Water Recycling Project and Drought Resiliency Investment Act	To direct the Secretary of the Interior to establish a grant program to provide grants on a competitive basis to eligible entities for large-scale water recycling and reuse projects, to amend the Omnibus Public Land Management Act of 2009 to make certain modifications to the Cooperative Watershed Management Program, to provide emergency drought funding, and for other purposes. *Companion bill to H.R.4099.*	Introduced by Sen. Catherine Cortez Masto (D-NV) – July 13, 2021	
H.R.4413 National Infrastructure Development Bank Act of 2021	This bill establishes the National Infrastructure Development Bank as a government corporation to finance energy, environmental (e.g., drinking water or waste facilities), telecommunications, and transportation infrastructure projects. The bill establishes the National Infrastructure Development Bank Board, which must oversee the infrastructure projects. The board may make loans and loan guarantees to assist in financing infrastructure projects. Further, the board must establish an executive committee, a risk management committee, an audit committee, and a compliance office. To be eligible for financial assistance from the bank, an infrastructure project (1) must have a public benefit, as determined by the board; and (2) may not have a sole use or purpose that is private. An infrastructure project must use iron, steel, and manufactured products that are made in the United States. The bill also establishes accounting and reporting requirements. In particular, the Government Accountability Office must, within five years of this bill's enactment, submit a report to Congress evaluating the bank's activities.	Introduced by Rep. Rosa DeLauro (D-CT) – July 13, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.2361 Green Retrofits Act	To reauthorize the budget-neutral demonstration program for energy and water conservation at multifamily residential units, to establish a green retrofit program, and for other purposes.	Introduced by Sen. John Reed (D-RI) – July 15, 2021	
H.R.4502 Labor, Health and Human Services, Education, Agriculture, Rural Development, Energy and Water Development, Financial Services and General Government, Interior, Environment, Military Construction, Veterans Affairs, Transportation, and Housing and Urban Development Appropriations Act, 2022	This bill provides FY2022 appropriations to the Departments of Labor, Health and Human Services, and Education; and related agencies.	Introduced by Rep. Rosa DeLauro (D-CT) – July 19, 2021 Passed the House; received in the Senate – August 3, 2021	
H.R.4549 Energy and Water Development and Related Agencies Appropriations Act, 2022	This bill provides FY2022 appropriations for U.S. Army Corps of Engineers civil works projects, the Department of the Interior's Bureau of Reclamation, the Department of Energy (DOE), and independent agencies such as the Nuclear Regulatory Commission.	Introduced by Rep. Marcy Kaptur (D-OH) – July 20. 2021 Passed via legislative minibus H.R.4502 – August 3, 2021	
H.R.4570 Define WOTUS Act of 2021	This bill describes which bodies of water fall under federal jurisdiction for purposes of the Clean Water Act. Specifically, the bill redefines navigable waters and establishes a process for the U.S. Army Corps of Engineers to determine, upon request, whether certain waters are navigable waters. *Companion bill to S.2168*	Introduced by Rep. Mary Miller (R-IL) – July 20,2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.2404 Western Wildfire Support Act of 2021	The bill requires the Department of Agriculture (USDA) and the Department of the Interior to establish spatial fire management plans before the end of FY2024. The bill establishes • accounts in the Treasury for addressing wildfires, • a program to train and certify citizens who wish to be able to volunteer to assist USDA or Interior during a wildland fire incident, • a program to award grants to eligible states or units of local government to acquire slip-on tank and pump units for a surge capacity of resources for fire suppression, • the Theodore Roosevelt Genius Prize for the management of wildfire-related invasive species, and • the Management of Wildfire-Related Invasive Species Technology Advisory Board.	Introduced by Sen. Catherine Cortez Masto (D-NV) – July 20, 2021 Committee on Energy and Natural Resource hearing held – October 21, 2021	
S.2406 Protect Drinking Water from PFAS Act of 2021	This bill requires the Environmental Protection Agency (EPA) to address the level of perfluoroalkyl and polyfluoroalkyl substances (PFAS) in drinking water. PFAS are man-made and may have adverse human health effects. A variety of products contain PFAS, such as nonstick cookware or weatherproof clothing. The EPA must publish a maximum contaminant level (MCL) and promulgate a national primary drinking water regulation for PFAS that includes perfluorooctanoic acid (commonly referred to as PFOA) and perfluorooctane sulfonic acid (commonly referred to PFOS). The MCL and regulation must be protective of the health of subpopulations that may be at greater risk than the general population of adverse health effects from exposure to PFAS in drinking water.	Introduced by Sen. Kirsten Gillibrand (D-NY) – July 21, 2021	
H.R.4597 Clean Water SRF Parity Act	To amend the Federal Water Pollution Control Act to make certain projects and activities eligible for financial assistance under a State water pollution control revolving fund, and for other purposes.	Introduced by Rep. John Garamendi (D-CA) – July 21, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.4602 WIPPES Act	To direct the Administrator of the Environmental Protection Agency to establish a grant program to improve the effectiveness of education and outreach on "Do Not Flush" labeling, and to require the Federal Trade Commission, in consultation with the Administrator, to issue regulations requiring certain products to have "Do Not Flush" labeling, and for other purposes. *Companion bill to S.3956.*	Introduced by Rep. Alan Lowenthal (D-CA) – July 21, 2021	
S.2430 Water Conservation Rebate Tax Parity Act	This bill expands the tax exclusion for energy conservation subsidies provided by public utilities to include certain subsidies for water conservation or efficiency measures and storm water management measures. The bill excludes from gross income subsidies provided (directly or indirectly) (1) by a public utility to a customer, or by a state or local government to a resident of such state or locality, for the purchase or installation of any water conservation or efficiency measure; and (2) by a storm water management provider to a customer, or by a state or local government to a resident of such state or locality, for the purchase or installation of any storm water management measure *Companion bill to H.R.4647.*	Introduced by Rep. Jared Huffman (D-CA) – July 22, 2021	
S.2454 Water Reuse and Resiliency Act of 2021	To amend the Federal Water Pollution Control Act to reauthorize the pilot program for alternative water source projects, and for other purposes.	Introduced by Sen. Alex Padilla (D-CA) – July 22, 2021	
H.R.4647 Water Conservation Rebate Tax Parity Act	This bill expands the tax exclusions for energy conservation subsidies to include subsidies provided (directly or indirectly) (1) by a public utility for the purchase or installation of any water conservation or efficiency measure; (2) by a storm water management provider for the purchase or installation of any storm water management measure; or (3) by a state or local government to a resident of such state or locality for the purchase or installation of any wastewater management measure, but only if such measure concerns the taxpayer's principal residence.	Introduced by Rep. Jared Huffman (D-CA) – July 22, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.4712 Desalination Development Act	This bill reauthorizes through FY2024 a grant program for constructing desalination projects. The bill also revises the program, including by requiring the prioritization of projects that maximize energy efficiency and the use of renewable energy.	Introduced by Rep. Mike Levin (D-CA) – July 27, 2021	
H.R.4614 Resilient Federal Forests Act	This bill modifies and sets forth provisions regarding forest management activities on National Forest System, public, and tribal lands. The bill provides for, among other things" • the Departments of Agriculture (USDA) and Interior to conduct fireshed management projects in fireshed management areas, • certain categorical exclusions for various purposes, • the balancing of the short- and long-term effects of forest management activities while considering injunctive relief, • USDA and Interior to establish their own discretionary arbitration pilot programs as an alternative dispute resolution process for forest management activities, • increasing the maximum term for a stewardship end result contract to 20 years, • demonstration projects to support the development and commercialization of biochar on Indian forest lands or rangelands and in nearby communities by providing reliable supplies of feedstock from federal lands, • the decommissioning of certain Forest Service Roads within designated high fire-prone areas, • repealing of the Eastside Screens requirements on National Forest System lands, • making the Northwest Forest Plan Survey and Manage Mitigation Measure Standards and Guidelines inapplicable to any National Forest System lands or public lands, • development of a protection plan for giant sequoia trees on National Forest System lands and public lands, and • permanent rights of access to the Oregon and California Railroad grant lands and the Coos Bay Wagon Road grant lands for private landowners issued reciprocal road rights-of-way.	Introduced by Repl. Bruce Westerman (R-AR) – July 22, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.2567 Navigable Waters Protection Act of 2021	To enact the definition of "waters of the United States" into law, and for other purposes.	Introduced by Sen. Shelley Capito (R-WV) – July 29, 2021	
S.2605 Energy and Water Development and Related Agencies Appropriations Act, 2022	This bill provides FY2022 appropriations for U.S. Army Corps of Engineers civil works projects, the Department of the Interior's Bureau of Reclamation, the Department of Energy (DOE), and independent agencies such as the Nuclear Regulatory Commission..	Introduced by Sen. Dianne Feinstein (D-CA) – August 4, 2021 Passed the Appropriations Committee; Placed on the Senate calendar – August 4, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.2630 Environmental Justice Act of 2021	This bill requires agencies to address and mitigate the disproportionate impact of environmental and human health hazards on communities of color, indigenous communities, and low-income communities resulting from agencies' programs and policies. The bill also requires agencies to address cumulative impacts of pollution in permitting decisions and expands the types of legal actions available to individuals regarding charges of federal discriminatory practices. Specifically, the bill provides statutory authority for a variety of existing programs, executive orders, federal guidance, and committees concerning environmental justice, including • Executive Order 12898; • a guidance issued in 1997 by the Council on Environmental Quality titled Environmental Justice Guidance Under the National Environmental Policy Act; • a guidance issued in 2016 by the Environmental Protection Agency titled EPA Policy on Consultation and Coordination with Indian Tribes: Guidance for Discussing Tribal Treaty Rights; • the National Environmental Justice Advisory Council; • the Environmental Justice Small Grants Program; and • the Environmental Justice Collaborative Problem-Solving Cooperative Agreement Program. • In addition, the bill requires agencies renewing or issuing specified permits under the Clean Water Act or the Clean Air Act to consider the cumulative impacts of pollution. The bill also allows individuals to bring actions under the Civil Rights Act against entities that receive federal assistance and engage in discriminatory practices that have a disparate impact. Currently, individuals must request that federal agencies bring such actions on their behalf.	Introduced by Sen. Cory Booker (D-NJ) – August 5, 2021	
H.R.4976 Ensuring PFAS Cleanup Meets or Exceeds Stringent Standards Act	To direct the Secretary of Defense to ensure that removal and remedial actions relating to PFAS contamination result in levels meeting or exceeding certain standards, and for other purposes.	Introduced by Rep. Elissa Slotkin (D-MI) – August 6, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.4979 Maintaining Access to Essential Services Act of 2021	This bill establishes several loan programs to assist households with paying utility bills for drinking water, wastewater, stormwater management, energy (e.g., electricity, natural gas, or propane), and internet services during the COVID-19 public health emergency. Under the programs, the utilities may apply for loans that are equal to the amount of the payment shortfall from their customers during the emergency.	Introduced by Rep. Rashia Tlaib (D-MI) – August 6, 2021	
S.2698 Stop CATASTROPHES Act	This bill categorically excludes certain forest management activities from the requirement to prepare an environmental assessment or an environmental impact statement. The activities are those that are carried out by the Department of Agriculture on National Forest System Lands or the Department of the Interior on public lands where the primary purpose is to improve or restore such lands or reduce the risk of wildfire on such lands. To be excluded, the area of the forest management activity may not exceed 10,000 acres.	Introduced by Sen. Cynthia Lummis (R-WY) – August 10, 2021	
S.Con.Res.14 A concurrent resolution setting forth the congressional budget for the United States Government for fiscal year 2022 and setting forth the appropriate budgetary levels for fiscal years 2023 through 2031	This concurrent resolution establishes the congressional budget for the federal government for FY2022, sets forth budgetary levels for FY2023-FY2031, and provides reconciliation instructions for legislation that increases the deficit. The resolution recommends levels and amounts for FY2022-FY2031 for • federal revenues, • new budget authority, • budget outlays, • deficits, • public debt, • debt held by the public, and • the major functional categories of spending.	Introduced by Sen. Bernie Sanders (I-VT) – August 9, 2021 Agreed to in the House – November 18, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.5305 Extending Government Funding and Delivering Emergency Assistance Act	This bill provides continuing FY2022 appropriations for federal agencies, provides supplemental appropriations, and extends several expiring programs and authorities. Specifically, the bill provides continuing FY2022 appropriations to federal agencies through the earlier of December 3, 2021, or the enactment of the applicable appropriations act. It is known as a continuing resolution (CR) and prevents a government shutdown that would otherwise occur if the FY2022 appropriations bills have not been enacted when FY2022 begins on October 1, 2021. The CR funds most programs and activities at the FY2021 levels with several exceptions that provide funding flexibility and additional appropriations for various programs. In addition, the bill provides supplemental appropriations to several federal agencies for activities related to natural disasters and the evacuees from Afghanistan.	Introduced by Rep. Rosa DeLauro (D-CT) – September 21, 2021 Became Public Law No: 117-43 – September 30, 2021	
S. 2792 National Defense Authorization Act for Fiscal Year 2022	This bill authorizes Department of Defense (DOD) activities for FY2022 and addresses related issues.	Introduced by Sen. Jack Reed (D-RI) – September 22, 2021	
H.R.5438 Water Advanced Technologies for Efficient Resource Use Act of 2021	To provide incentives for the purchase of water-efficient products, and for other purposes.	Introduced by Rep. Matt Cartwright (D-PA) – September 30, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.5376 Inflation Reduction Act of 2022	This bill provides funding, establishes programs, and otherwise modifies provisions relating to a broad array of areas, including education, labor, child care, health care, taxes, immigration, and the environment.	Introduced by Rep. John Yarmuth (D-KY) – September 27, 2021 Became Public Law No. 117-169 – August 16, 2022	
S.3031 Clean Water Allotment Modernization Act of 2021	To amend the Federal Water Pollution Control Act to modify certain allotments under that Act, and for other purposes. *Companion bill to H.R.5653.*	Introduced by Sen. Marco Rubio (R-FL) – October 20, 2021	
S.3034 Department of the Interior, Environment, and Related Agencies Appropriations Act, 2022	This bill provides FY2022 appropriations for the Department of the Interior, the Environmental Protection Agency (EPA), and several related agencies.	Introduced by Sen. Jeff Merkley (D-OR) – October 20, 2021	
H.R.5653 Clean Water Allotment Modernization Act of 2021	To amend the Federal Water Pollution Control Act to modify certain allotments under that Act, and for other purposes. *Companion bill to S.3031.*	Introduced by Rep. Michael Waltz (R-FL) – October 20, 2021	
H.R.5716 Securing Access for the central Valley and Enhancing (SAVE) Water Resources Act	To promote water supply reliability and improved water management for rural communities, the State of California, and the Nation, and for other purposes.	Introduced by Rep. Josh Harder (D-CA) – October 25, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.3156 Federal Agency Climate PREP Act of 2021	To require Federal agencies to maintain plans for responding to, mitigating, and adapting to climate change, and for other purposes.	Introduced by Sen. Amy Klobuchar (D-MN) – November 3, 2021	
S.3169 Keep Food Containers Safe from PFAS Act of 2021	To amend the Federal Food, Drug, and Cosmetic Act to prohibit the introduction or delivery for introduction into interstate commerce of food packaging containing intentionally added PFAS, and for other purposes. *Companion bill to H.R.6026.*	Introduced by Sen. Maggie Hassan (D-NH) – November 4, 2021	
H.R.5987 PFAS Definition Improvement Act	This bill broadens the definition of perfluoroalkyl or polyfluoroalkyl substances, commonly referred to as PFAS, in relation to the reporting requirement under the Toxic Substances Control Act. PFAS are man-made and may have adverse human health effects. A variety of products contain the compounds, such as nonstick cookware or weatherproof clothing. Specifically, the bill provides that PFAS include those substances that contain at least one fully fluorinated carbon atom.	Introduced by Rep. Deborah Ross (D-NC) – November 16, 2021	
H.R.6010 Protect Our Workers Act of 2021	To ensure that contractor employees on Army Corps projects are paid prevailing wages as required by law, and for other purposes.	Introduced by Rep. Christopher Smith (R-NJ) – November 17, 2021	
H.R.6026 Keep Food Containers Safe from PFAS Act of 2021	To amend the Federal Food, Drug, and Cosmetic Act to prohibit the introduction or delivery for introduction into interstate commerce of food packaging containing intentionally added PFAS, and for other purposes. *Companion bill to S.3129.*	Introduced by Rep. Debbie Dingell (D-MI) – November 18, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.6058 PFAS Health Study Act of 2021	This bill extends through FY2023 the authority of the Department of Defense to transfer funds for the required study on the human health implications of perfluoroalkyl and polyfluoroalkyl substances (PFAS) contamination in drinking water, groundwater, and any other sources of water and relevant exposure pathways, including the cumulative human health implications of multiple types of PFAS contamination at levels above and below health advisory levels. PFAS are man-made and may have adverse human health effects. A variety of products contain the compounds, such as nonstick cookware or weatherproof clothing.	Introduced by Rep. Madeleine Dean (D-PA) – November 19, 2021	
S.3277 Section 401 Certification Act	To enact the Section 401 Certification Rule, and for other purposes.	Introduced by Sen. Shelley Moore Capito (R-WV) – November 30, 2021	
S.3282 Water Infrastructure Modernization Act of 2021	To amend the Federal Water Pollution Control Act and the Safe Drinking Water Act to authorize grants for smart water infrastructure technology, and for other purposes. *Companion bill to H.R.6088.*	Introduced by Sen. Mark Kelly (D-AZ) – November 30, 2021	
H.R.6088 Water Infrastructure Modernization Act	To amend the Federal Water Pollution Control Act and the Safe Drinking Water Act to authorize grants for smart water infrastructure technology, and for other purposes. *Companion bill to S.3282.*	Introduced by Rep. Ruben Gallego (D-AZ) – November 30, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.6119 Further Extending Government Funding Act	This bill provides continuing FY2022 appropriations for federal agencies, provides supplemental appropriations, and extends several expiring authorities. Specifically, the bill provides continuing FY2022 appropriations to federal agencies through the earlier of February 18, 2022, or the enactment of the applicable appropriations act. It is known as a continuing resolution (CR) and prevents a government shutdown that would otherwise occur if the FY2022 appropriations bills have not been enacted when the existing CR expires on December 3, 2021. The CR funds most programs and activities at the FY2021 levels with several exceptions that provide funding flexibility and additional appropriations for various programs.	Introduced by Rep. Rosa DeLauro (D-CT) – December 2, 2021 Became Public Law No: 117-70 – December 3, 2021	
S.3371 Land and Water Conservation Fund Amendments Act of 2021	To amend title 54, United States Code, to authorize the Secretary of the Interior to make financial assistance to States under the Land and Water Conservation Fund available for water quality projects, and for other purposes. *Companion bill to H.R.6229.*	Introduced by Sen. Marco Rubio (R-FL) – December 9, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.6229 Land and Water Conservation Fund Water Amendments Act of 2021	This bill authorizes the Department of the Interior to provide financial assistance for water quality improvement projects from amounts made available under the Land and Water Conservation Fund. Interior shall only provide such financial assistance to projects that seek to improve water quality by improving, restoring, remediating, or developing natural hydrological systems, such as wetlands and living shorelines. To be eligible for assistance, a state's comprehensive statewide outdoor recreation plan • shall identify any body of water within the state for which a water quality control plan has been developed pursuant to the Federal Water Pollution Control Act, and • any proposed water quality project to be conducted with respect to such body of water. *Companion bill to S.3371.*	Introduced by Rep. Brian Mast (R-FL) – December 9, 2021	
S.J.Res.33 A joint resolution joint resolution relating to increasing the debt limit	This joint resolution increases the public debt limit by $2.5 trillion.	Introduced by Sen. Charles Schumer (D-NY) – December 15, 2021 Became Public Law No: 117-73 – December 16, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.6336 Western Wildfire Support Act of 2021	The bill requires the Department of Agriculture (USDA) and the Department of the Interior to establish spatial fire management plans before the end of FY2024. The bill establishes: • accounts in the Treasury for addressing wildfires, • a program to train and certify citizens who wish to be able to volunteer to assist USDA or Interior during a wildland fire incident, • a program to award grants to eligible states or units of local government to acquire slip-on tank and pump units for a surge capacity of resources for fire suppression, • the Theodore Roosevelt Genius Prize for the management of wildfire-related invasive species, and the Management of Wildfire-Related Invasive Species Technology Advisory Board.	Introduced by Rep. Joe Neguse (D-CO) – December 20, 2021	
H.R.6591 PIPES Act	To require the Administrator of the Environmental Protection Agency to publish a rule that establishes standards for the flushability of disposable nonwoven wipes, and for other purposes.	Introduced by Rep. Lisa McClain (R-MI) – February 3, 2022	
S.3539 Watershed Results Act	To authorize the Secretary of the Interior to carry out watershed pilots, and for other purposes.	Introduced by Sen. Ron Wyden (D-OR) – February 1, 2022	
H.R.6617 Further Additional Extending Government Funding Act	This bill provides continuing FY2022 appropriations for federal agencies and extends several expiring authorities. Specifically, the bill provides continuing FY2022 appropriations to federal agencies through the earlier of March 11, 2022, or the enactment of the applicable appropriations act. It is known as a continuing resolution (CR) and prevents a government shutdown that would otherwise occur if the FY2022 appropriations bills have not been enacted when the existing CR expires on February 18, 2022.	Introduced by Rep. Rosa DeLauro (D-CT) – February 7, 2022 Became Public Law No. 117-86 – February 18, 2022	

LEGISLATION	SUMMARY	STATUS	POSITION
S.3662 Preventing PFAS Runoff at Airports Act	To temporarily increase the cost share authority for aqueous film forming foam input-based testing equipment, and for other purposes.	Introduced by Sen. Gary Peters (D-MI) – February 16, 2022	
H.J.Res.75 Extension of Continuing Appropriations Act, 2022	This joint resolution provides continuing FY2022 appropriations to federal agencies through March 15, 2022. It is known as a continuing resolution (CR) and prevents a government shutdown that would otherwise occur if the FY2022 appropriations bills have not been enacted when the existing CR expires on March 11, 2022. The joint resolution also (1) extends the temporary scheduling order issued by the Drug Enforcement Administration to place fentanyl-related substances in Schedule I of the Controlled Substances Act, and (2) increases the limit on the value of the defense articles and services that the President is authorized to draw down to address unforeseen emergencies.	Introduced by Rep. Rosa DeLauro (D-CT) – March 8, 2022 Became Public Law No: 117-95 – March 11, 2022	
H.R.2471 Consolidated Appropriations Act, 2022	Making consolidated appropriations for the fiscal year ending September 30, 2022, and for providing emergency assistance for the situation in Ukraine, and for other purposes.	Introduced by Rep. Hakeem Jeffries (D-NY) – April 13, 2021 Became Public Law No: 117-103– March 15, 2022	
S.3886 Future of Water Act of 2022	To amend the Commodity Exchange Act to prohibit trading of water and water rights for future delivery, and for other purposes. *Companion bill to H.R.7182.*	Introduced by Sen. Elizabeth Warren (D-MA) – March 21, 2022	
H.R.7182 Future of Water Act of 2022	To amend the Commodity Exchange Act to prohibit trading of water and water rights for future delivery, and for other purposes. *Companion bill to S.3886.*	Introduced by Rep. Ro Khanna (D-CA) – March 21, 2022	

LEGISLATION	SUMMARY	STATUS	POSITION
S.3893 WASH Sector Development Act of 2022	To collect information regarding water access needs across the United States, to provide grants for decentralized drinking water systems, and for other purposes.	Introduced by Sen. Ron Wyden (D-OR) – March 22, 2022	
S.3956 WIPPES Act	This bill requires the Federal Trade Commission to issue regulations requiring entities responsible for the labeling or retail packaging of certain premoistened, nonwoven wipes (e.g., baby wipes, cleaning wipes, or personal care wipes) to label such products clearly and conspicuously with the phrase Do Not Flush and accompanying symbol as depicted under specified industry guidelines. The commission is authorized to enforce this requirement. Additionally, the Environmental Protection Agency must award competitive grants to states, local or tribal governments, nonprofit organizations, or public-private partnerships to increase community outreach about such labels. *Companion bill to H.R.4602.*	Introduced by Sen. Jeff Merkley (D-OR) – March 30, 2022	
H.R.7289 Federal PFAS Research Evaluation Act	This bill requires various studies and reports on the exposure, hazards, and management of perfluoroalkyl and polyfluoroalkyl substances, commonly referred to as PFAS. These substances are man-made and may have adverse human health effects. A variety of products contain the compounds, such as nonstick cookware or weatherproof clothing. Specifically, the bill requires the Environmental Protection Agency (EPA) to enter into an agreement with the National Academies of Sciences, Engineering, and Medicine (NASEM) to conduct a two-phase study and report on the research and development needed to advance human exposure estimation and toxicity hazard estimation of individual or total PFAS. The bill also requires the EPA to jointly enter into an agreement with NASEM to conduct a study and submit a report on the research and development needed to advance the understanding of the extent and implications of environmental contamination by PFAS, how to manage and treat such contamination, and the development of safe alternatives. The White House Office of Science and Technology Policy must submit an implementation plan for federal PFAS research, development, and demonstration activities, taking into account the recommendations of the NASEM reports.	Introduced by Rep. Lizzie Fletcher (D-TX) – March 30, 2022 Passed the House – July 28, 2022	

LEGISLATION	SUMMARY	STATUS	POSITION
S.3893 WASH Sector Development Act of 2022	To collect information regarding water access needs across the United States, to provide grants for decentralized drinking water systems, and for other purposes.	Introduced by Sen. Ron Wyden (D-OR) – March 22, 2022	
S.4076 PFAS Firefighter Protection Act	To protect firefighters from exposure to per- and polyfluoroalkyl substances. *Companion bill to H.R.7597.*	Introduced by Sen. Kirsten Gillibrand (D-NY) – April 25, 2022	
S.4081 Healthy H2O Act	To amend the Consolidated Farm and Rural Development Act to establish a grant program to assist with the purchase, installation, and maintenance of point-of-entry and point-of-use drinking water quality improvement products, and for other purposes. *Companion bill to H.R.8018.*	Introduced by Sen. Tammy Baldwin (D-WI) – April 26, 2022	
H.R.7597 PFAS Firefighter Protection Act	To protect firefighters from exposure to per- and polyfluoroalkyl substances. *Companion bill to S.4076.*	Introduced by Rep. Daniel Kildee (D-MI) – April 27, 2022	
H.R.7612 Desalination Research Advancement Act	To advance desalination research and technological innovation, and for other purposes.	Introduced by Rep. Mike Levin (D-CA) – April 28, 2022 House Natural Resources Subcommittee on Water, Oceans, and Wildlife hearing held – May 12, 2022	

LEGISLATION	SUMMARY	STATUS	POSITION
S.4136 Water Resources Development Act of 2022	To provide for improvements to the rivers and harbors of the United States, to provide for the conservation and development of water and related resources, and for other purposes.	Introduced by Sen. Tom Carper (D-DE) – May 4, 2022 Passed by the Committee. Placed on Senate Legislative Calendar – May 4, 2022	
S.4137 Water Resources Development Act of 2022	To provide for improvements to the rivers and harbors of the United States, to provide for the conservation and development of water and related resources, and for other purposes.	Introduced by Sen. Tom Carper (D-DE) – May 4, 2022	
S.4139 HEATR Act	This bill allows a new tax credit through 2031 for energy efficient consumer and commercial heat pumps and heat pump water heaters.	Introduced by Sen. Amy Klobuchar (D-MN) – May 4, 2022	
S.4144 ICEE HOT Act of 2022	To amend the Energy Policy Act of 2005 to establish an energy efficient appliance rebate program to provide rebates for the manufacturing, distribution, and shipment of certain building electrification products, and for other purposes.	Introduced by Sen. Ed Markey (D-MA) – May 4, 2022	
S.4161 Clean Water Standards for PFAS 2.0 Act of 2022	To establish effluent limitations guidelines and standards and water quality criteria for perfluoroalkyl and polyfluoroalkyl substances under the Federal Water Pollution Control Act, and for other purposes. *Companion bill to H.R.7696.*	Introduced by Sen. Kirsten Gillibrand (D-NY) – May 9, 2022	
H.R.7696 Clean Water Standards for PFAS 2.0 Act of 2022	To establish effluent limitations guidelines and standards and water quality criteria for perfluoroalkyl and polyfluoroalkyl substances under the Federal Water Pollution Control Act, and for other purposes. *Companion bill to S.4161.*	Introduced by Rep. Chris Pappas (D-NH) – May 10, 2022	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.7771 To require the Secretary of the Army and the Administrator of the Environmental Protection Agency to conduct a study analyzing the cost to permit applicants and permit holders of complying with sections 402 and 404 of the Federal Water Pollution Control Act, and for other purposes	To require the Secretary of the Army and the Administrator of the Environmental Protection Agency to conduct a study analyzing the cost to permit applicants and permit holders of complying with sections 402 and 404 of the Federal Water Pollution Control Act, and for other purposes.	Introduced by Rep. David Rouzer (R-NC) – May 13, 2022	
H.R.7776 Waters Resources Development Act of 2022	To provide for improvements to the rivers and harbors of the United States, to provide for the conservation and development of water and related resources, and for other purposes.	Introduced by Rep. Peter DeFazio (D-OR) – May 16, 2022 Passed the Senate – July 28,2022	
S.4231 STREAM Act	A bill to support water infrastructure in Reclamation States, and other purposes.	Introduced by Sen. Dianne Feinstein (D-CA) – May 17, 2022 Committee on Energy and Natural Resources Subcommittee on Water and Power hearing held – May 25, 2022	*SUPPORT*

LEGISLATION	SUMMARY	STATUS	POSITION
S.4237 Fire Ready Nation Act of 2022	To establish and maintain a coordinated program within the National Oceanic and Atmospheric Administration that improves wildfire, fire weather, fire risk, and smoke related forecasting, detection, modeling, observations, and service delivery, and to address growing needs in the wildland-urban interface, and for other purposes.	Introduced by Sen. Maria Cantwell (D-WA) – May 17, 2022 Committee on Commerce, Science, and Transportation hearing held. Ordered to be reported with an amendment – May 25, 2022	
S.4236 Water Data and Security Act of 2022	To provide for a national water data framework, to provide for the water security of the Rio Grande Basin, to reauthorize irrigation infrastructure grants, and for other purposes.	Introduced by Sen. Dianne Feinstein (D-CA) – May 17, 2022 Committee on Energy and Natural Resources Subcommittee on Water and Power hearing held – May 25, 2022	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.7792 Water Data Act	To provide for a national water data framework, and for other purposes.	Introduced by Rep. Melanie Stansbury (D-NM) – May 17, 2022 House Natural Resources Subcommittee on Water, Oceans, and Wildlife hearing held – June 16, 2022	
H.R.7847 Water Efficiency, Conservation, and Sustainability Act of 2022	To increase efficiency and conservation in public water systems, and for other purposes. *Companion bill to S.4279.*	Introduced by Rep. Jerry McNerney (D-CA) – May 19, 2022	
H.R.7897 PFAS Reference Standards Act	To require manufacturers of PFAS to submit analytical reference standards to the Environmental Protection Agency, and for other purposes.	Introduced by Rep. John Sarbanes (D-MD) – May 27, 2022	
H.R.7900 National Defense Authorization Act for Fiscal Year 2023	This bill authorizes FY2023 appropriations for military activities and programs of the Department of Defense (e.g., personnel; research, development, test, and evaluation; and procurement of items such as aircraft, missiles, and ammunition). It also prescribes military personnel strengths for FY2023.	Introduced by Rep. Adam Smith (D-WA) – May 27, 2022 Passed by the House – July 14, 2022	
H.R.8018 Healthy H2O Act	To amend the Consolidated Farm and Rural Development Act to establish a grant program to assist with the purchase, installation, and maintenance of point-of-entry and point-of-use drinking water quality improvement products, and for other purposes. *Companion bill to S.4081.*	Introduced by Rep. Chellie Pingree (D-ME) – June 9, 2022	

LEGISLATION	SUMMARY	STATUS	POSITION
S.4279 Water Efficiency, Conservation, and Sustainability Act of 2022	To increase efficiency and conservation in public water systems, and for other purposes. *Companion bill to H.R.7847.*	Introduced by Sen. Alex Padilla (D-CA) – May 19, 2022	
H.R.8090 To reauthorize funding for the Reclamation Climate Change and Water Program	To reauthorize funding for the Reclamation Climate Change and Water Program.	Introduced by Rep. Katie Porter (D-CA) – June 15, 2022	
H.R.8127 To reauthorize the Water Infrastructure Finance and Innovation Act of 2014, and for other purposes	To require the Secretary of the Army and the Administrator of the Environmental Protection Agency to conduct a study analyzing the cost to permit applicants and permit holders of complying with sections 402 and 404 of the Federal Water Pollution Control Act, and for other purposes.	Introduced by Rep. Kim Schrier (D-WA) – June 16, 2022	
S.4492 Federal PFAS Research Evaluation Act	To provide for the National Academies of Sciences, Engineering, and Medicine to study and report on a Federal research agenda to advance the understanding of perfluoroalkyl and polyfluoroalkyl substances, and for other purposes.	Introduced by Sen. Gary Peters (D-MI) – June 23, 2022	
H.R.8255 Energy and Water Development and Related Agencies Appropriations Act, 2023	This bill provides FY2023 appropriations for U.S. Army Corps of Engineers civil works projects, the Department of the Interior's Bureau of Reclamation, the Department of Energy (DOE), and independent agencies such as the Nuclear Regulatory Commission.	Introduced by Rep. Marcy Kaptur (D-OH) – June 30, 2022 Placed on the House Calendar – June 30, 2022	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.8262 Department of the Interior, Environment, and Related Agencies Appropriations Act, 2023	This bill provides FY2023 appropriations for the Department of the Interior, the Environmental Protection Agency (EPA), and several related agencies.	Introduced by Rep. Charlie Pingree (D-ME) – July 1, 2022 Placed on the House calendar – July 1, 2022	
H.R.8300 Empowering Resilient Local Communities Act	To direct the Administrator of the Federal Emergency Management Agency to issue guidance on extreme temperature events and resilience goals, and for other purposes.	Introduced by Rep. Earl Blumenauer (D-OR) – July 7, 2022	
H.R. 8255 Energy and Water Development and Related Agencies Appropriations Act, 2023	This bill provides FY2023 appropriations to the U.S. Army Corps of Engineers civil works projects, the Department of the Interior's Bureau of Reclamation, the Department of Energy, and independent agencies such as the Nuclear Regulatory Commission.	Introduced by Rep. Marcy Kaptur (D-OH) – June 30, 2022 Passed the House of Representatives in a minibus – July 20, 2022	
H.R.8294 Transportation, Housing and Urban Development, and Related Agencies Appropriations Act, 2023	This bill provides FY2023 appropriations to the Department of Transportation (DOT), the Department of Housing and Urban Development (HUD), and several related agencies.	Introduced by Rep. David Price (D-NC) – July 5, 2022 Passed by House and received in Senate – July 26, 2022	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R. 8682 Federal Infrastructure Bank Act of 2022	To establish the Federal Infrastructure Bank to facilitate investment in, and the long-term financing of, economically viable United States infrastructure projects that provide a public benefit, and for other purposes.	Introduced by Congressman Webster (R-FL) – August 9, 2022	
H.R. 8676 Salton Sea Public Health and Environmental Protection Act of 2022	To require the Secretary of the Interior to take certain measures with respect to protecting the Salton Sea, and for other purposes.	Introduced by Congressman Ruiz (D-CA) – August 5, 2022	
S.4815 A bill to clarify regulatory certainty, and for other purposes	This bill would codify many provisions relating to permitting, and give authority to states over obtaining natural resources on federal land located within a state. This bill also eliminates federal jurisdiction over project review and approval.	Introduced by Senator Capito (R-WV) – September 12, 2022	
Energy Independence and Security Act of 2022 *Bill number not yet available.*	A bill to codify permitting regulations; directs the President to issue an executive order designating priority projects; limits timeline for federal permitting review and approval; limits 401 considerations to water quality impacts; completes the Mountain Valley Pipeline.	Introduced by Senator Joe Manchin (D-WV) – September 21, 2022	

BEST BEST & KRIEGER LLP
ATTORNEYS AT LAW

To:	Las Virgenes - Triunfo JPA
From:	Syrus Devers, Best Best & Krieger
Date:	December 13th, 2022
Re:	State Legislative Report

Legislative Report

Not much happened inside the Capitol during election season, so this month's report is more of a political report on the elections as opposed to a legislative report. Both houses met on December 5th to swear in the new members and vote on leadership.

As this report is being prepared on December 7th, there is still an undecided race in the Central Valley counties of Fresno, Tulare, and Kings, where there are 100 ballots yet to be processed. After giving up the lead twice over the last week, Senator Melissa Hurtado (D) leads challenger David Shepard (R) by 12 votes in the new Senate District 16 (which includes much of the old SD 16).

Republican Senator Suzette Vallardares (SD 40) lost to challenger Pilar Schiavo (D) after it appeared she would hold onto her as recently as 5 days ago. With all votes counted Schiavo leads by 522.

The current political divide in the State Senate is 31 Democrats to 9 Republicans. If Hurtado does win, Democrats will gain a seat and the split will be 32-8.

The new maps were even better for the Democrats in the Assembly. The current political divide is 60 Democrats, 19 Republicans, and one independent. (Chad Mayes). One race, AD 47 (Palm Desert), has yet to be decided. This seat is mainly the former district of Chad Mayes. His District Director Greg Wallis (R) leads the former mayor of Palm Springs Christy Holstege (D) by 95 votes with 1,200 votes to count in San Bernardino County, which tends to favor Wallis. Assuming Wallis wins, Democrats will have 62 seats to the Republicans 18, a gain of two for the Dems.

The intrigue over the Assembly speakership appears to have been resolved in a unique manner. The Board may recall that Assembly Member Robert Rivas (D-Salinas) challenged Speaker Anthony Rendon over the summer. Last month both men announced an agreement whereby Rivas would assume the speakership "in the summer." The vote for Speaker was to elect Anthon Rendon as Speaker until July 1st, at which time Rivas would take over. If BB&K staff understand motion correctly, no further vote needs to be taken for Rivas to assume the Speakership on July 1st.

How will all of this affect water districts?

Not much will change in the Senate, but in the Assembly Water Parks & Wildlife Committee 5 of the 15 current committee members will not return in 2023. How those seats are filled could significantly affect the politics of the committee. As mentioned above, 34% of the Assembly will be new members, and 25% of the senators will be freshmen as well. That is a lot of new members and staff for governmental affairs advocates to get to know in the first quarter of 2023.

AGENDA ITEM NO. 5.C

DATE: December 13, 2022

TO: JPA Board of Directors

FROM: Engineering and External Affairs

SUBJECT: Pure Water Project Las Virgenes-Triunfo: Update

SUMMARY:

On August 1, 2016, the JPA Board selected Scenario No. 4, use of Las Virgenes Reservoir for indirect potable reuse, as the preferred alternative for the Recycled Water Seasonal Storage Basis of Design Report. The selected alternative was subsequently renamed the Pure Water Project Las Virgenes-Triunfo. Staff was also directed to report back to the Board on the next steps for implementation of the project.

Staff released a request for proposals (RFP) for Owner's Advisor/Program Manager services for the Pure Water Project Las Virgenes-Triunfo on May 8, 2020. The selection of an Owner's Advisor/Program Manager to support the effort was an important next step to begin implementation of the Pure Water Program. Utilization of an Owner's Advisor/Program Manager is consistent with the approach taken by other public agencies pursuing potable reuse projects of similar scope and complexity. Among the critical elements of the proposed scope are completion of the preliminary design and environmental documentation in support of the Pure Water Program. The scope of work under the contract includes program management, preparation of preliminary design and/or alternative delivery bridging documents, preparation of all environmental studies and documentation for compliance with the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA), preparation of studies and documents necessary to secure all required regulatory permits, and support of efforts to secure grant funding or low-interest loans.

On September 8, 2020, the JPA Board accepted a proposal from Jacobs Engineering Group, Inc., and authorized the Administering Agent/General Manager to execute a professional services agreement for Owner's Advisor/Program Manager services for the Pure Water Project Las Virgenes-Triunfo. This report serves to provide a summary of the progress to- date on the work performed by Jacobs Engineering Group, Inc., including major monthly milestones, key program accomplishments, key considerations and a look-ahead of upcoming activities.

Prepared by: Eric Schlageter, Principal Engineer

ATTACHMENTS:
Jacobs Update

To: Las Virgenes-Triunfo JPA Board of Directors

From: Jennifer Phillips, Jacobs

Date: November 28, 2022

Re: Pure Water Project JPA Board Monthly Update

Pure Water Project Overview

The Pure Water Project (PWP) is an opportunity to proactively address three major challenges facing the Las Virgenes-Triunfo JPA:

- comply with more stringent regulatory requirements for discharging to Malibu Creek,
- balance seasonal variation of recycled water demand, and
- create a valuable resource to supplement the region's water supplies, enabled by California's cutting-edge reservoir water augmentation program.

By 2030, the innovative plan is to have an operational advanced water purification facility (AWPF) to treat tertiary effluent from the Tapia Water Reclamation Facility for indirect potable reuse, and convey the product water to the Las Virgenes Reservoir, where it will be blended with Metropolitan Water District (MWD) supply. The current phase (Phase 1) of the project provides the programmatic process to manage such a large, complicated project, focusing on the technical, regulatory, environmental, financial, and procurement strategies to provide a foundation with more cost and project delivery clarity. Each month the Project team will provide a status report to communicate major milestones, accomplishments for the previous month, planned work for the next month, and potential challenges.

Monthly Major Milestones

- Finalized the Programmatic Environmental Impact Report (PEIR) and prepared formal responses to public comments received, which are included as an appendix to the Final PEIR.
- Finalized and submitted the Letter of Interest application for the Water Infrastructure Finance and Innovation Act (WIFIA) program.

Key Program Accomplishments Last Month

Following is a summary of the key November 2022 program accomplishments. Many PWP team meetings occurred in November to plan, coordinate and implement the following activities:

November Accomplishments:

Programmatic:

- Coordinated technical, procurement, financial, regulatory and environmental efforts.

- Presented a draft roadmap for evaluating the viability of water augmentation source opportunities that is focused on technical, environmental, financial and partnership elements.

Technical:

- Submitted the draft Conceptual Design Report for the AWPF on November 15 for LVMWD review.
- Continued support for the Demonstration Facility with weekly meetings to review performance data trends, share insights, and provide recommendations on the sampling plan to increase source water quality characterization for the AWPF design. Facilitated the technical coordination for autopsy of UF-3 to troubleshoot performance irregularities.
- Continued support for the RO concentrate pipe run pilot at the Demonstration Facility to simulate the ≈14-mile pipeline and identify the potential for scaling based on anticipated detention time and velocity. Reviewed daily data and created weekly data trends. Replaced or cleaned piping segments to start a new phase of testing with no air gap.
- Added initial equipment to provide preformed monochloramines at the Demonstration Facility to help reduce the development of dichloramines and disinfection byproducts. Updating the electrical design for a more permanent solution.
- Continued development of an Enhanced Source Control Plan, which augments existing water reclamation facility pretreatment programs with the goal of protecting human health in potable reuse projects. Held progress meeting with LVMWD staff on November 17.

Regulatory/Environmental:

- Submitted the Final PEIR and prepared formal responses to public comments received, which are included as an appendix. The full document will be posted on the Pure Water website the week of November 28.
- Continued development of the 1211 petition application for Tapia WRF. Initiated consultation requests as required for the process.
- Developed draft permitting matrix for the AWPF and conveyance projects.
- Prepared a strategy and schedule for engaging regulators to discuss additional PWP elements.

Financial:

- Submitted the WIFIA Letter of Interest to EPA on November 7.
- Attended a kickoff meeting with LVMWD, TWSD and Piper Sandler for development of the California State Revolving Fund (SRF) application.
- Continued tracking of funding options and supporting LVMWD staff, as needed.

Procurement:

- Continued development of details for the Request for Qualifications (RFQ) and Request for Proposals (RFP) as part of the PDB process.

Public Outreach:

- Provided support and information to address public comments and concerns about potable reuse.

Look Ahead

The Project Team is finalizing the technical evaluations, conducting testing at the Demonstration facility to inform the final design, developing procurement documents, meeting with regulators to review details of the project, keeping planners and City Councils informed, finalizing the CEQA work, and proceeding with the strategies outlined in the Program Implementation Plan.

The Project Team is focused on the following activities for December and January:

- Provide final Tapia WRF and AWPF Equalization report, based on LVMWD comments.
- Provide final conveyance alignment study, once LVMWD comments are received.
- Provide final AWPF Conceptual Design report, once LVMWD comments are received.
- Provide draft Site Selection memo for LVMWD review.
- Monitor RO concentrate pipe run testing with no air gap, implement preformed monochloramine dosing prior to MF/UF, and support performance trending for the Demonstration Facility.
- Provide draft 1211 petition application for LVMWD review.
- Engage regulators to gain input on PWP technical items and provide progress update.
- Prepare guidance for implementing preformed monochloramine disinfection at Tapia WRF to reduce disinfection byproduct formation in the AWPF feed.

AGENDA ITEM NO. 6.A

DATE: December 13, 2022

TO: JPA Board of Directors

FROM: Finance and Administration

SUBJECT: Fiscal Year 2021-22 Annual Financial Statements and Independent Auditor's Report

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SUMMARY:

Rogers, Anderson, Malody & Scott, LLP (RAMS) completed the annual audit of the Las Virgenes-Triunfo Joint Powers Authority (JPA) financial statements and issued an opinion that they fairly present the financial position of the JPA as of June 30, 2022.

RECOMMENDATION(S):

Receive and file the Fiscal Year 2021-22 Annual Financial Statements and Independent Auditor's Report.

DISCUSSION:

On June 30, 2022, the JPA's net position (excess of assets over liabilities) was $101.1 million. The entirety of the net position consisted of the JPA's investment in capital assets by participants in the amounts of $67.7 million for Las Virgenes Municipal Water District and $33.4 million for Triunfo Water and Sanitation District.

The JPA's Fiscal Year 2021-22 net position increased by $2.8 million, compared to an increase of $1.2 million in Fiscal Year 2020-21. Net position will increase or decrease from year-to-year based on capital assets contributed by its participants during the year less any depreciation recorded.

Total operating revenues in Fiscal Year 2021-22 were $2.6 million, in-line with prior year revenues of $2.7 million. The minimal decrease in revenues as compared to the prior year was due to lower wholesale recycled water sales to the JPA's customers, Las Virgenes Municipal Water District and Triunfo Water and Sanitation District.

Total operating expenses in Fiscal Year 2021-22 were $26.7 million, $1.0 million (or 3.8%) below the prior year's expenses of $27.7 million. The decrease in operating expenses as compared to the prior year was due mainly from reduced general and administrative expenses (G&A), down $1.1 million versus Fiscal Year 2020-21 (or 9.2%). G&A costs were lower than

the prior year primarily due to cost-savings from vacancies in administrative support staff that resulted in lower allocated service costs to the JPA year-over-year.

The changes in net position for the JPA in Fiscal Year 2021-22 are summarized below (in thousands).

Recycled water sales	$2,534
Other operating revenue	97
Total Operating Revenue	**2,631**
Depreciation expense	5,825
Other operating expenses	20,845
Total Operating Expenses	**26,670**
Operating Loss Before Billings to Participants	**(24,039)**
Billings to participants	15,367
Non-operating revenues/expenses	2,848
Net Loss Before Participants' Capital Contributions	**(5,825)**
Participant capital contributions	8,597
Change in Net Position	**2,772**
Net Position - Beginning of Year	98,362
Net Position - End of Year	**$101,134**

GOALS:

Ensure Effective Utilization of the Public's Assets and Money

Prepared by: Brian Richie, Finance Manager

ATTACHMENTS:
JPA Fiscal Year 2021-22 Annual Financial Statements

Las Virgenes-Triunfo
Joint Powers Authority

Financial Statements and
Independent Auditor's Reports

For the Years Ended June 30, 2022 and 2021

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Independent Auditor's Report

To the Board of Directors
Las Virgenes-Triunfo Joint Powers Authority
Calabasas, California

Report on the Audit of the Financial Statements

Opinion

We have audited the financial statements of the Las Virgenes-Triunfo Joint Powers Authority (the "JPA"), as of and for the year ended June 30, 2022, and the related notes to the financial statements, which collectively comprise the JPA's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements present fairly, in all material respects, the respective financial position of the JPA, as of June 30, 2022, and the respective changes in financial position and cash flows for the year ended in accordance with accounting principles generally accepted in the United States of America, as well as accounting systems prescribed by the State Controller's Office and state regulations governing special districts.

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS) and the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the JPA and to meet our other ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Other Matter

The financial statements of the JPA for the year ended June 30, 2021, were audited by another auditor, who expressed an unmodified opinion on those statements on December 6, 2021.

Responsibilities of Management for the Financial Statements

The JPA's management is responsible for the preparation and fair presentation of the financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the JPA's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the JPA's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the JPA's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control–related matters that we identified during the audit.

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the required supplementary information, such as management's discussion and analysis be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the JPA's basic financial statements. The accompanying Schedule of Changes in Participants' Advance Accounts is presented for purposes of additional analysis and is not a required part of the basic financial statements.

The accompanying Schedule of Changes in Participants' Advance Accounts is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the Schedule of Changes in Participants' Advance Accounts is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated November 17, 2022 on our consideration of the JPA's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is solely to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on the effectiveness of internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the JPA's internal control over financial reporting and compliance.

Rogers, Anderson, Malody & Scott, LLP.

San Bernardino California
November 17, 2022

This section of the Joint Powers Authority (JPA) annual financial report presents our analysis of the JPA's financial performance during the Fiscal Years that ended on June 30, 2022 and June 30, 2021. Please read it in conjunction with the Financial Statements, which follow this section.

FINANCIAL HIGHLIGHTS

- On June 30, 2022, the JPA's net position (excess of assets over liabilities) was $101.1 million. The entirety of the net position consisted of the JPA's investment in capital assets by participants in the amounts of $67.7 million for Las Virgenes Municipal Water District and $33.4 million for Triunfo Water & Sanitation District.

- The JPA's Fiscal Year 2021-22 net position increased by $2.8 million, compared to an increase of $1.2 million in Fiscal Year 2020-21. Net position will increase or decrease from year to year in the JPA based on capital assets contributed by its participants within the year less any depreciation recorded.

- Total operating revenues in Fiscal Year 2021-22 were $2.6 million, in line with prior year revenues of $2.7 million. The minimal decrease in revenues as compared to the prior year was due to lower wholesale recycled water sales to the JPA's customers Las Virgenes Municipal Water District and Triunfo Water & Sanitation District.

- Total operating revenues in Fiscal Year 2020-21 of $2.7 million, were $246 thousand (or 10.1%) above the previous year's revenues of $2.4 million. The increase in revenues as compared to the prior year was due to higher wholesale recycled water sales year over year to the JPA's customers.

- Total operating expenses in Fiscal Year 2021-22 were $26.7 million, $1.0 million (or 3.8%) below the prior year's expenses of $27.7 million. The decrease in operating expenses as compared to the prior year was due mainly from reduced general and administrative expenses (G&A), down $1.1 million versus Fiscal Year 2020-21 (or 9.2%). G&A costs were lower than the prior year primarily due to cost-savings from vacancies in administrative support staff that resulted in lower allocated service costs to the JPA year-over-year.

- Total operating expenses in Fiscal Year 2020-21 of $27.7 million, were $3.5 million (or 14.6%) higher than the previous year's expenses of $24.2 million. The increase in operating expenses as compared to the prior year was due mainly from increased general and administrative expenses, up $1.9 million versus Fiscal Year 2019-20 (or 20.1%) along with increased recycled water transmission and distribution expenses, up $1.1 million versus Fiscal Year 2019-20.

BASIC FINANCIAL STATEMENTS

The Financial Statements of the JPA report information about the JPA using accounting methods similar to those used by private sector companies. These statements offer short- and long-term financial information about its activities. The Comparative Statements of Net Position (CSNP) includes all of the JPA's assets and liabilities and provides information about the nature and amount of investments in resources (assets) and the obligations to JPA creditors (liabilities). The CSNP also provides the basis for evaluating the capital structure of the JPA.

All of the current year's revenues and expenses are accounted for in the Comparative Statements of Revenues, Expenses and Changes in Net Position. These statements reflect the result of the JPA's operations over the past year.

The final Financial Statements are the Comparative Statements of Cash Flows. The primary purpose of this statement is to provide information about the JPA's cash receipts and cash payments during the reporting period. The statement reports cash receipts, cash payments, and net changes in cash resulting from operations and investments. It also provides answers to such questions as where cash came from, what was cash used for, and what was the change in cash balance during the reporting period.

FINANCIAL ANALYSIS OF THE JOINT POWERS AUTHORITY

The Financial Statements provide information on whether the JPA is in a stronger or weaker financial position compared to the last year. The Statement of Net Position and the Statement of Revenues, Expenses, and Changes in Net Position provide a means to measure the District's financial health or financial position. Over time, increases or decreases in the JPA's net position are one indicator of whether its financial health is improving or deteriorating. Considering other non-financial factors such as changes in economic conditions, population growth, weather, and new or changed government legislation is also vital. It is important to note that the JPA's goal is to have sufficient revenue to cover operating and capital expenses while maintaining affordable rates for its customers.

The Fiscal Year 2021-22 recycled water sales and sanitation reflect a long-term trend of reduced water usage that began with the 2011-2017 drought and continues through the current time. Customer behaviors that changed during the drought, and the JPA's messaging promoting water use efficiency as a way of life, have contributed to lower than historical averages of water use seen in the current fiscal year. The JPA has continued its efforts to maximize its use of recycled water, reduce charges to Malibu Creek, achieve long-term compliance with environmental regulations and renew aging infrastructure.

Actions by the JPA during Fiscal Year 2021-22 continued to reflect the change in focus which began in Fiscal Year 2017-18 when the JPA Board approved the Basis of Design Report for indirect potable reuse using Las Virgenes Reservoir. During that time, the JPA Board also took action to minimize the number of new recycled water connections and focused efforts on the efficient use of recycled water. These efforts will ultimately provide the resources necessary to support the indirect potable reuse project, now known as Pure Water Project Las Virgenes-Triunfo. During Fiscal Year 2020-21, the JPA began operations of the Pure Water

Demonstration Project and engaged a firm to provide advisor/program management services to the JPA for the Pure Water Project. During Fiscal Year 2021-22, the JPA administrator Las Virgnes Municipal Water District began developing the design criteria for the project, developed the environmental documentation for the program, and engaged in public outreach activities to help progress the project. Moving forward, the JPA will continue to develop this project and move towards construction. The JPA continues to be well-positioned for the challenges in the years ahead and will continue to deliver high-quality, reliable services to its customers for years to come.

NET POSITION

As shown below in Table 1, net position increased by $2.8 million to $101.1 million in Fiscal Year 2021-22, compared to an increase in net position of $1.2 million in Fiscal Year 2020-21.

TABLE 1
Condensed Statements of Net Position
(in thousands of dollars)

	FY 2022	FY 2021	FY 2020
Current assets	$ 12,737	$ 7,439	$ 13,990
Capital assets	101,134	98,362	97,127
Total Assets	113,871	105,801	111,117
Due to participants	10,843	5,417	12,532
Other liabilities	1,895	2,022	1,462
Total Liabilities	12,737	7,439	13,994
Total Net Position	$ 101,134	$ 98,362	$ 97,123

The increase in Net Position (and capital assets) is primarily due to an increase in participants' contributions less depreciation for the year.

While the Statement of Net Position shows the change in financial position, the Statement of Revenues, Expenses and Changes in Net Position provides answers as to the nature and source of these changes.

TABLE 2
Condensed Statements Revenues,
Expenses and Changes in Net Position
(in thousands of dollars)

	FY 2022	FY 2021	FY 2020
Recycled water sales	$ 2,534	$ 2,638	$ 2,397
Other operating revenue	97	52	47
Total Operating Revenue	2,631	2,691	2,444
Depreciation expense	5,825	5,800	5,624
Other operating expenses	20,845	21,916	18,559
Total Operating Expenses	26,670	27,715	24,183
Operating Loss Before Billings to Participants	(24,039)	(25,025)	(21,739)
Billings to participants	15,367	19,001	13,041
Non-operating revenues/expenses	2,848	228	3,070
Net Loss Before Participants' Capital Contributions	(5,825)	(5,796)	(5,628)
Participant capital contributions	8,597	7,035	9,072
Change in Net Position	2,772	1,239	3,444
Net Position - Beginning of Year	98,362	97,123	93,679
Net Position - End of Year	$ 101,134	$ 98,362	$ 97,123

As reflected in Table 2, Fiscal Year 2021-22 revenue from recycled water sales decreased by $0.1 million (or 3.9%) compared to the prior fiscal year primarily due to an 11.8% decrease in recycled water purchases from Triunfo Water and Sanitation District ($571 thousand in Fiscal Year 2021-22 versus $647 thousand in Fiscal Year 2020-21) offset by only a 1.4% decrease in recycled water sales from Las Virgenes Municipal Water District ($1.96 million in Fiscal Year 2021-22 versus $2.0 million in Fiscal Year 2020-21). Total Operating Expenses decreased 3.8% in Fiscal Year 2021-22 versus Fiscal Year 2020-21 due to G&A costs savings from staffing vacancies.

CAPITAL ASSETS AND DEBT ADMINISTRATION

At the end of Fiscal Year 2021-22, the JPA had net capital assets of $101.1 million compared to $98.4 million for Fiscal Year 2020-21 as shown in Table 3. See Note 4 for further information about capital assets.

TABLE 3
Capital Assets
(in thousands of dollars)

	FY 2022	FY 2021	FY 2020
Land and land rights	$ 14,368	$ 14,368	$ 14,368
Sewer and treatment plant	130,696	130,624	129,569
Compost plant	83,892	78,707	76,219
Recycled water system	35,512	35,509	34,819
Construction in progress	11,020	7,739	9,302
Advanced water system	4,421	4,366	-
Subtotal	279,909	271,313	264,278
Accumulated depreciation	178,776	172,951	167,151
Total Capital Assets	$ 101,134	$ 98,362	$ 97,127

Table 4 below is a summary of some of the major improvements to the system during Fiscal Year 2021-22, Fiscal Year 2020-21, and Fiscal Year 2019-20.

TABLE 4
Major Capital Improvement Projects
(in thousands of dollars)

	2022
Pure water project	$ 3,486
Summer season TMDL compliance	2,261
Woolsey Fire Repair Rancho	1,237
Tapial PGMBLE logic controller upgrade	1,039
Total major projects FY 2022	$ 8,023

	2021
Rancho LV digester/cleaning/repair	$ 1,748
Pure water demonstration	1,429
Tapia pgmble log controller	1,249
Cordillera tank rehabilitation	927
Tapia hypochlorite tank replacement	619
Total major projects FY 2021	$ 5,972

	2020
Process air improvements	$ 3,640
Pure water demonstration project	3,428
Rancho Las Virgenes digester cleaning and repair	578
Tapia headworks white room	318
Summer season TMDL compliance	260
Total major projects FY 2020	$ 8,224

LONG TERM DEBT

The JPA currently has no long-term debt. All funding is provided by the participating agencies.

CONTACTING THE DISTRICT'S FINANCIAL MANAGER

This financial report is designed to provide our residents, customers and creditors with a general overview of the JPA's finances and to demonstrate the JPA's accountability for the money it receives. The responsibility for the JPA's accounting and financial reporting rests with the staff of the Las Virgenes Municipal Water District. If you have questions about this report or need additional financial information, contact the Las Virgenes Municipal Water District, Department of Finance and Administration by email at finance@lvmwd.com, by phone at 818-251-2134, or by mail to 4232 Las Virgenes Road, Calabasas, California, 91302.

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Statements of Net Position
June 30, 2022 and 2021

	2022	2021
ASSETS		
Current assets:		
Cash and cash investments (Note 3)	$ 7,312,917	$ 4,921,769
Accounts receivable	5,199,331	2,289,417
Interest receivable	3,748	31,505
Prepaid items	221,407	196,065
Total current assets	12,737,403	7,438,756
Noncurrent assets:		
Capital assets, not being depreciated	25,388,592	22,106,730
Capital assets, being depreciated, net	75,744,919	76,255,754
Total capital assets	101,133,511	98,362,484
Total noncurrent assets	101,133,511	98,362,484
Total assets	113,870,914	105,801,240
LIABILITIES		
Current liabilities:		
Accounts and contracts payable and accrued expenses	1,894,716	2,021,757
Due to participants	10,842,687	5,416,999
Total current liabilities	12,737,403	7,438,756
Total liabilities	12,737,403	7,438,756
NET POSITION		
Investments in capital assets by participants:		
Las Virgenes Municipal Water District	67,736,136	65,742,118
Triunfo Water & Sanitation District	33,397,375	32,620,366
Investments in capital assets by participants	101,133,511	98,362,484
Unrestricted	-	-
Total net position	$ 101,133,511	$ 98,362,484

The accompanying notes are an integral part of these statements.

Statements of Revenues, Expenses, and Changes in Net Position
For the Years Ended June 30, 2022 and 2021

	2022	2021
Operating revenues:		
Wholesale recycled water sales	$ 2,534,154	$ 2,638,344
Other income	96,798	52,229
Total operating revenues	2,630,952	2,690,573
Operating expenses:		
Treatment plant	4,336,980	4,569,128
Recycled water transmission and distribution	2,456,106	2,366,095
Compost plant	2,919,174	2,945,751
Sewer	340,816	222,638
Depreciation	5,824,838	5,799,831
General and administrative	10,533,042	11,600,875
Other operating expenses	259,163	211,152
Total operating expenses	26,670,119	27,715,470
Operating loss before billings to participants	(24,039,167)	(25,024,897)
Billings to participants	15,366,514	19,000,638
Operating loss	(8,672,653)	(6,024,259)
Nonoperating revenues (expenses):		
Interest income	34,783	50,601
Interest (expense)	(1,677)	
Other revenues (expenses)	2,814,709	177,647
Total nonoperating revenues (expenses)	2,847,815	228,248
Net loss before participants' capital contributions	(5,824,838)	(5,796,011)
Participants' capital contributions	8,595,865	7,035,377
Changes in net position	2,771,027	1,239,366
Net position:		
Beginning of year	98,362,484	97,123,118
End of year	$ 101,133,511	$ 98,362,484

The accompanying notes are an integral part of these statements.

Statements of Cash Flows
For the Years Ended June 30, 2022 and 2021

	2022	2021
Cash flows from operating activities:		
Cash received from participants	$ 15,087,552	$ 21,565,952
Cash paid to suppliers for operations	(20,738,501)	(21,363,657)
Other revenue (expenses)	(259,163)	52,229
Net cash provided by (used in) operating activities	(5,910,112)	254,524
Cash flows from noncapital financing activities:		
Other revenues	2,814,709	177,647
Net cash provided by noncapital financing activities	2,814,709	177,647
Cash flows from capital and related financing activities:		
Acquisition of capital assets	(8,595,865)	(7,035,378)
Capital contributions	8,595,865	7,035,377
Interest paid	(1,677)	-
Net cash received from (paid to) participants	5,425,688	(7,114,961)
Net cash provided by (used for) capital and related financing activities	5,424,011	(7,114,962)
Cash flows from investing activities:		
Interest received	62,540	52,819
Net cash provided by investing activities	62,540	52,819
Net change in cash and cash equivalents	2,391,148	(6,629,972)
Cash and cash equivalents:		
Beginning of year	4,921,769	11,551,741
End of year	$ 7,312,917	$ 4,921,769
Noncash investing activities:		
Change in fair value of investments	$ 247,332	$ 27,147
Reconciliation of net operating (loss) to net cash provided by (used in) operating activities:		
Operating (loss)	$ (8,672,653)	$ (6,024,259)
Adjustments to reconcile operating (loss) to net cash provided by (used in) operating activities:		
Depreciation	5,824,838	5,799,831
Changes in operating assets and liabilities:		
(Increase) decrease in accounts receivable	(2,909,914)	(73,030)
(Increase) decrease in prepaid items	(25,342)	(7,737)
Increase (decrease) in accounts and contracts payable and accrued liabilities	(127,041)	559,719
Net cash provided by (used in) operating activities	$ (5,910,112)	$ 254,524

The accompanying notes are an integral part of these statements.

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Note 1 – Reporting Entity

On October 12, 1964, Las Virgenes Municipal Water District ("LVMWD") and Triunfo Water & Sanitation District ("TWSD") established Las Virgenes-Triunfo Joint Powers Authority ("JPA") to construct, operate, maintain and provide for the replacement of a joint sewerage system to serve the Malibu Creek drainage area. The equity of each member is equal to the member's pro-rata share of capital assets, net of depreciation. LVMWD has been the designated administering agent.

Note 2 – Summary of Significant Accounting Policies

Basis of Presentation

Financial statement presentation follows the recommendations promulgated by the Governmental Accounting Standards Board ("GASB") commonly referred to as accounting principles generally accepted in the United States of America ("U.S. GAAP"). GASB is the accepted standard-setting body for establishing governmental accounting and financial reporting standards.

Measurement Focus, Basis of Accounting and Financial Statements Presentation

The Financial Statements (i.e., the statement of net position, the statement of revenues, expenses and changes in net position, and statement of cash flows) report information on all of the activities of the JPA.

The Financial Statements are reported using the *"economic resources"* measurement focus and the accrual basis of accounting. Revenues are recorded when earned and expenses are recorded when a liability is incurred, regardless of the timing of related cash flows. Interest associated with the current fiscal period is considered to be susceptible to accrual and so has been recognized as revenue of the current fiscal period.

Operating revenues are those revenues that are generated from the primary operations of the JPA. The JPA reports a measure of operations by presenting the change in net position from operations as "operating income" in the statement of revenues, expenses, and changes in net position. Operating activities are defined by the JPA as all activities other than financing and investing activities (interest expense and investment income), and other infrequently occurring transaction of a non-operating nature. Operating expenses are those expenses that are essential to the primary operations of the JPA. All other expenses are reported as non-operating expenses.

Note 2 – Summary of Significant Accounting Policies (Continued)

Cash, Cash Equivalents and Investments

Cash and cash equivalents include all highly liquid investments with original maturities of 90 days or less and are carried at cost, which approximates fair value.

The JPA participates in an investment pool managed by the State of California titled Local Agency Investment Fund (LAIF), which has invested a portion of the pool funds in structured notes and asset-backed securities. LAIF's investments are subject to credit risk with the full faith and credit of the State of California collateralizing these investments. In addition, these structured notes and assets-backed securities are subject to market risk and to change in interest rates. The reported value of the pool is based on net asset value.

The JPA is also a voluntary participant in CAMP, a Joint Powers Authority established in 1989, to provide California public agencies with professional investment services. The CAMP pool is a permitted investment for all local agencies under California Government Code Section 601(p). CAMP is directed by a Board of Trustees, which is made up of experienced local government finance directors and treasurers. There are no withdrawal limitations or restrictions.

Certain disclosure requirements, if applicable for deposit and investment risk, are specified for the following areas:

- Interest rate risk
- Credit risk
  - Overall
  - Custodial credit risk
  - Concentration of credit risk
- Foreign currency risk

Fair Value Measurements

In accordance with U.S. GAAP, investments, unless otherwise specified, recorded at fair value in the Statements of Net Position, are categorized based upon the level of judgment associated with the inputs used to measure their fair value. Levels of inputs are as follows:

Level 1 – Inputs are unadjusted, quoted prices for identical assets and liabilities in active markets at the measurement date.

Level 2 – Inputs, other than quoted prices included in Level 1, that are observable for the asset or liability through corroboration with market data at the measurement date.

Level 3 – Unobservable inputs that reflect management's best estimate of what market participants would use in pricing the asset or liability at the measurement date.

Note 2 – Summary of Significant Accounting Policies (Continued)

Accounts Receivable

Customer accounts receivable consist of amounts owed by private individuals and organizations for services rendered in the regular course of business operations. Receivables are shown net of allowances for doubtful accounts, if any. The JPA also accrues an estimated amount for services that have been provided, but not yet billed. Management has evaluated the accounts and believes they are all collectible.

Prepaid items

Payments made to vendors for services that will benefit periods beyond the fiscal year ended are recorded as prepaid items.

Capital Assets

Capital assets are valued at historical cost, or estimated historical cost, if actual historical cost was not available. Donated capital assets are valued at acquisition value on the date donated. The JPA policy has set the capitalization threshold for reporting capital assets at $5,000, all of which must have an estimated useful life in excess of one year. Depreciation is recorded on a straight-line basis over estimated useful lives of the assets, which range from 3 to 100 years.

Plant	10-100 years
Machinery and equipment	3-25 years

Capital assets are shared in accordance with each participant's capacity rights reserved in each component of the joint system. The allocation of costs for projects in process is based upon engineering estimates of the capacity rights and could increase or decrease when the final capacity rights are determined.

Net Position

Net position represents the difference between all other elements in the statement of net position and may be displayed in the following three components:

Investment in Capital Assets – This component of net position consists of capital assets, net of accumulated depreciation.

Restricted – This component of net position consists of restricted assets reduced by liabilities and deferred inflows of resources related to those assets.

Unrestricted – This component of net position is the amount of the assets, deferred outflows of resources, liabilities, and deferred inflows of resources that are not included in the determination of net investment in capital assets or the restricted component of net position.

Note 2 – Summary of Significant Accounting Policies (Continued)

Use of Restricted/Unrestricted Net Position

When both restricted and unrestricted resources are available for use, it is the JPA's policy to use restricted resources first, then unrestricted resources as they are needed.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect certain reported amounts and disclosure. Accordingly, actual results could differ from those estimates.

Note 3 – Cash and Investments

At June 30, 2022 and 2021, cash and investments are reported in the accompanying statements of net position as follows:

	2022	2021
Cash and cash equivalents	$ 147,754	$ 404,635
Investments	7,165,163	4,517,134
Total Cash and Investments	$ 7,312,917	$ 4,921,769

At June 30, 2022 and 2021, cash and investments consisted of the followings:

	2022	2021
Deposits:		
Pooled with Las Virgenes Municipal Water District	$ 147,754	$ 404,635
Investments:		
California Asset Management Program	873,450	-
California Local Agency Investment Fund	1,879,013	3,754,987
U.S. Government Sponsored Agency Security	4,412,700	762,147
Total Cash and Investments	$ 7,312,917	$ 4,921,769

Demand Deposits

At June 30, 2022 and 2021, the carrying amounts of cash deposits were $147,754 and $404,635 respectively, which were fully insured and/or collateralized with securities held by the pledging financial institutions in the LVMWD's name as discussed below.

Note 3 – Cash and Investments (Continued)

Demand Deposits (Continued)

The California Government Code requires California banks and savings and loan associations to secure the LVMWD's cash deposits by pledging securities as collateral. This Code states that collateral pledged in this manner shall have the effect of perfecting a security interest in such collateral superior to those of a general creditor. Thus, collateral for cash deposits is considered to be held in the LVMWD's name.

The fair value of pledged securities must equal at least 110% of the LVMWD's cash deposits. California law also allows institutions to secure the LVMWD's deposits by pledging first trust deed mortgage notes having a value of 150% of the LVMWD's total cash deposits. LVMWD may waive collateral requirements for cash deposits, which are fully insured up to $250,000 by the Federal Deposit Insurance Corporation. LVMWD, however, has not waived the collateralization requirements.

Local Agency Investment Fund

The JPA's investments with Local Agency Investment Fund (LAIF) include a portion of the pool funds invested in structured notes and asset-backed securities. These investments include the following:

Structured Notes - debt securities (other than asset-backed securities) whose cash flow characteristics (coupon rate, redemption amount, or stated maturity) depend upon one or more indices and/or that have embedded forwards or options.

Asset-Backed Securities -– the bulk of which are mortgage-backed securities, entitle their purchasers to receive a share of the cash flows from a pool of assets such as principal and interest repayments from a pool of mortgages (such as CMO's) or credit card receivables.

LAIF is overseen by the Local Agency Investment Advisory Board, which consists of five members, in accordance with State statute.

As of June 30, 2022, the JPA had $1,879,013 invested in LAIF, which had invested 1.10% of the pool investment funds in Structured Notes and Asset-Backed Securities compared to $3,754,987 and 3.37% at June 30, 2021**.**

Investments Authorized by the California Government Code and the JPA's Investment Policy

The JPA follows LVMWD's investment policy. The table below identifies the investment types that are authorized for the JPA by the California Government Code (or the LVMWD's investment policy, where more restrictive). The table also identifies certain provisions of the California Code (or the LVMWD's investment policy, where more restrictive) that address interest rate risk, credit risk, and concentration of credit risk.

Note 3 – Cash and Investments (Continued)

Authorized Investment Type	Maximum Maturity	Percentage of Portfolio	Maximum Investment in One Issuer
United States treasury bills, bonds and notes	5 years	None	None
United States government sponsored agency securities	5 years	None	None
Time deposits	1 year	25%	None
Repurchase agreements/reverse repurchase agreement	30 days	25%/10%	None
California Asset Management Program (CAMP)	None	25%	$75,000,000
California Local Agency Investment Fund (LAIF)	None	25%	$75,000,000
Bonds issue by local agencies or states	5 years	None	None
Certificates of deposits	5 years	25%	$250,000

Disclosures Relating to Fair Value Measurement

Information about the fair value measurement of the JPA's investments is as follows:

	2022			2021		
	Significant Other Observable Input (Level 2)	Uncategorized	Total	Significant Other Observable Input (Level 2)	Uncategorized	Total
California Asset Management Program	$ -	$ 873,450	$ 873,450	$ -	$ -	$ -
California Local Agency Investment Fund	-	1,879,013	1,879,013	-	3,754,987	3,754,987
U.S. Government Sponsored Agency Security	4,412,700	-	4,412,700	762,147	-	762,147
Total Investments	$ 4,412,700	$ 2,752,463	$ 7,165,163	$ 762,147	$ 3,754,987	$ 4,517,134

Investments securities classified in Level 2 of the fair value hierarchy are valued using prices determined by the use of matrix pricing techniques maintained by the pricing vendors for these securities. Matrix pricing is used to value securities based on the securities' relationship to benchmark quoted prices.

Disclosures Relating to Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment, the greater the sensitivity of its fair value to changes in market interest rates. One of the ways that the JPA manages its exposure to interest rate risk is by purchasing a combination of shorter term and longer-term investments and by timing cash flows from maturities so that a portion of the portfolio is maturing or coming close to maturity evenly over time as necessary to provide the cash flow and liquidity needed for operations.

The JPA's investments of $7,165,163 and $4,517,134 at June 30, 2022 and 2021, respectively, made up of investments in LAIF and U.S. Government Sponsored Agency Securities at June 30, 2022 and 2021. Investments in LAIF and CAMP are highly liquid, as deposits can be converted to cash within twenty-four hours without loss of interest. The investment in U.S. Government-Sponsored Agency Securities matures in the year ending June 30, 2022.

Note 3 – Cash and Investments (Continued)

Disclosures Relating to Credit Risk

Generally, credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization. Investments in LAIF in the amounts of $1,879,013 and $3,754,987 at June 30, 2022 and 2021, respectively, are unrated. Investment in U.S. Government Sponsored Agency Securities in the amount of $4,412,700 and $762,147 at June 30, 2022 and 2021, respectively, are unrated. Investments in California Asset Management Program (CAMP) in the amounts of $873,450 at June 30, 2022, are unrated.

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of the JPA'S investment in a single investment. As of June 30, 2022 and 2021, the JPA had no investments exceed this limit.

Custodial Credit Risk

Custodial credit risk for deposits is the risk that, in the event of the failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party. The custodial credit risk for investments is the risk that, in the event of the failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. The California Government Code and the JPA's investment policy do not contain legal or policy requirements that would limit the exposure to custodial credit risk for deposits or investments, other than the following provision for deposits: The California Government Code requires that a financial institution secure deposits made by state or local governmental units by pledging securities in an undivided collateral pool held by a depository regulated under state law (unless so waived by the governmental unit). The fair value of the pledged securities in the collateral pool must equal at least 110% of the total amount deposited by the public agencies. California law also allows financial institutions to secure JPA deposits by pledging first trust deed mortgage notes having a value of 150% of the secured public deposits. As of June 30, 2022, the JPA's deposits with financial institutions are interest bearing, and have a limited insurance coverage with the federal deposit insurance corporation up to $250,000. Any amounts in excess of $250,000 per institution are collateralized by the bank with pledged securities.

Note 4 – Capital Assets

A summary of changes in capital assets for the year ended June 30, 2022 is as follows:

	Balance July 1, 2021	Additions	Deletions	Reclassification	Balance June 30, 2022
Capital assets, not being depreciated					
Land and land rights	$ 14,368,150	$ -	$ -	$ -	$ 14,368,150
Construction in progress	7,738,580	8,595,865	-	(5,314,003)	11,020,442
Total capital assets, not being depreciated	22,106,730	8,595,865	-	(5,314,003)	25,388,592
Capital assets, being depreciated					
Sewer and treatment plant	130,623,917	-	-	72,341	130,696,258
Compost plant and farm	78,707,298	-	-	5,184,645	83,891,943
Recycled water system	35,509,083	-	-	2,534	35,511,617
Advanced water system	4,366,140	-	-	54,483	4,420,623
Total capital assets, being depreciated	249,206,438	-	-	5,314,003	254,520,441
Less accumulated depreciation					
Sewer and treatment plant	(93,841,866)	(2,992,912)	-	-	(96,834,778)
Compost plant and farm	(55,062,807)	(1,764,607)	-	-	(56,827,414)
Recycled water system	(24,002,350)	(942,034)	-	-	(24,944,384)
Advanced water system	(43,661)	(125,285)	-	-	(168,946)
Total accumulated depreciation	(172,950,684)	(5,824,838)	-	-	(178,775,522)
Total capital assets, being depreciated, net	76,255,754	(5,824,838)	-	5,314,003	75,744,919
Total capital assets, net	$ 98,362,484	$ 2,771,027	$ -	$ -	$ 101,133,511

A summary of changes in capital assets for the year ended June 30, 2021 is as follows:

	Balance July 1, 2020	Additions	Deletions	Reclassification	Balance June 30, 2021
Capital assets, not being depreciated					
Land and land rights	$ 14,368,150	$ -	$ -	$ -	$ 14,368,150
Construction in progress	9,302,202	7,035,378	-	(8,599,000)	7,738,580
Total capital assets, not being depreciated	23,670,352	7,035,378	-	(8,599,000)	22,106,730
Capital assets, being depreciated					
Sewer and treatment plant	129,569,257	-	-	1,054,660	130,623,917
Compost plant and farm	76,218,777	-	-	2,488,521	78,707,298
Recycled water system	34,819,404	-	-	689,679	35,509,083
Advanced water system	-	-	-	4,366,140	4,366,140
Total capital assets, being depreciated	240,607,438	-	-	8,599,000	249,206,438
Less accumulated depreciation					
Sewer and treatment plant	(90,632,349)	(3,209,517)	-	-	(93,841,866)
Compost plant and farm	(53,478,695)	(1,584,112)	-	-	(55,062,807)
Recycled water system	(23,039,809)	(962,541)	-	-	(24,002,350)
Advanced water system	-	(43,661)	-	-	(43,661)
Total accumulated depreciation	(167,150,853)	(5,799,831)	-	-	(172,950,684)
Total capital assets, being depreciated, net	73,456,585	(5,799,831)	-	8,599,000	76,255,754
Total capital assets, net	$ 97,126,937	$ 1,235,547	$ -	$ -	$ 98,362,484

Note 5 – Due to Participants

During the year ended June 30, 2022 and 2021, additional advances received from the participants were in the amount of $19,612,743 and $25,272,164, respectively. The advances received from the participants are used to pay for the operating, capital, and administrative cost of the JPA. At June 30, 2022 and 2021, due to participants were in the amount of $10,842,687 and $5,416,999, respectively.

Note 6 – Participant Contributions

Cost of the JPA is shared by the participants based on the following methodology. Variable operation and maintenance cost are prorated between the participants based on the average sewage flow contributed to the joint system. Fixed operating and maintenance cost are prorated between the participants based on the participants' respective capacity rights in the facility. Capital costs are prorated between the participants based on the participants' respectively capacity rights in the facility. Annual audit costs are shared equally. General and administrative costs are based on the actual cost of labor. Lastly, land acquisition costs are shared based on the capacity rights in the project for which the land is acquired. As of January 1, 2005, the joint system, except for the sewer collection system, is allocated by 70.6% to LVMWD and 29.4% to TWSD.

The following is the summary of the contributions made by the participants for the years ended June 30, 2022 and 2021:

	2022			
	Operating Contribution	Percentage	Capital Contribution	Percentage
LVMWD	$ 10,386,142	68.4%	$ 6,068,677	70.6%
TSD	4,980,372	31.6%	2,527,185	29.4%
Total	$ 15,366,514	100.0%	$ 8,595,862	100.0%

	2021			
	Operating Contribution	Percentage	Capital Contribution	Percentage
LVMWD	$ 13,005,183	68.4%	$ 4,966,976	70.6%
TSD	5,995,455	31.6%	2,068,401	29.4%
Total	$ 19,000,638	100.0%	$ 7,035,377	100.0%

Note 7 – Risk Management

The JPA is covered under the LVMWD's insurance policies. The LVMWD retained Tolman & Wiker Insurance Service, LLC for general liability, property, auto and physical damage. The coverage for the general liability provided for $11 million per occurrence and $61 million for the aggregate, with a $50,000 self-insured retention limit per occurrence. The coverage for the property provided for $61 million per occurrence with a self-insured retention limit of $50,000 per occurrence.

During the past three fiscal years, none of the above programs of protection have had settlement or judgments that exceeded pooled or insured coverage. There have been no significant reductions in pooled or insured liability cover from coverage in the prior year.

Note 8 – Commitment and Contingencies

Lawsuits

The JPA is a defendant in various lawsuits. Although the outcome of these lawsuits is not presently determinable, it is the opinion of the JPA's legal counsel and the JPA's management that resolution of these matters will not have a material adverse effect on the financial condition of the JPA.

Commitments

As of June 30, 2022, the JPA had material construction commitments evidenced by contractual commitments with contractors in the amount of $4,940,036.

Project Name	Contractual Commitment
Pure Water Project	$ 2,428,139
Summer Season TMDL Compliance	1,618,097
Various construction projects	893,800
Total	$ 4,940,036

As of June 30, 2021, the JPA had material construction commitments evidenced by contractual commitments with contractors in the amount of $6,731,430.

Project Name	Contractual Commitment
Pure Water Project	$ 5,290,303
SCADA Upgrade for Tapia	754,482
Various construction projects	686,645
Total	$ 6,731,430

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SUPPLEMENTARY INFORMATION

Schedule of Changes in Participants' Advance Accounts
For the Years Ended June 30, 2022 and 2021

	Construction Funds		Operating Funds	
	Tapia Plant and Trunk Sewers		Operations and Maintenance	
	Las Virgenes Municipal Water District	Triunfo Sanitation District	Las Virgenes Municipal Water District	Triunfo Sanitation District
Due to (from) participants - July 1, 2021	$ 396,112	$ 71,371	$ 2,319,688	$ 747,472
Advance from participants	-	-	7,778,925	7,127,534
Interfund activities with participants	-	-	-	-
Construction costs allocated	(592,646)	(246,797)	-	-
Construction reclass to operating expenses	-	-	-	-
Change in fair market value of LAIF	(112,067)	(46,668)	(62,549)	(26,047)
Change in fair market value of LAIF - prior year	-	-	-	-
Grant income	-	-	-	-
Other miscellaneous income	281,142	117,076	(273,420)	(113,860)
Billings to participants for operating expenses	-	-	(6,821,229)	(4,986,536)
Billings to participants from replacement fund interest income	-	-	-	-
Interest income from (to) participants	707	293	-	-
Adjustment billing to participants for operating fund	-	-	-	-
Recycled water billings to Triunfo Sanitation District	-	-	-	(570,574)
Due to (from) participants - June 30, 2022	$ (26,752)	$ (104,725)	$ 2,941,415	$ 2,177,989

(continued)

	Construction Funds		Operating Funds	
	Tapia Plant and Trunk Sewers		Operations and Maintenance	
	Las Virgenes Municipal Water District	Triunfo Sanitation District	Las Virgenes Municipal Water District	Triunfo Sanitation District
Due to (from) participants - July 1, 2020	$ 443,982	$ 82,549	$ 2,319,689	$ 1,114,684
Advance from participants	-	-	13,117,862	6,328,764
Interfund activities with participants	-	-	-	-
Construction costs allocated	(9,876)	(4,113)	-	-
Construction reclass to operating expenses	-	-	-	-
Change in fair market value of LAIF	14,200	3,400	-	-
Change in fair market value of LAIF - prior year	(58,634)	(11,662)	-	-
Grant income	-	-	-	-
Other miscellaneous income	-	-	-	-
Billings to participants for operating expenses	-	-	(13,117,863)	(6,049,347)
Billings to participants from replacement fund interest income	-	-	-	-
Interest income from (to) participants	6,440	1,197	-	-
Adjustment billing to participants for operating fund	-	-	-	-
Recycled water billings to Triunfo Sanitation District	-	-	-	(646,629)
Due to (from) participants - June 30, 2021	$ 396,112	$ 71,371	$ 2,319,688	$ 747,472

(continued)

Schedule of Changes in Participants' Advance Accounts (Continued)
For the Years Ended June 30, 2022 and 2021

	Operating Funds			
	Replacement of Capital Assets			
	Las Virgenes Municipal Water District	Triunfo Sanitation District	Total	
			2022	2021
Due to (from) participants - July 1, 2021	$ 247,975	$ 1,634,381	$ 5,416,999	$ 12,531,959
Advance from participants	7,559,070	4,053,018	26,518,547	19,612,743
Interfund activities with participants	-	-	-	-
Construction costs allocated	(5,476,034)	(2,280,388)	(8,595,865)	(7,035,377)
Construction reclass to operating expenses	-	-	-	-
Change in fair market value of LAIF	-	-	(247,331)	17,600
Change in fair market value of LAIF - prior year	-	-	-	(70,296)
Grant income	-	-	-	-
Other miscellaneous income	-	-	10,938	-
Billings to participants for operating expenses	-	-	(11,807,765)	(19,167,210)
Billings to participants from replacement fund interest income	(4,799)	121,537	116,738	166,572
Interest income from (to) participants	-	-	1,000	7,637
Adjustment billing to participants for operating fund	-	-	-	-
Recycled water billings to Triunfo Sanitation District	-	-	(570,574)	(646,629)
Due to (from) participants - June 30, 2022	$ 2,326,212	$ 3,528,548	$ 10,842,687	$ 5,416,999

(concluded)

	Operating Funds			
	Replacement of Capital Assets			
	Las Virgenes Municipal Water District	Triunfo Sanitation District	Total	
			2021	2020
Due to (from) participants - July 1, 2020	$ 4,751,734	$ 3,819,321	$ 12,531,959	$ 8,187,259
Advance from participants	340,661	(174,544)	19,612,743	25,272,164
Interfund activities with participants	-	-	-	-
Construction costs allocated	(4,957,100)	(2,064,288)	(7,035,377)	(9,071,803)
Construction reclass to operating expenses	-	-	-	-
Change in fair market value of LAIF	-	-	17,600	70,296
Change in fair market value of LAIF - prior year	-	-	(70,296)	(8,571)
Grant income	-	-	-	-
Other miscellaneous income	-	-	-	-
Billings to participants for operating expenses	-	-	(19,167,210)	(13,247,458)
Billings to participants from replacement fund interest income	112,680	53,892	166,572	1,917,121
Interest income from (to) participants	-	-	7,637	10,264
Adjustment billing to participants for operating fund	-	-	-	-
Recycled water billings to Triunfo Sanitation District	-	-	(646,629)	(597,313)
Due to (from) participants - June 30, 2021	$ 247,975	$ 1,634,381	$ 5,416,999	$ 12,531,959

(concluded)

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REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING AND ON COMPLIANCE AND OTHER MATTERS BASED ON AN AUDIT OF FINANCIAL STATEMENTS PERFORMED IN ACCORDANCE WITH *GOVERNMENT AUDITING STANDARDS*

Independent Auditor's Report

To the Board of Directors
Las Virgenes-Triunfo Joint Powers Authority
Calabasas, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Las Virgenes-Triunfo Joint Power Authority (the "JPA"), which comprise the statements of net position as of June 30, 2022 and 2021, and the related statements of revenues, expenses, and changes in net position and cash flows for the years then ended, and the related notes to the basic financial statements and have issued our report thereon dated November 17, 2022.

Report on Internal Control Over Financial Reporting

In planning and performing our audits of the financial statements, we considered the JPA's internal control over financial reporting (internal control) as a basis for determining audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the JPA's internal control. Accordingly, we do not express an opinion on the effectiveness of the JPA's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the JPA's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the financial statements. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards.*

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Rogers, Anderson, Malody & Scott, LLP.

San Bernardino, California
November 17, 2022

AGENDA ITEM NO. 6.B

DATE: December 13, 2022

TO: JPA Board of Directors

FROM: Engineering and External Affairs

SUBJECT: Certification of the Final Programmatic Environmental Impact Report and Approval of the Pure Water Project Las Virgenes-Triunfo

---

SUMMARY:

The Pure Water Project Las Virgenes-Triunfo (PWP) represents a unique opportunity to proactively address the challenges facing the Las Virgenes-Triunfo Joint Powers Authority (JPA). The JPA has prepared a Programmatic Environmental Impact Report (PEIR) to identify the potential environmental impacts associated with the proposed project and reduce those environmental impacts to the extent feasible. The PEIR identifies two site alternatives for the proposed Advanced Water Purification Facility (AWPF) – the 30800 Agoura Road site and the Las Virgenes Reservoir site – as well as multiple alternative alignments for the four major conveyance pipelines that are part of the project. After fulfilling or exceeding the requirements of the California Environmental Quality Act (CEQA), staff recommends that the JPA Board pass, approve and adopt proposed Resolution No. 23, approving the Pure Water Project Las Virgenes-Triunfo, certifying the Final PEIR and selecting 30800 Agoura Road as the preferred site for the proposed AWPF to minimize potential environmental impacts.

A copy of the Final PEIR is available on-line at https://www.ourpureh2o.com/pure-water/project-updates.

RECOMMENDATION(S):

Pass, approve and adopt proposed Resolution No. 23, approving the Pure Water Project Las Virgenes-Triunfo, certifying the Final Programmatic Environmental Impact Report, adopting the environmental findings, mitigation measures, statement of overriding considerations, and mitigation monitoring and reporting program and selecting 30800 Agoura Road in the City of Agoura Hills as the preferred site for the proposed Advanced Water Purification Facility; and authorize the Administering Agent/General Manager to sign a Notice of Determination to be filed with the Los Angeles and Ventura County Clerks and State Clearinghouse for the Pure Water Project Las Virgenes-Triunfo.

RESOLUTION NO. 23

A RESOLUTION OF THE GOVERNING BOARD OF THE LAS VIRGENES-TRIUNFO JOINT POWERS AUTHORITY CERTIFYING THE FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT REPORT, APPROVING THE PURE WATER PROJECT LAS VIRGENES-

TRIUNFO, AND ADOPTING THE ENVIRONMENTAL FINDINGS, MITIGATION MEASURES, STATEMENT OF OVERRIDING CONSIDERATIONS, AND MITIGATION MONITORING AND REPORTING PROGRAM

(Reference is hereby made to Resolution No. 23 on file in the JPA's Resolution Book and by this reference the same is incorporated herein.)

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

There is minimal financial impact associated with this action. Filing fees are estimated to cost of $3,664.25. Sufficient funds are available in the adopted Fiscal Year 2022-23 Budget.

DISCUSSION:

Background:

The Las Virgenes Municipal Water District (LVMWD) and Triunfo Water and Sanitation District (TWSD), collectively part of the Las Virgenes-Triunfo Joint Powers Authority (JPA), currently rely entirely on purchased imported drinking water from the Metropolitan Water District of Southern California. In addition, the JPA currently discharges excess Title 22 recycled water from the Tapia Water Reclamation Facility (TWRF) to Malibu Creek and will soon be subject to new, more stringent water quality requirements.

The Pure Water Project Las Virgenes-Triunfo (PWP) represents a unique opportunity to proactively address three major challenges facing the JPA by:

1. Complying with more stringent regulatory requirements for discharge to Malibu Creek;
2. Balancing seasonal variations in recycled water demand; and
3. Creating a valuable resource to supplement the region's drinking water supplies, supported by California's reservoir water augmentation regulations.

The fundamental plan is to build an Advanced Water Purification Facility (AWPF) to treat tertiary effluent from the TWRF for indirect potable reuse and convey the purified water to the Las Virgenes Reservoir where it will be blended with water supplied directly by the Metropolitan Water District of Southern California. After a specified retention period, water from the Las Virgenes Reservoir will be treated at the existing Westlake Filtration Plant prior to distribution via the potable water system. Additionally, four pipelines will be constructed to convey source water, purified water, reverse osmosis concentrate (brine) and any water that is "out of spec" to the wastewater collection system.

Environmental Review Process and the California Environmental Quality Act :

The California Environmental Quality Act (CEQA) generally requires state and local government agencies to inform decision makers and the public about the potential environmental impacts of proposed projects and reduce those environmental impacts to the extent feasible. The laws and rules governing the CEQA process are contained in the CEQA

statutes (Public Resources Code Section 21000 et seq.), CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.), published court decisions interpreting CEQA and locally-adopted CEQA procedures.

A Notice of Preparation (NOP) for the Draft PEIR was issued on September 9, 2021. Staff and the JPA's consultant worked together to develop the document, which included amongst many other tasks: biological and cultural surveys, development of site plans, outreach to stakeholders, and individual investigations to help define the potential environmental impacts of the PWP. The Draft PEIR ultimately defined two distinct site alternatives for the AWPF, multiple optional alignments for the four major project pipelines, and an augmentation project that may ultimately supplement source water available for treatment at the AWPF. The two site alternatives defined in the document were the 30800 Agoura Road site and the Las Virgenes Reservoir site. After careful consideration, the Draft PEIR identified the 30800 Agoura Road site as the least environmentally impactful of the two alternatives.

On August 22, 2022, a Draft PEIR was completed and a Notice of Availability and Notice of Public Meeting was posted and sent to project stakeholders. Per the CEQA Guidelines, the document was made available at LVMWD Headquarters, as well as on-line and at several local city halls and libraries. The Notice of Availability was also advertised in the *Las Virgenes/Calabasas Enterprise, Ventura County Star, The Acorn,* and the *Los Angeles Daily News*. Stakeholders, neighboring cities and agencies and other key officials were directly contacted via email or regular mail of the document's availability, and presentations were made at the Agoura Hills, Westlake Village and Thousand Oaks City Council meetings, as well as to the Oak Park MAC. A public meeting was held on September 8, 2022 to provide information about the project and the draft environmental analysis and to receive public comments on the Draft PEIR. The release of the document on August 22, 2022 began a minimum 45-day public comment period that concluded on October 7, 2022.

At the conclusion of the public comment period, the District received 12 letters responsive to the Draft PEIR, all of which have been individually responded to in the Final PEIR. Changes to the Draft PEIR were also made based on these letters and the feedback. At the end of November 2022, the document was posted on the Pure Water Project website (http://www.ourpureh2o.com/projectupdates), sent to the JPA Board for review and the commenters were individually notified of the availability of the document for a 10-day public review period. Staff reviewed the Final PEIR and the comment responses and have determined that the comments have been adequately and thoroughly responded to in the Final PEIR.

Per the CEQA Guidelines and because potential environmental impacts that could not be mitigated to a less than significant impact were identified, mitigation measures, a statement of overriding considerations and a mitigation monitoring and reporting program are included for adoption as part of the Resolution. While not all impacts could be mitigated fully, the measures laid out in these documents detail the JPA's commitment to a robust and thorough mitigation plan and provide justification for approval of the project.

Proposed Resolution No. 23:

Upon approval and adoption, Resolution No. 23 will constitute the Board's approval of the Pure Water Project Las Virgenes-Triunfo, certification of the Final Programmatic Environmental Impact Report, adoption of the environmental findings, mitigation measures,

statement of overriding considerations, and mitigation monitoring and reporting program and selection of 30800 Agoura Road in the City of Agoura Hills as the preferred site for the proposed Advanced Water Purification Facility. The 30800 Agoura Road site is clearly documented in the Final PEIR to have fewer environmental impacts than the Las Virgenes Reservoir site, and selection of the site as the preferred alternative will allow staff to move forward with design of Advanced Water Purification Facility.

GOALS:

Provide Safe and Quality Water with Reliable Services

Prepared by: Oliver Slosser, Engineering Program Manager

ATTACHMENTS:
Proposed Resolution No. 23
Exhibit A - Findings and Statements Required under CEQA
Exhibit B - Mitigation Monitoring and Reporting Program

RESOLUTION NO. 23

A RESOLUTION OF THE GOVERNING BOARD OF THE LAS VIRGENES-TRIUNFO JOINT POWERS AUTHORITY CERTIFYING THE FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT REPORT, APPROVING THE PURE WATER PROJECT LAS VIRGENES-TRIUNFO, AND ADOPTING THE ENVIRONMENTAL FINDINGS, MITIGATION MEASURES, STATEMENT OF OVERRIDING CONSIDERATIONS, AND MITIGATION MONITORING AND REPORTING PROGRAM

WHEREAS, a Programmatic Environmental Impact Report was prepared to assess the environmental impacts of the Pure Water Project Las Virgenes-Triunfo (Pure Water Project) and two site alternatives and multiple conveyance alternatives were identified therein; and

WHEREAS, the Las Virgenes-Triunfo Joint Powers Authority (JPA) is the Lead Agency for the Pure Water Project pursuant to the provisions of the California Environmental Quality Act (CEQA) and is responsible for complying with CEQA; and

WHEREAS, a Notice of Preparation (NOP) of a Draft Programmatic Environmental Impact Report (DPEIR) was issued on September 9, 2021 and comments were received from potentially affected parties; and

WHEREAS, a DPEIR was prepared for the Project, and a Notice of Completion filed with the State Office of Planning and Research and circulated for public comment during a 45-day review period that closed on October 7, 2022; and

WHEREAS, a Public Notice of Availability of the DPEIR was prepared and filed with the Ventura and Los Angeles County Clerks and duly published in the Las Virgenes/Calabasas Enterprise, Ventura County Star, The Acorn, and the Los Angeles Daily News in accordance with law; and

WHEREAS, a public hearing regarding the DPEIR was held by the JPA, pursuant to notices of public hearing, on September 8, 2022 for the receipt of additional public comment; and

WHEREAS, a Final Programmatic Environmental Impact Report (FPEIR) for the Project, was prepared responding to the written and oral comments received during the public review period and presented to the JPA Board of Directors (Board) in advance of its December 13, 2022 meeting, and made available to the public for at least 10 calendar days pursuant to the provisions of the CEQA; and

WHEREAS, the JPA will be considering approval of the Pure Water Project and the FPEIR.

NOW, THEREFORE, THE JPA HEREBY RESOLVES, DETERMINES, AND ORDERS AS FOLLOWS:

1. The JPA has reviewed the FPEIR (SCH# 2021090157) dated November 2022 (a copy of which is on file at the Las Virgenes Municipal Water District's headquarters and incorporated herein by reference) and found that the Final PEIR meets all provisions of CEQA and that the FPEIR reflects the independent judgment of the JPA.

2. The FPEIR adequately identifies all the environmental impacts of the Pure Water Project. Potentially significant impacts have been identified and mitigation measures have been incorporated that will reduce impacts to a level which will not cause a significant impact on the environment, with the exception of those significant impacts included in the Statement of Overriding Considerations as described in section 5 below.

3. Mitigation measures, which mitigate or avoid most of the significant environmental impacts of the Pure Water Project are identified in the FPEIR. The findings to support this conclusion are attached as Exhibit A and are hereby incorporated by reference.

4. Pursuant to section 21081.6 of the Public Resources Code, a Mitigation Monitoring and Reporting Program (MMRP) has been included to mitigate or avoid potential significant impacts on the environment. The MMRP for the Program is attached as Exhibit B and is hereby incorporated by reference. The JPA approves and adopts the MMRP.

5. Unmitigated significant impacts are identified in the FPEIR, and a Statement of Overriding Considerations is adopted. There are economic, legal, social, technological, or other benefits of the Pure Water Project that outweigh the Program's unavoidable significant environmental impacts. A description of these impacts, the Pure Water Project's benefits and the findings for a Statement of Overriding Consideration as required by the CEQA are attached as Exhibit A and are hereby incorporated by reference. The JPA approves and adopts the Statement of Overriding Considerations and all other findings and elements of Exhibit A

6. The JPA certifies the FPEIR referred to in section 2 above.

7. The JPA hereby directs staff to file with the County Clerks and the Office of Planning and Research in Sacramento a Notice of Determination commencing a 30-day statute of limitations for any legal challenge to the same based on alleged non-compliance with CEQA.

8. The JPA approves the Pure Water Project Las Virgenes-Triunfo and selects 30800 Agoura Road in the City of Agoura Hills as the preferred site for development of the Advanced Water Purification Facility.

The foregoing Resolution was adopted, signed, and approved at a special meeting of the Governing Board of the Las Virgenes-Triunfo Joint Powers Authority held on December 13, 2022, by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

_____
Jay Lewitt, Chair

ATTEST:

_____
Leon E. Shapiro, Vice Chair

APPROVED AS TO FORM:

_____
W. Keith Lemieux, JPA Counsel

EXHIBIT A

FINDINGS AND STATEMENTS REQUIRED UNDER THE
CALIFORNIA ENVIRONMENTAL QUALITY ACT

For

FINAL PROGRAMMATIC ENVIRONMENTAL IMPACT REPORT

PURE WATER PROJECT – LAS VIRGENES TRIUNFO

STATE CLEARINGHOUSE NUMBER: 2021090157

Prepared Pursuant to
Sections 15091 and 15093 of the State CEQA Guidelines and Section 21081 of the Public Resources Code

by the

LAS VIRGENES-TRIUNFO JOINT POWERS AUTHORITY

NOVEMBER 2022

1. Introduction

1.1 Overview and Organization

The Las Virgenes-Triunfo Joint Powers Authority (JPA) has prepared a Final Programmatic Environmental Impact Report (Final Program EIR) for the Pure Water Project Las Virgenes-Triunfo (Pure Water Project). The Final Program EIR analyzes the anticipated environmental impacts of two site alternatives for the Advanced Water Purification Facility (AWPF) and multiple alignment alternatives for four conveyance pipelines. To support its certification of the Final Program EIR, recommendation of the AWPF site alternative, and approval of the Pure Water Project, the JPA makes the following findings of fact and statements of overriding considerations (collectively, Findings). These Findings contain the JPA's written analysis and conclusions regarding the Pure Water Project's environmental effects, mitigation measures, alternatives, and the overriding considerations which the JPA views justify the approval of the Pure Water Project despite its potential environmental effects. These Findings are based upon the entire record of proceedings for the Final Program EIR, as described below.

The Pure Water Project would address three major challenges facing the JPA:

1. Compliance with more stringent regulatory requirements for discharge to Malibu Creek
2. Balance seasonal variation in recycled water demand
3. Create a valuable resource to supplement the region's water supplies, supported by California's reservoir water augmentation regulations

The fundamental plan is to build an Advanced Water Purification Facility (AWPF) to treat tertiary effluent from the Tapia Water Reclamation Facility (WRF) for indirect potable reuse, and convey the purified water to the Las Virgenes Reservoir, where it will be blended with Metropolitan Water District of Southern California supply. Overall project objectives and intended use of the Final Program EIR are described in Chapter 1 of the Final Program EIR. Pure Water Project features are briefly summarized below and are described in more detail in Chapter 2 of the Final Program EIR.

- Tapia Water Reclamation Facility and Malibu Creek Discharges. The Pure Water Project does not include substantial changes at the Tapia WRF, and its capacity is not expected to increase. To operate the project efficiently, some minor upgrades to existing facilities would be required within the existing plant footprint, such as changes to optimize disinfection practices. The primary change is operational – all treated effluent would be sent to the recycled water system and the new AWPF.
- Alternative 1 Agoura Road Advanced Water Purification Facility. Under Alternative 1 Agoura Road AWPF, Tapia WRF effluent would be conveyed by the recycled water system to the new purification facility located along Agoura Road in Agoura Hills. The facility would have a capacity of 7.5 MGD.
- Alternative 2 Reservoir Advanced Water Purification Facility. Under Alternative 2 Reservoir AWPF, Tapia WRF effluent discharged into the recycled water system would be sent to a new treatment facility located next to Las Virgenes Reservoir in Westlake Village. Like Alternative 1 Agoura Road AWPF, the facility would have a capacity of 7.5 MGD.
- Las Virgenes Reservoir and Westlake Filtration Plant. Under both Alternative 1 Agoura Road AWPF and Alternative 2 Reservoir AWPF, a new discharge pipeline would be installed in Las Virgenes Reservoir.
- Source Water Augmentation. Full utilization of the AWPF would require an additional source water supply to supplement the Tapia WRF recycled water supply. The Pure Water Project may retrofit an existing groundwater well located at the Los Robles Greens golf course by installing new piping and valves, a flow meter, and a blow-off system; and a perimeter fence would be placed around the well.

- Pipelines. The Pure Water Project would require a series of interrelated pipelines. For most of these pipelines, several alignment options are under consideration and are analyzed in the Final Program EIR.

- Other Ancillary Facilities. The project also includes upgrades to the existing recycled water pump station (west).

The content and format of the Findings are designed to meet the requirements of the California Environmental Quality Act (CEQA).[1,2] The Final Program EIR identifies significant environmental effects that would result from implementation of the Pure Water Project. For each significant effect identified in the Final Program EIR, the JPA is adopting one or more of the findings as provided in CEQA and specified in Section 15091 of the CEQA Guidelines. For most significant effects, the JPA finds that the mitigation measures identified in the Final Program EIR and adopted by the JPA will avoid or substantially lessen the significant effects to a less-than-significant level. As provided in Section 15093 of the CEQA Guidelines, the JPA is balancing the economic, legal, social, technological, or other benefits of the Pure Water Project against the unavoidable environmental effects. With regard to those unavoidable effects, the JPA is adopting a Statement of Overriding Considerations. The JPA also adopts a Mitigation Monitoring and Reporting Plan (MMRP). The JPA finds that the MMRP, which is incorporated by reference and made a part of these Findings, meets the requirements of Public Resources Code Section 21081.6 by providing for the implementation and monitoring of measures intended to mitigate potentially significant effects. The MMRP is provided under separate cover and is incorporated by reference.

1.2 Statutory Requirements

CEQA and the CEQA Guidelines require that:

No public agency shall approve or carry out a project for which an EIR has been certified that identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:

1. Changes or alterations have been required in, or incorporated into, the project, which avoid or substantially lessen the significant environmental effect as identified in the final EIR. (Referred to herein as "Finding 1")

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

3. Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the final EIR. (Referred to herein as "Finding 3")

For those significant effects that the agency determines are not feasible to mitigate to a less-than-significant level, the public agency is required to find that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment (see, Public Resource Code Section 21081(b)). The Guidelines state in Section 15093 that if the specific economic, legal, social, technological, or other benefits of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered acceptable.

1.3 Records of Proceedings and Custodian of Record

For purposes of CEQA and these Findings, the record of proceedings for the JPA's decisions on the Pure Water Project consist of: (a) matters of common knowledge to the JPA, including, but not limited to,

[1] California Environmental Quality Act (CEQA), Public Resources Code (PRC), §§ 21000 et seq.

[2] CEQA Guidelines, CCR, Title 14, Division 6, Chapter 3, §15000 et seq. (CEQA Guidelines).

federal, state and local laws and regulations and policies, (b) the following documents, which are in custody of Las Virgenes Municipal Water District, 4232 Las Virgenes Road, Calabasas:

- Notice of Preparation and other public notices issued by the JPA in conjunction with the Pure Water Project
- Draft Programmatic Environmental Impact Report, dated August 2022
- All testimony, documentary evidence, and correspondence submitted in response to the Draft Program EIR by agencies or members of the public during the public comment period on the Draft Program EIR and responses to those comments
- Final Programmatic Environmental Impact Report, dated November 2022, including all documents incorporated therein by reference
- Mitigation Monitoring and Reporting Plan, dated November 2022
- All findings, statements of overriding consideration, and resolutions adopted by the JPA in connection with the Pure Water Project, and all documents cited or referred to therein
- All final technical reports and addenda, studies, memoranda, maps, correspondence, and all planning documents prepared by the JPA or the JPA's consultants relating to the Pure Water Project
- All documents submitted to the JPA by agencies or members of the public in connection with development of the Pure Water Project
- All actions of the JPA with respect to the Pure Water Project
- All references included in the Final Program EIR
- Applicable local general plans and related environmental analyses
- Meeting agenda, minutes, and staff reports of the JPA
- Other documents regarding coordination and consultation with the public and public agencies and other documents designated by the JPA

1.4 Preparation and Consideration of the Final PEIR and Independent Judgment Findings

Pursuant to Public Resources Code Section 21082.1(c)(3), the JPA finds, with respect to the JPA's preparation, review and consideration of the Final Program EIR, that:

- The JPA retained the independent firm Jacobs Engineering Group Inc. (Jacobs) to prepare the Final Program EIR, and Jacobs prepared the Final Program EIR under the supervision and at the direction of the JPA.
- The JPA circulated the Draft Program EIR for review by responsible agencies and the public from August 22, 2022, to October 7, 2022, for a total public review period of over 45 days and submitted it to the State Clearinghouse for review and comment by State agencies.
- A public hearing regarding the Draft Program EIR was held by the JPA, pursuant to notices of public hearing, on September 8, 2022, for the receipt of additional public comment.
- The Final Program EIR was prepared responding to the comments received during the public review period and presented to the JPA Board of Directors (Board) in advance of its December 13, 2022 meeting, and made available to the public for at least 10 calendar days pursuant to the provisions of CEQA.
- The Final Program EIR has been completed in compliance with CEQA.

- The Pure Water Project will have significant, unavoidable impacts as described and discussed in the Final Program EIR.
- The Final Program EIR is adequate under CEQA to address the potential environmental impacts of the Program.
- The Final Program EIR has been presented to the JPA and the JPA has independently reviewed and considered information contained in the Final Program EIR.

By these Findings, the JPA ratifies, adopts, and incorporates the analyses, explanations, findings, responses to comments, and conclusions of the Final Program EIR, except as specifically described in these Findings.

2. Findings Regarding Less-Than-Significant Impacts; Mitigation Incorporated

The JPA finds that, as discussed below, the following potentially significant impacts would be reduced to less than significant with implementation of the corresponding mitigation measures of the Program.

2.1 Aesthetics

2.1.1 Impacts

- **Impact 3-3:** Implementation of the Pure Water Project would have a potentially significant impact from lighting during both construction and operation.

2.1.2 Findings

The JPA adopts Finding 1. The JPA adopts the following mitigation measure to reduce potentially significant impacts related to aesthetics to less-than-significant levels.

- **Mitigation Measure 3-1:** Design lighting to minimize impacts on adjacent areas.

  Construction Lighting. Prior to site mobilization, the construction manager will confirm that construction lighting is used in a manner that minimizes potential night lighting impacts, as follows:

  - All lighting will be of minimum necessary brightness consistent with worker safety.
  - All fixed-position lighting will be shielded, hooded, and directed downward to minimize backscatter to the night sky and prevent light trespass (direct lighting extending outside the boundaries of the construction area).
  - Where feasible and safe, lighting will be turned off when not in use, and motion detectors will be used.
  - A lighting complaint resolution form will be maintained by construction management to record all lighting complaints received and to document resolutions.
  - All construction-related lighting will be completely shielded or screened so it is not visible to adjacent residents with direct views of the construction site.
  - Maintain all construction-related lighting to be shielded or screened to minimize any inadvertent lighting spillover onto the open-space area south of the construction site.

  Project Operation Lighting. New permanent lighting will be designed and installed such that light bulbs are not visible from public viewing areas and illumination of the night sky is minimized. To meet these requirements, the JPA will:

  - Design lighting so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. Lighting will be designed such that the luminescence or light source is shielded to prevent light trespass outside the facility boundary.

- All lighting will be of minimum necessary brightness consistent with worker safety.
- Where feasible and safe, lighting will be turned off when not in use.
- A lighting complaint resolution form will be used by AWPF staff to record all lighting complaints received and document resolutions.
- Maintain all lighting to be shielded or screened to minimize any inadvertent lighting spillover onto the open-space area south of the AWPF site.

2.1.3 Facts in Support of Findings

Facts in support of the findings are described in the Final Program EIR Chapter 3 (Aesthetics) and in Appendix F (Response to Comments).

2.2 Biological Resources

2.2.1 Impacts

- **Impact 5-1 (Wildlife):** Implementation of the Pure Water Project could result in a significant impact on special-status wildlife species.
- **Impact 5-3:** Implementation of the Pure Water Project could result in a significant impact on federally protected wetlands.
- **Impact 5-5:** Implementation of the Pure Water Project could result in a significant impact to oak trees that may occur at the Alternative 1 Agoura Road AWPF site or the Alternative 2 Reservoir AWPF site, and along the pipeline corridors.

2.2.2 Findings

The JPA adopts Finding 1. The JPA adopts the following mitigation measure to reduce potentially significant impacts related to biological resources to less-than-significant levels.

- **Mitigation Measure 5-2:** Perform preconstruction surveys and construction monitoring for special-status wildlife species.

  The JPA will retain qualified biologists with appropriate handling permits or will obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with project construction and activities.

  A qualified biologist will prepare a Worker Environmental Awareness Training. The biologist will communicate to workers that, upon encounter with a special-status species, work must stop, the biologist must be notified, and work may only resume once a qualified biologist has determined it is safe to do so.

  A qualified biologist will prepare a Wildlife Relocation and Avoidance Plan. The plan will describe the special-status species that could occur within the project site and proper avoidance, handling, and relocation protocols. The plan will include species-specific avoidance buffers and suitable relocation areas at least 200 feet outside of the project site. The biologist will submit a copy of the Wildlife Relocation and Avoidance Plan to CDFW for approval prior to any clearing, grading, or excavation work on the project site.

  To avoid direct injury and mortality of special-status wildlife, a qualified biologist will be onsite to move out of harm's way wildlife of low mobility that would be injured or killed. Wildlife will be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to suitable habitat adjacent to the project site. In areas where a special-status species is found, work may only occur in these areas after a qualified biologist has determined it is safe to do so. Even so, a qualified biologist will advise workers to proceed with caution. A qualified biologist will be onsite daily during initial ground and habitat-disturbing activities as well as vegetation removal. Then,

the biologist will be onsite weekly or every other week for the remainder of the activity until the cessation of all ground- and habitat-disturbing activities, as well as vegetation removal, so that no wildlife is harmed.

If any special-status wildlife is harmed during relocation or a dead or injured animal is found, work in the immediate vicinity will stop immediately, the qualified biologist notified, and the dead or injured animal documented immediately. A formal report will be sent to the appropriate agency within 3 days of the incident or finding. The report will include the date, time of the finding or incident (if known), location of the carcass or injured animal, and circumstances of its death or injury (if known). Work in the immediate vicinity may only resume once the proper notifications have been made and additional mitigation measures have been identified to prevent additional injury or death.

A qualified biologist will conduct species-specific and season-appropriate surveys for the following species where suitable habitat occurs in the project site. Positive detections of special-status species and suitable habitat at the detection location will be mapped. If species are detected, the biologist will use visible flagging to mark the detection location.

- Least Bell's Vireo: Perform protocol surveys within the Conejo Canyons Open Space and where there is habitat for least Bell's vireo in the project area. Surveys will adhere to the USFWS Least Bell's Vireo Survey Guidelines (USFWS 2001). A final survey report (including negative findings) will be provided to USFWS and CDFW within 45 days following completion of the survey effort. A final survey report will be submitted to USFWS and CDFW prior to any project-related ground-disturbing activities and vegetation removal.

  If least Bell's vireo is present in the project area, the JPA will fully avoid impacts. A final Least Bell's Vireo Avoidance Plan will be developed prior to implementing project-related ground-disturbing activities and vegetation removal.

  To fully avoid impacts to least Bell's vireo, no ground-disturbing activities, including staging, or disturbances to native and non-native vegetation, will occur during the least Bell's vireo breeding season from March 15 through September 15 to avoid take of least Bell's vireo birds, nestlings, or eggs. If construction activities occur within this time, nesting bird surveys will be conducted. Active least Bell's vireo nests will be avoided with a 500-foot buffer delineated by high-visibility flagging. Construction activities will not continue within the buffer until the young have fledged or the nest is no longer active.

  If impacts to least Bell's vireo cannot be avoided, the JPA will consult with the USFWS and CDFW to obtain take authorization. Appropriate take authorization will be obtained prior to any ground-disturbing activities and vegetation removal.

- Coastal California Gnatcatcher: Protocol presence or absence surveys for coastal California gnatcatcher will be performed by a qualified biologist with a USFWS Section 10(a)(1)(A) permit. If coastal California gnatcatcher are present, the Pure Water Project and its contractors will avoid impacting occupied habitat by maintaining a 500-foot buffer. In addition, no construction activities will occur within 500 feet of an active nest. Buffers will be maintained until young have fledged (left the nest on their own), as determined by the biologist, or the nest is no longer active. Buffers will be delineated by high-visibility fencing. If these avoidance techniques are not feasible, USFWS and CDFW will be contacted regarding alternative avoidance measures for the species.

  If coastal California gnatcatcher is present, the JPA will consult with the USFWS to determine whether the project would result in take. Consultation with the USFWS to comply with the ESA is advised well in advance of any ground-disturbing activities or vegetation removal that may impact the gnatcatcher. If a take permit from the USFWS is needed, the JPA will comply with the mitigation measures detailed in the permit.

  If the project would result in permanent loss of gnatcatcher habitat, the JPA will provide replacement habitat at no less than 2:1 for the total acreage of affected habitat.

Assurances for long-term protection of replacement habitat will be provided by the JPA prior to any ground-disturbing activities or vegetation removal that may impact gnatcatcher.

- California Legless Lizard and Coastal Whiptail: Surveys will be scheduled during the summer months (June and July) when these animals are most likely to be encountered. Surveys will be conducted with parallel transects at approximately 20 feet apart and walked onsite in appropriate habitat for each species. Suitable habitat consists of areas of sandy, loose, and moist soils, typically under sparse vegetation of scrub, chapparal, and within the duff of oak woodlands.

- Western Pond Turtle: Surveys will be conducted during the time of greatest pond turtle activity, typically during the breeding season (May through July) and when pond turtles have not left the water to aestivate or overwinter in the uplands. Surveys and potential habitats will follow the USGS Western Pond Turtle (Emys marmorata) Visual Survey Protocol for the Southcoast Ecoregion (USGS 2006).

- Nesting Birds: Preconstruction nesting bird surveys will be performed by a qualified biologist within 500 feet of the construction area no more than 7 days prior to construction when work activities in that area begin (or resume after 2 or more weeks of inactivity) between February 1 and August 31. If the construction area and within 500 feet of the construction area has nesting habitat for raptors, surveys for nesting raptors will begin January 1 to avoid take of birds, raptors, or their eggs.

  Should an active nest be observed, a qualified biologist will implement a minimum buffer of 300 feet around the migratory bird species nests and 500 feet around active raptor nests. The qualified biologist will notify CDFW of buffers established around any active nests of protected species. Buffers will be maintained until young have fledged (left the nest on their own), as determined by a qualified biologist, or the nest is no longer active.

  The biologist will monitor active nests daily when construction is occurring and assess the effect on the nesting birds. If the biologist determines that particular activities pose a high risk of disturbing an active nest, the biologist will increase the minimum buffer and recommend additional, feasible measures to minimize the risk of nest disturbance. If work cannot proceed without disturbing the nesting birds, or signs of disturbance are observed by a monitor, work will be stopped or redirected to other areas until the nesting and fledging is completed or the nest has otherwise become inactive.

- Bats: Prior to construction, a qualified biologist will complete a habitat assessment for special-status bats to identify potential maternity roost sites or substantial day roost sites. If special-status bat roost sites are identified, then a qualified biologist will complete acoustical monitoring surveys and visual surveys at dusk to identify roost locations and types, the species composition, and number of occupants.

  If a maternity roost is present, the biologist will determine the extent of the construction buffer around the active roost. The buffer will be maintained from April 1 until the young are flying, typically after August 31. If a roost is present in a bridge or tree in or adjacent to the construction area, the biologist will determine the likelihood of disturbance. The impact of roost eviction rather than roost protection will be evaluated, and roost eviction will occur only when necessary. Any necessary roost eviction will occur at night, between September 1 and March 31 outside the maternity season unless the roost is determined to be a non-maternity roost occupied only by males.

- Arroyo Chub and Western Pond Turtle: The JPA will fully avoid all impacts to arroyo chub and western pond turtle along Arroyo Conejo. No work will occur on the stream banks adjacent to Arroyo Conejo during the winter rainy season, typically between December 1 and March 31. Additionally, no work will occur during the combined rainy season and breeding season for arroyo chub (February 1 through August 31) and western pond turtle (March 1 through July 15).

For work occurring near Arroyo Conejo, the JPA will monitor construction noise to confirm noise does not affect wildlife in the adjacent river habitat. Construction equipment will use noise-reduction features (such as mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer. Stationary noise sources, such as generators and pumps, at staging areas within 1,400 feet of sensitive receptors should be shielded at the source by an enclosure, temporary sound walls, or acoustic blankets. Where feasible, sound walls or acoustic blankets should have a height of no less than 8 feet, a Sound Transmission Class of 27 or greater, and a surface with a solid face from top to bottom without any openings or cutouts. Unnecessary construction vehicle use and idling time should be minimized to the extent feasible, such that if a vehicle is not required for use immediately or continuously for safe construction activities, the engine should be shut off.

- **Mitigation Measure 5-3:** Avoid and minimize impacts to jurisdictional waters, including wetlands. The Pure Water Project may affect some watercourses identified in undeveloped areas, with an unavoidable wetland impact along Agoura Road (Alternative 1 Agoura Road AWPF only) and at the Las Virgenes Reservoir site (Alternative 2 Reservoir AWPF only). For all impacts to jurisdictional waters, including wetlands, that cannot be avoided, permits must be obtained from the appropriate state and federal agencies. The JPA will notify the appropriate agencies – expected to be the USACE, Regional Board, and CDFW – prior to any ground-disturbing activities and vegetation removal, including staging, near streams. Notifications will be consistent with the permit application submittal requirements in effect at the time of submittal. For these impacts, the Pure Water Project will evaluate all construction footprints in undeveloped areas to avoid and minimize impacts to jurisdictional waters. Avoidance and minimization measures may include:

    - Maintain a construction buffer from the jurisdictional limits by installing construction fencing to prevent encroachment. If possible, the fencing will be installed at least 10 feet from the jurisdictional limits.

    - Locate construction staging, including equipment and materials storage, away from the jurisdictional limits, preferably at least 50 feet away.

    - Implement erosion control measures as prescribed by a Stormwater Pollution Prevention Plan (SWPPP) or Erosion Control Plan. Chapter 8, Geology and Soils (including Mitigation Measure 8-2) and Chapter 11, Hydrology and Water Quality, provide further discussion.

  For impacts to wetlands that cannot be avoided, compensatory mitigation will be provided. The JPA will provide compensatory mitigation by purchasing credits at an approved mitigation bank within the region or by paying in-lieu fees. Credits or in-lieu fees will be provided at an appropriate ratio subject to the specific requirements of each agency at no less than 1:1.

- **Mitigation Measure 5-4:** Prepare and implement a mitigation plan for oak trees and oak tree natural communities. The Pure Water Project is expected to result in impacts to oak trees and oak tree natural communities, including potential tree removal, in several areas based on a tree survey conducted in 2022. In preparation for construction, a program will be developed that describes:

    - Appropriate avoidance and minimization measures

    - Identification of oak tree mitigation areas

    - Success criteria

    - Monitoring and reporting processes

  The program will be developed and implemented in coordination with CDFW and affected local agencies with responsibility for oak tree protection. Specifically, the program will include the following:

    - Additional surveys by a qualified arborist of all oak trees and oak tree communities to be affected by construction-related disturbance, including both tree removal and encroachment within 5 feet of the driplines of oak trees that will be preserved. In addition to the physical characteristics already recorded, the surveys will include a horticultural

evaluation, including physical evidence of disease, identification of pests, and an evaluation of the trees' vigor.

- Oak trees that can be avoided will include protection measures to minimize the potential for accidental disturbance. Temporary construction fencing will be installed around the protected zones of all oak trees to be preserved adjacent to the disturbance areas. Fencing will be maintained during construction, and construction crews informed about the need to avoid these areas.

- All trees identified for removal will be inspected for contagious tree diseases, such as thousand canker fungus (Geosmithia morbida), polyphagous shot-hole borer (Euwallacea spp.), and goldspotted oak borer (Agrilus auroguttatus). To avoid the spread of infectious tree diseases, diseased trees will not be transported from the site without first being treated using best available management practices relevant to each tree disease observed.

- The project will include an oak tree planting plan that includes information on the location of mitigation plantings. Preference is for onsite mitigation within or adjacent to the disturbed areas and areas subject to permanent fuel modification, including as part of site landscaping plans. In addition to oak tree planting, the planting plan will include provisions to maintain the restoration areas in a manner suitable as a natural community. The planting plan will include:

    - Restoration of functioning and self-sustaining woodlands of similar composition, structure, and function as the affected woodlands.

    - Restoration of structurally diverse understory vegetation species (grasses, forbs, shrub, subshrub, and vine) occurring in the affected woodlands; acorns and seedlings will originate from plants and trees of the same species as the affected species

    - Standards for new plantings, such as hole size and depth, soil amendments, irrigation, and protection (for example, tree fences or cages)

    - Planting schedule

    - Measures to control exotic vegetation and protection from herbivory

    - A requirement that four trees will be planted for every oak tree removed that is wider than 4 inches in diameter

    - Measurable goals and success criteria for establishment of self-sustaining populations based on site and habitat conditions prior to impact and using functional local native oak shrublands and woodlands as reference sites, adaptive management techniques, and contingency measures if success criteria are not met

    - Annual monitoring criteria and requirements for a minimum of 5 years

- If mitigation cannot be achieved through oak tree planting or if there is a lack of success during the monitoring period, then payment of in lieu fees to a local agency or conservation organization or purchase of suitable offsite properties (including conservation easements) may be used to fulfill these obligations.

2.2.3 Facts in Support of Findings

Facts in support of the findings are described in the Final Program EIR Chapter 5 (Biological Resources) and Appendix F (Response to Comments).

2.3 Cultural and Paleontological Resources

2.3.1 Impacts

- **Impact 6-1:** Implementation of the Pure Water Project could cause a substantial change in the significance of an archaeological resource pursuant to CEQA § 45064.5.
- **Impact 6-3:** Implementation of the Pure Water Project could cause a substantial adverse change in the significance of paleontological resources.

2.3.2 Findings

The JPA adopts Finding 1. The JPA adopts the following mitigation measures to reduce potentially significant impacts related to cultural resources to less-than-significant levels.

- **Mitigation Measure 6-1a:** Perform archaeological survey prior to construction in high and medium archaeological sensitivity zones.

  Prior to construction, the JPA will determine whether the project is located within a high or medium archaeological sensitivity zone. If the project site is determined to be in a high or medium archaeological sensitivity zone, a qualified archaeologist will perform an archaeological investigation at the site if it has not been surveyed. Subsurface testing, including hand-augured borings and excavated test pits, may be recommended by the archaeologist. The archaeologist will analyze gathered data in relation to the detailed project construction plans. The findings of the investigation will be submitted for JPA review and approval. This report will include an evaluation of the "uniqueness" of all finds, anticipated project-related impacts, and recommendations for mitigating impacts.

- **Mitigation Measure 6-1b:** Halt construction if archaeological resources are discovered.

  In the event archaeological resources are discovered, the construction contractor will be responsible for halting construction activities, notifying the JPA, and retaining a qualified archaeologist. The archaeologist will evaluate the uniqueness of the find, contact local Native American and historical organizations, and recommend a course of action. The construction contractor will receive training regarding the identification of cultural resources by a qualified archaeologist prior to the start of construction activities.

- **Mitigation Measure 6-3a:** Prepare a PRMMP.

  Prior to construction, a PRMMP will be developed to reduce potential impacts to paleontological resources. The PRMMP will be prepared by a professional paleontologist and will meet SVP criteria (2010). The PRMMP will:

  - Identify construction impact areas where significant paleontological resources may be encountered and the depths at which those resources are likely to be discovered
  - Stipulate the location and frequency of monitoring and other appropriate procedures
  - Describe the significance criteria to be used to determine which resources will be recovered for their data potential, as well as the coordination strategy to conduct adequate monitoring
  - Describe methods of recovery
  - Provide procedures for post-excavation preparation and analysis of specimens
  - Document the final curation of specimens at an accredited facility
  - Describe data analysis methods
  - Describe reporting requirements

The PRMMP will specify that all paleontological work will be conducted by qualified professionals meeting the SVP criteria (2010) so that encountered resources will be quickly and professionally recovered while not impeding project construction. At the end of the monitoring effort, a Paleontological Monitoring Report will be prepared by the professional paleontologist to document the results of monitoring.

- **Mitigation Measure 6-3b:** Halt construction if paleontological resources are discovered.

  Should any paleontological resources (for example, fossils) be encountered during construction activities when a paleontological monitor is not present, work will be halted immediately within 50 feet of the discovery. The project paleontologist will determine the significance of the discovery, evaluate the uniqueness of the find, and prepare a written report documenting the find and recommending further courses of action. Depending on the significance of the discovery, the actions may include avoidance, excavation, documentation, recovery, or other measures determined by the paleontologist. Because proper excavation and removal of paleontological resources do not lessen the scientific value of the resources, recovery is the recommended method of reducing impacts to scientifically important paleontological resources resulting from project-related excavations and would reduce impacts to less than significant.

- **Mitigation Measure 6-3c:** Prepare a Paleontological Resources WEAT Program.

  Because ground disturbance is associated with some risk of encountering previously undiscovered paleontological resources, prior to the initiation of construction or ground-disturbing activities, a WEAT module for paleontological resources will be prepared by a qualified professional paleontologist, as defined by the SVP (2010). Construction personnel will be trained via the WEAT module regarding the following activities:

  - Recognition of possible buried paleontological resources
  - Protection of paleontological resources during construction
  - Coordination between construction staff and paleontological staff
  - Construction and paleontological staff roles and responsibilities in implementing the PRMMP
  - Procedures to be followed if paleontological resources are encountered

  Personnel will be instructed that unauthorized collection or disturbance of fossils is unlawful. Training materials and formats may include in-person training, prerecorded videos, posters, and informational brochures. Upon completion of WEAT training, the contractor would require workers to sign a form stating that they attended the training and understand and will comply with the information presented.

2.3.3 Facts in Support of Findings

Facts in support of the findings are described in Final Program EIR Chapter 6 (Cultural Resources) and Appendix F (Response to Comments).

2.4 Geology and Soils

2.4.1 Impacts

- **Impact 8-1:** Implementation of the Pure Water Project could have a potentially significant impact related to seismic risks, as the project area is located within a seismically active area and is susceptible to strong ground shaking during major earthquakes because of the proximity to earthquake sources.

- **Impact 8-2:** Implementation of the Pure Water Project could result in substantial soil erosion or loss of topsoil.

- **Impact 8-3**: Projects construction under the Pure Water Project may be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, potentially resulting in onsite or offsite landslides, lateral spreading, subsidence, liquefaction, or collapse.
- **Impact 8-4:** Implementation of the Pure Water Project could have a potentially significant impact related to expansive soils, as project features may be underlain by soils that exhibit shrink-swell characteristics of expansive soils.

2.4.2 Findings

The JPA adopts Finding 1. The JPA adopts the following mitigation measures to reduce potentially significant impacts related to geology and soils to less-than-significant levels.

- **Mitigation Measure 8-1:** Review regulation requirements, perform site-specific geotechnical and engineering studies, and implement recommendations.

  The project and its design engineers will perform site-specific geotechnical and engineering studies as required by local policies to meet the goals and objectives listed in Tables 8-1 through 8-4. The review will verify compliance with federal, state, and local regulations related to reducing earthquake and soils hazards. Approval will be granted for projects in areas of potential geologic hazards only where it can be demonstrated that the project will not be endangered by, or contribute to, the hazardous condition on the site or on adjacent properties.

  The studies will include identification of site-specific geotechnical and engineering measures. Typical geotechnical or engineering report measures to reduce impacts related to liquefaction, settlement, or other ground failure could include earthwork and foundation remediation, which will comply with applicable provisions of the CBC.

- **Mitigation Measure 8-2:** Comply with regulations and policies for erosion control.

  Prior to start of construction, the project's technical engineering team will review local policies (Tables 8-1 through 8-4 in the Final Program EIR) and work with construction contractors to develop and implement a project-specific SWPPP for construction projects with a land disturbance area equal to or greater than 1 acre. For projects with disturbance area less than 1 acre, a site-specific Erosion and Sediment Control Plan will be prepared. For projects with any land disturbance, construction will comply with local site development codes and incorporate an effective combination of erosion and sediment control measures identified in the California Stormwater Quality Association (CASQA) Stormwater Best Management Practice Handbook (CASQA 2003).

  Construction erosion and sediment control BMPs typically include the following measures:

  - Scheduling site grading during the dry season (April 15 to October 15), when possible
  - Segregating topsoil during rough grading
  - Temporarily stabilizing soil during site grading and active construction
  - Permanently stabilizing site soil after construction
  - Implementing erosion and sediment controls during construction dewatering activities
  - Controlling site runon and runoff to isolate the work area and prevent onsite or offsite erosion and sediment transport during construction
  - Implementing dust suppression measures
  - Managing stockpiles; in accordance with local standard construction practices, materials will be stockpiled at central locations instead of within work areas, where feasible

2.4.3 Facts in Support of Findings

Facts in support of the findings are described in Final Program EIR Chapter 8 (Geology and Soils) and Appendix F (Response to Comments).

2.5 Hazards and Hazardous Materials

2.5.1 Impacts

- **Impact 10-2:** Construction and operation of the Pure Water Project could expose the public or the environment to hazardous materials through routine use, transport, or disposal of hazardous materials or reasonably foreseeable upset and accident conditions involving the release of hazardous materials.
- **Impact 10-4:** Implementation of the Pure Water Project could potentially result in exposure of contaminated soils or groundwater to workers, the environment, and the public.

2.5.2 Findings

The JPA adopts Finding 1. The JPA adopts the following mitigation measures to reduce potentially significant impacts related to hazards and hazardous materials to less-than-significant levels.

- **Mitigation Measure 10-1:** Perform a Phase I investigation as needed prior to construction; and remediate, control, or dispose of contaminated materials as appropriate.

  New facility locations will be reviewed for inclusion in the lists of hazardous materials compiled pursuant to Government Code Section 65962.5. Where contamination is suspected, a Phase I site assessment of the proposed work area will be performed prior to start of construction activities, including excavation and other soil-disturbing activities, such as tunneling. The Phase I site assessment will comply with the applicable ASTM International (ASTM) standard for site assessments (currently E-1527-21, Standard Practice For Environmental Site Assessments: Phase I Environmental Site Assessment Process) and will include recommendations for reducing or eliminating the source or mechanisms of contamination, if contamination is found. Recommendations may include removing the contaminated soil and disposing of it at a licensed facility in accordance with regulations.

- **Mitigation Measure 10-2:** Los Robles Well Monitoring Program.

  Monitoring will specifically look at groundwater level changes and migration of the groundwater plume. The monitoring system will assess changes in hydraulic control of the TFX Aviation groundwater plume. The monitoring will be performed quarterly after resuming pumping from the Los Robles well as part of the Pure Water Project. The JPA will submit a sampling plan to DTSC that includes this quarterly sampling from the existing TFX Aviation monitoring well sites (or replacement monitoring wells) prior to operating the well for the Pure Water Project. The quarterly sampling will start after the well starts operating and may be reduced to semiannually or annually if there is no destabilization of the groundwater plume (with time frame provided in the sampling plan). Should monitoring indicate that hydraulic control of the groundwater plume is being affected, the JPA will reassess the project impact on plume migration in the next quarter subject to review and approval by DTSC.

2.5.3 Facts in Support of Findings

Facts in support of the findings are described in Final Program EIR Chapter 10 (Hazards and Hazardous Materials) and Appendix F (Response to Comments).

2.6 Noise

2.6.1 Impacts

- **Impact 13-1:** Construction of the Pure Water Project could result in generation of noise and vibration levels in excess of standards.

2.6.2 Findings

The JPA adopts Finding 1. The JPA adopts the following mitigation measures to reduce potentially significant impacts related to noise to less-than-significant levels.

- **Mitigation Measure 13-1:** Noise Control Plan.

  The contractor will be required to develop a Noise Control Plan identifying how noise would be minimized during construction, and as required, apply for a temporary construction noise variance. Noise-reducing methods that may be implemented include the following:

  - Follow local noise control requirements as much as possible, with exceptions only as needed (e.g., nighttime construction to minimize traffic disruptions) in collaboration with local jurisdictions.
  - Minimize the use of impact devices, such as jackhammers, pavement breakers, and hoe rams. Where possible, use concrete crushers or pavement saws rather than hoe rams for tasks such as concrete or asphalt demolition and removal.
  - Verify that pneumatic impact tools and equipment used at the construction site have intake and exhaust mufflers recommended by the manufacturers to meet relevant noise limitations.
  - Provide impact noise-producing equipment, such as jackhammers and pavement breakers, with noise-attenuating shields, shrouds, or portable barriers or enclosures to reduce operating noise.
  - Line or cover hoppers, conveyor transfer points, storage bins, and chutes with sound-deadening material (for example, apply wood or rubber liners to metal bin impact surfaces).
  - Avoid blasting and impact-type pile driving to the extent reasonable and feasible. Coordinate these highly intrusive construction activities with the local jurisdictions and provide advance notice to nearby residents and other sensitive receptors.
  - Use alternative procedures of construction, and select a combination of techniques that generate the least overall noise and vibration. Such alternative procedures could use electric welders powered by remote generators and mix concrete at nonsensitive offsite locations, instead of onsite.
  - Turn off idling equipment when not in use of periods longer than 30 minutes.
  - Where building foundation systems are needed, use drilling or alternate foundations systems instead of driven piles where reasonable and feasible.
  - Operate equipment so as to minimize banging, clattering, buzzing, and other annoying types of noises, especially near residential and other noise-sensitive areas during the evening and nighttime hours.
  - To the extent feasible, configure the construction site in a manner that keeps noisier equipment and activities as far as possible from noise-sensitive locations and nearby buildings.

- Consider the use of broadband or white noise backup alarms as allowed by Cal/OSHA during evening and nighttime hours.
- Maximize physical separation, as far as practicable, between noise generators and noise receptors. Separation includes providing enclosures for stationary items of equipment and noise barriers around particularly noisy areas at the project site, and locating stationary equipment to minimize noise and vibration impacts on the community.
- Minimize noise-intrusive impacts during most noise-sensitive hours. Plan noisier operations during times of highest ambient noise levels.

2.6.3 Facts in Support of Findings

Facts in support of the findings are described in Final Program EIR Chapter 13 (Noise) and Appendix F (Response to Comments).

2.7 Transportation and Traffic

2.7.1 Impacts

- **Impact 15-1:** Project construction activities and operations effects on transportation would not have substantive conflicts with programs, plans, ordinances, and policies of the affected jurisdictions; however, implementation of Mitigation Measure 15-1, Transportation Management Plan, would mean impacts would be less than significant.
- **Impact 15-4:** Construction of all project features has the potential to result in inadequate emergency access due to road and lane closures.

2.7.2 Findings

The JPA adopts Finding 1. The JPA adopts the following mitigation measures to reduce potentially significant impacts related to transportation and traffic to less-than-significant levels.

- **Mitigation Measure 15-1:** Transportation Management Plan: A TMP will be prepared to address construction impacts on transportation facilities. Pipeline construction will be planned and scheduled to minimize traffic impacts to the extent feasible, and the TMP will further reduce impacts by addressing the following:
  - Potential impacts from construction activities on vehicular, transit, pedestrian, and bicycle access
  - Potential impacts from construction activities on mobility, including:
    - Temporary lane and roadway, sidewalk, bicycle facility, and freeway ramp closures
    - Detours
    - Increases in traffic volumes, including:
      - Regular traffic and construction traffic
      - Construction equipment
      - Materials delivery vehicles
      - Waste and haul vehicles
      - Employee commutes
    - Construction parking
    - Emergency services (such as fire, police, ambulances)

Development of the TMP will be coordinated with the affected local jurisdictions and other potentially affected parties (such as school bus and transit operators and police, fire, and emergency services providers). The TMP will identify:

- Specific TMP strategies
- The parties responsible for implementing those strategies
- The agencies and parties the TMP strategies will be coordinated with
- Implementation timing

Specific activities in the TMP may include:

- Install traffic control devices, as specified in Caltrans' California Manual on Uniform Traffic Control Devices (Caltrans 2021), where needed to maintain safe driving conditions, including:
  - Use of signage to alert motorists and bicyclists of construction activities, potential hazards, and travel detours
  - Flaggers when appropriate
- Coordinate with the applicable jurisdictions, including local agencies and transit providers.
- Provide construction notification procedures for:
  - Police, public works, fire departments, and other public service providers
  - Cycling organizations, bike shops, schools, and homeowner associations
- Inform contractors and subcontractors of work hours, modes and locations of transportation, and parking for construction workers.
- Describe the procedures for construction area evacuation in case of an emergency declared by the city, county, or other local authorities.
- Identify emergency routes available and open for public emergency personnel.
- Designate areas where nighttime construction will occur, if needed.
- Provide information to the public for contact in case of emergency or complaint. Publicize and display contact information on signs in proximity to construction areas..

2.7.3 Facts in Support of Findings

Facts in support of the findings are described in Final Program EIR Chapter 15 (Transportation and Traffic) and Appendix F (Response to Comments).

2.8 Tribal Cultural Resources

2.8.1 Impacts

- **Impact 16-1:** Implementation of the Pure Water Project could cause a significant change to a tribal cultural resource.

2.8.2 Findings

The JPA adopts Finding 1. The JPA adopts the following mitigation measures to reduce potentially significant impacts related to tribal cultural resources to less-than-significant levels.

- **Mitigation Measure 6-1b:** Halt construction if archaeological resources are discovered.

  In the event archaeological resources are discovered, the construction contractor will be responsible for halting construction activities, notifying the JPA, and retaining a qualified archaeologist. The archaeologist will evaluate the uniqueness of the find, contact local Native American and historical organizations, and recommend a course of action. The construction contractor will receive training regarding the identification of cultural resources by a qualified archaeologist prior to the start of construction activities.

2.8.3 Facts in Support of Findings

Facts in support of the findings are described in Final Program EIR Chapter 16 (Tribal Cultural Resources) and Appendix F (Response to Comments).

3. Significant and Unavoidable Environmental Effects

The Final Program EIR identifies the following significant or potentially significant impacts as remaining significant and unavoidable because the impacts cannot be mitigated to a less-than-significant level. As stated in CEQA Guidelines Section 15091, the JPA finds that "specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives" identified in the Final Program EIR. The JPA further finds that the Pure Water Project has been designed in a manner that reduces impacts to the extent feasible, while achieving the specific economic, legal, social and technological benefits of the project. With regard to each significant effect that is not avoided or that is not substantially lessened, the JPA is adopting a Statement of Overriding Considerations in accordance with CEQA Guidelines Section 15093.

3.1 Biological Resources

3.1.1 Impacts

- **Impact 5-1 (Plants):** Implementation of the Pure Water Project would have a potentially significant impact, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species.

  Under Alternative 1, project grading and development would result in the loss of 11 subpopulations, containing approximately 500 individual *Ojai navarretia* plants that may serve as a seed bank for this species. In addition, the site contains 0.11 acre of sensitive natural communities (excluding oak trees, which are discussed under Impact 5-5). The Pure Water Project will implement Mitigation Measure 5-1, Prepare and Implement a Mitigation Plan for Special-status Plants and Plant Communities, but project impacts would remain significant and unavoidable.

  Under Alternative 2, an undetermined number of special-status plant subpopulations and native plant communities along the access road that would be removed during grading and road construction. The Pure Water Project will implement Mitigation Measure 5-1, Prepare and Implement a Mitigation Plan for Special-status Plants and Plant Communities. However, until the number and species of the special-status plants to be removed are determined, project impacts to these special-status plants and plant communities are potentially significant and unavoidable.

  Pipeline installation may result in the loss of special-status species plant species and natural communities and would remove an unknown number of individuals. The Pure Water Project will implement Mitigation Measure 5-1, Prepare and Implement a Mitigation Plan for Special-status Plants and Plant Communities. However, until the number and species of the special-status plants and plant communities to be removed are determined, project impacts would be potentially significant and unavoidable.

3.1.2 Findings

The JPA adopts Findings 1 and 3. The JPA adopts the following mitigation measures to reduce potentially significant impacts related to biological resources.

- **Mitigation Measure 5-1:** Prepare and implement a mitigation plan for special-status plants and plant communities.

  Special-status plants are likely to be encountered during construction in most natural areas, based on surveys conducted in 2022. Given the Pure Water Project construction timeline and potential for changed conditions, disturbance areas (depending on the selected alternative) should continue to be monitored for special-status plant subpopulations and sensitive natural communities. Prior to initiation of any construction activities that would affect special-status plants, a program will be developed that describes:

  - Appropriate avoidance and minimization measures
  - Plant salvage and seed collection procedures
  - Offsite propagation
  - Identification of mitigation areas
  - Site preparation and planting of mitigation areas
  - Success criteria
  - Monitoring and reporting processes

  The program will be developed and implemented in coordination with relevant state and federal agencies with responsibilities for special-status plant species protection. Specifically, the program will include the following:

  - Preconstruction surveys of the disturbance areas will be performed by a qualified botanist during the appropriate season for detection. Surveys will follow standard survey protocols for rare plants, primarily the Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants (USFWS 2000) and Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2018).
    - If suitable relocation areas occur on or near the affected sites, surveys will also include these potential relocation areas to provide background data for determining transplant success.
  - The project will avoid impacts on rare, endangered, and threatened plants to the maximum extent possible. For impacts on CESA-listed or ESA-listed species, the JPA will consult with CDFW or the USFWS to obtain appropriate take authorization prior to any ground-disturbing activities and vegetation removal.
  - Special-status plants and plant communities that can be avoided will include protection measures to minimize the potential for accidental disturbance. Temporary construction fencing will be installed around protected zones adjacent to the disturbance areas. Fencing will be maintained during construction, and construction crews will be informed about the need to avoid these areas.
  - An avoidance and relocation plan will be developed and implemented to address special-status plants that cannot be avoided. The plan will be submitted to CDFW for review, and the JPA will resolve CDFW concerns and comments. No ground-disturbing activities or vegetation removal will occur until the plan is implemented. The plan will address and describe methods for:

        - Topsoil salvage to preserve the seed bank
        - Seed collection, storage, nursery propagation, and planting
        - Salvage and planting of other plant propagules
        - Location of relocation areas on- and offsite
        - A land protection plan for relocation areas
        - Methods for monitoring and reporting, including success criteria and adaptive management measures and contingency plans for achieving success; monitoring will occur for a minimum of 5 years
    - For impacts on special-status species, the JPA will provide compensatory mitigation at an appropriate ratio to be determined based on site conditions and in consultation with CDFW and, if necessary, USFWS. Compensatory mitigation will be provided for the total number of plants and total acreage of habitat supporting those plants impacted.
    - For impacts on natural community alliances or associations, the JPA will provide compensatory mitigation at an appropriate ratio to be determined based on site conditions and in consultation with CDFW. Mitigation will replace the natural community alliance or association that was affected. Areas that may be affected by permanent fuel modification will be included as part of the total acreage requiring compensation.
    - If relocation is not possible or if there is a lack of success during the monitoring period, then purchase of mitigation credits or suitable offsite properties (including conservation easements) may be used to fulfill these obligations. The JPA will purchase credits prior to any ground-disturbing activities or vegetation removal.

3.1.3 Facts in Support of Findings

Facts in support of the findings are described in the Final Program EIR Chapter 5 (Biological Resources), Appendix F (Response to Comments), and these Findings, which includes the Statement of Overriding Considerations.

3.2 Recreation

3.2.1 Impacts

- **Impact 14-1:** Implementation of the Pure Water Project would have a potentially significant impact on recreation access and opportunities.

  Conveyance pipeline construction would follow the Westlake Vista Trail within Triunfo Creek Park, resulting in a substantial change to existing recreation use of the trail and its shared trailhead with the Pentachaeta Trail along Triunfo Canyon Road. Under Alternative 2, the impact would be larger because of the access road, additional pipelines, and electrical supply. During construction, disruption of the trailhead and closure of Westlake Vista Trail may occur over 4 to 6 months, assuming pipeline construction progress of 50 feet per day. Following the completion of construction activities, the trailhead would be repaired, and recreation access to the Pentachaeta Trail and Westlake Vista Trail would be restored. The disruption of recreation access for 4 to 6 months at the Triunfo Creek Park trailhead and the temporary closure of Westlake Vista Trail is a potentially significant impact. Even with Mitigation Measure 14-1 that would reduce the impact, there would be significant and unavoidable impacts.

  Pipeline construction would result in the loss of recreation access for 4 to 6 months in both the Triunfo Creek Park and Conejo Canyons areas is a potentially significant impact. Mitigation Measure 14-1 would reduce the impact, but not to a less than significant level.

3.2.2 Findings

The JPA adopts Findings 1 and 3. The JPA adopts the following mitigation measures to reduce potentially significant impacts related to recreation.

- **Mitigation Measure 14-1:** Prepare Trail Closure and Restoration Plan.

  The JPA will prepare trail closure and restoration plans for the Westlake Vista Trail and Conejo Canyon Open Space Trail in collaboration with MRCA, the City of Westlake Village, COSCA, and the City of Thousand Oaks. The plans will contain the following information:

  - Notification procedures so that trail users are aware of the closures. Notification will consist of posting information at trailheads, newspaper notices, website updates, and other similar measures. The notifications will describe the closure start dates and expected closure durations, and will redirect trail users to other trails in the area.
  - Provisions to maintain access to the Pentachaeta Trail as much as possible during construction, including the ability to park at the trailhead and safely access the trail while construction is occurring along the Westlake Vista Trail.
  - Restoration of the trailhead area, including replacing demolished or damaged fencing, trailhead signage, and wayfinding features.
  - Trench backfill and surface restoration plans appropriate for restoration use. Grades along the restored pipeline corridor will match the existing grades to the extent possible. The top layer of backfill material will consist of decomposed granite or similar material using best practices for trail construction.
  - If Alternative 2 Reservoir AWPF is selected as the preferred alternative, additional collaboration with MRCA will be required to determine whether use of the access road for recreation is feasible.

  Because of the duration of the closure and the changed character of the trail surface following restoration, and because of the permanent changes under Alternative 2 Reservoir AWPF, the impact cannot be reduced to a less than significant level. The impact would remain significant and unavoidable.

3.2.3 Facts in Support of Findings

Facts in support of the findings are described in the Final Program EIR Chapter 14 (Recreation), Appendix F (Response to Comments), and these Findings, which includes the Statement of Overriding Considerations.

4. Findings Regarding Project Alternatives

4.1 Introduction

The Final Program EIR analyzed the following alternatives that meet the project objectives, in addition to a No Project: two AWPF alternatives (Agoura Road and Las Virgenes Reservoir), Tapia WRF Upgrade Project, and the Encino Reservoir Project. In addition, the Final Program EIR analyzed alternative conveyance routes in addition to the options considered in the evaluation. Descriptions of the alternatives are included in final Program EIR Chapter 19 (Alternatives). These alternatives were determined to be an adequate range of reasonable alternatives as required under CEQA Guidelines Section 15126.6. The environmental impacts of each of these alternatives are identified and compared on Table 19-2 of the Final Program EIR and the environmentally superior alternative is identified in Section 19.6 of the Final Program EIR.

4.2 Alternatives Analysis

The JPA finds that the range of alternatives studied in the final Program EIR along with recognition of the project objectives reflects a reasonable attempt to identify and evaluate various alternatives that would

potentially be capable of reducing the project's environmental impacts, while accomplishing most of the project objectives. The JPA is required to determine whether any alternative identified in the Final EIR is environmentally superior. The following summarizes the project alternatives analyzed in the Final EIR.

4.2.1 No Project Alternative

Under the No Project alternative, no new facilities would be constructed; therefore, the adverse effects of the Pure Water Project facilities, including construction impacts, would be avoided. However, none of the project objectives would be met. The No Project alternative does not include any features needed to comply with the Malibu Creek water quality requirements for nitrogen and phosphorus removal and may still require some discharges into the creek when otherwise prohibited by the discharge permit. For this reason, the No Project alternative is not feasible.

4.2.2 Project Alternatives

Both the Tapia WRF Upgrade Project and the Encino Reservoir Project would avoid some of the environmental impacts of the Pure Water Project, including impacts to sensitive plants and some recreation uses. The Tapia WRF Upgrade Project would have new impacts to sensitive plants and recreation uses from new site development outside of the current WRF boundary, thereby transferring the impacts to a new site rather than avoiding them altogether. In addition, the Tapia WRF Upgrade Project would not meet the objective of increasing water supply reliability and would only partially meet the objective of balancing recycled water system demands.

Similarly, the Encino Reservoir Project would avoid some of the environmental impacts of the Pure Water Project but would result in new impacts elsewhere. This is primarily from new pipeline construction but may also include substantial construction activities (including access through residential areas) for seismic upgrades and other improvements to the reservoir. In addition, the Encino Reservoir Project would not meet the objective of increasing water supply reliability.

4.2.3 Environmentally Superior Alternative

CEQA requires that an environmentally superior alternative to the proposed project be specified, if one is identified. In general, the environmentally superior alternative is supposed to minimize adverse impacts to the environment while achieving most of the basic objectives of the project.

Only Alternative 1 Agoura Road AWPF and Alternative 2 Reservoir AWPF would meet all Pure Water Project objectives. In addition, other alternatives could result in the same or greater impacts. As described in the final Program EIR, the two AWPF alternatives would have similar impacts in type, scale, and location; but the overall scale of the anticipated environmental impacts under Alternative 2 Reservoir AWPF would be greater. Therefore, Alternative 1 Agoura Road AWPF is the environmentally superior alternative.

5. Statement of Overriding Considerations

CEQA requires the JPA Board of Directors as the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits of the project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits of the project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered acceptable. (CEQA Guidelines, § 15093(a).) CEQA requires the JPA to support, in writing, the specific reasons for considering the project acceptable when significant effects are not avoided or substantially lessened, based on substantial evidence in the Final Program EIR or administrative record. (CEQA Guidelines, § 15093(b).)

The JPA finds that the mitigation measures identified in the Final Program EIR and the Mitigation Monitoring and Reporting Program, when implemented, avoid or substantially lessen virtually all of the significant effects identified in the Final Program EIR. However, certain significant impacts remain unavoidable. Despite the ultimate occurrence of these expected effects, the JPA, in accordance with Public Resources Code Section 21081(b) and CEQA Guidelines Section 15093, has balanced the benefits of the project against the following unavoidable adverse impacts associated with the project and has adopted all feasible mitigation measures. The JPA has also (i) independently reviewed the information in the Final

Program EIR and the record of proceedings; (ii) made a good faith effort to eliminate or substantially lessen the impacts resulting from the project to the extent feasible by adopting the mitigation measures as identified in the Final Program EIR; and (iii) balanced the project's benefits against its significant unavoidable impacts. The JPA has also examined alternatives to the project and has determined that adoption and implementation of the project is the most desirable, feasible, and appropriate action. The JPA has chosen to approve the Final Program EIR because in its judgment, it finds that specific overriding economic, legal, social, technological, or other benefits of the project outweigh its significant effects on the environment. Substantial evidence supports the various benefits and can be found at a minimum in the preceding CEQA findings, which are incorporated by reference into this Statement, the Final Program EIR, and the documents which make up the record of proceedings.

5.1 Significant and Unavoidable Impacts

Based on the information and analysis set forth in the Final Program EIR and the record of proceedings, construction of the project would result in the following significant unavoidable impacts even with the implementation of all feasible mitigation measures:

- Impact 5-1. Special-Status Species (Plants)
- Impact 14-1. Recreation Access and Opportunities

5.2 Overriding Considerations

The following benefits and considerations, taken together or individually, outweigh such significant and unavoidable adverse environmental impacts, and the JPA determines that the evidence in the record constitutes substantial evidence to support this determination, that the facts stated in this document and in the CEQA Findings are supported by substantial evidence in the record, including testimony received at the public hearings, in staff presentations, staff reports, and all materials in the project files. Each of these benefits and considerations is a separate and independent basis that justifies approval of the project, so that if a court were to set aside the determination that any particular benefit or consideration will occur and justifies project approval, the JPA determines that it would stand by its determination that the remaining benefits or considerations are sufficient to warrant project approval.

- The project will provide a new use for treated effluent that is currently discharged to Malibu Creek, which is necessary for the JPA to meet the more stringent regulatory requirements of NPDES Permit No. CA0056014 and Order R4-2017-0124.
- The project will help the JPA balance the seasonal variation of recycled water demand by increasing annual reuse.
- The project will provide a valuable, drought-resistant resource to supplement the region's water supplies, therefore reducing dependence on State Water Project supplies delivered by the Metropolitan Water District of Southern California.
- The project helps achieve regional objectives for local water supply reliability, including the objectives identified by the Metropolitan Water District of Southern California.
- The project helps achieve State of California objectives for recycled water as a critical water supply for California and an important resource for diversifying local supplies and improving the State's long-term water resilience.

These considerations identify why, in the JPA's judgement, the Pure Water Project and its benefits to the community outweigh its unavoidable significant environmental impacts. The substantial evidence supporting these various considerations is found in the Final Program EIR and the contents of the records of proceedings for the project.

Mitigation Monitoring and Reporting Program

Pure Water Project - Las Virgenes-Triunfo

Exhibit B

Prepared for
Las Virgenes-Triunfo Joint Powers Authority

November 2022

Contents

Tables

Acronyms and Abbreviations

CEQA	California Environmental Quality Act
Project	Pure Water Project – Las Virgenes-Triunfo
JPA	Las Virgenes-Triunfo Joint Powers Authority
MMRP	Mitigation Monitoring and Reporting Program
PEIR	Programmatic Environmental Impact Report

1. Introduction

The Las Virgenes-Triunfo Joint Powers Authority (JPA) published a Programmatic Environmental Impact Report (PEIR) (JPA 2022) for the Pure Water Project – Las Virgenes-Triunfo (project) in accordance with the requirements of the California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq. The PEIR evaluates the potentially significant environmental impacts that may result from implementing the project and concludes that implementation of the project could result in significant environmental impacts. Impacts related to loss of special-status plants and native plant habitat and recreation access and opportunities would be significant and unavoidable. All other impacts potentially resulting from construction and operation of the project would be mitigated to a less than significant level through feasible mitigation measures identified in the PEIR.

Public Resources Code Section 21081.1 requires a lead agency to adopt a mitigation monitoring and reporting program (MMRP) when it approves a project for which measures to mitigate or avoid significant effects on the environment are required. The purpose of the MMRP is to ensure compliance with the mitigation measures during project implementation. JPA has developed a series of mitigation measures to minimize potential environmental impacts during project construction, which are incorporated into this MMRP and are summarized in Table 1.

This MMRP will be used by JPA to ensure that all mitigation measures adopted as a condition for project approval are implemented. This MMRP meets the requirements of Section 15074(d) of the CEQA Guidelines, which mandates the preparation of monitoring provisions for the implementation of mitigation assigned as part of project approval or adoption.

2. Mitigation Implementation and Monitoring

JPA is responsible for implementing and monitoring mitigation measures to mitigate impacts associated with the project. However, others have been assigned the responsibility of actually implementing certain measures. JPA will designate certain personnel who will be responsible for monitoring the implementation of the mitigation measures. The designated personnel will submit required documentation and reports to JPA in a timely manner to demonstrate compliance with mitigation requirements. JPA will ensure that the designated personnel have authority to require implementation of mitigation measures and to terminate activities, such as project construction, that are inconsistent with mitigation objectives or project approval conditions.

JPA will be responsible for ensuring that construction personnel understand their responsibilities regarding the performance requirements of the mitigation plan, as well as other contractual requirements related to implementation of the mitigation measures during project construction. JPA will also be responsible for demonstrating compliance with other agency permit conditions to the appropriate regulatory agency.

In the following pages, Table 1 provides this information:

- **Mitigation Measure Number:** Mitigation measures are listed by number as designated in the PEIR, by resource category.
- **Mitigation Measure:** The text of each mitigation measure is provided as adopted by JPA and incorporated into the project.
- **Implemented By:** JPA is responsible for making sure that all mitigation measures identified in the PEIR are fully enforceable by adopting and incorporating them into the project. During project implementation, JPA may assign others the responsibility of actually implementing the measure.
- **When Implemented:** All mitigation measures identified in the PEIR have been adopted and incorporated into the project. JPA will ensure that the timing and duration of implementation of

the mitigation measures occur in accordance with the appropriate activity or permit requirement, as necessary.

- **Monitoring or Reporting Action:** If a mitigation measure requires monitoring or reporting actions, often as the result of a permit condition, JPA will ensure those actions are performed in accordance with the mitigation or permit.

3. References

Las Virgenes-Triunfo Joint Powers Authority. 2023. *Final Programmatic Environmental Impact Report, Pure Water Project – Las Virgenes-Triunfo*. Prepared by Jacobs Engineering Group Inc..

Table 1. Mitigation Monitoring and Reporting Plan

Pure Water Project – Las Virgenes-Triunfo

Mitigation Measure Number	Mitigation Measure	Implemented By	When Implemented	Monitoring or Reporting Action (if applicable)
Chapter 3. Aesthetics				
3-1	**Design lighting to minimize impacts on adjacent areas.** **Construction Lighting.** Prior to site mobilization, the construction manager will confirm that construction lighting is used in a manner that minimizes potential night lighting impacts, as follows: • All lighting will be of minimum necessary brightness consistent with worker safety. • All fixed-position lighting will be shielded, hooded, and directed downward to minimize backscatter to the night sky and prevent light trespass (direct lighting extending outside the boundaries of the construction area). • Where feasible and safe, lighting will be turned off when not in use, and motion detectors will be used. • A lighting complaint resolution form will be maintained by construction management to record all lighting complaints received and to document resolutions. • All construction-related lighting will be completely shielded or screened so it is not visible to adjacent residents with direct views of the construction site. • Maintain all construction-related lighting to be shielded or screened to minimize any inadvertent lighting spillover onto the open-space area south of the construction site. **Project Operation Lighting.** New permanent lighting will be designed and installed such that light bulbs are not visible from public viewing areas and illumination of the night sky is minimized. To meet these requirements, the JPA will: • Design lighting so exterior light fixtures are hooded, with lights directed downward or toward the area to be illuminated and so that backscatter to the nighttime sky is minimized. Lighting will be designed such that the luminescence or light source is shielded to prevent light trespass outside the facility boundary. • All lighting will be of minimum necessary brightness consistent with worker safety. • Where feasible and safe, lighting will be turned off when not in use. • A lighting complaint resolution form will be used by AWPF staff to record all lighting complaints received and document resolutions.	Construction Manager and JPA.	During design During construction.	None

Mitigation Measure Number	Mitigation Measure	Implemented By	When Implemented	Monitoring or Reporting Action (if applicable)
	• Maintain all lighting to be shielded or screened to minimize any inadvertent lighting spillover onto the open-space area south of the AWPF site.			
Chapter 5. Biological Resources				
5-1	**Prepare and implement a mitigation plan for special-status plants and plant communities.** Special-status plants are likely to be encountered during construction in most natural areas, based on surveys conducted in 2022. Given the Pure Water Project construction timeline and potential for changed conditions, disturbance areas (depending on the selected alternative) should continue to be monitored for special-status plant subpopulations and sensitive natural communities. Prior to initiation of any construction activities that would affect special-status plants, a program will be developed that describes: • Appropriate avoidance and minimization measures • Plant salvage and seed collection procedures • Offsite propagation • Identification of mitigation areas • Site preparation and planting of mitigation areas • Success criteria • Monitoring and reporting processes The program will be developed and implemented in coordination with relevant state and federal agencies with responsibilities for special-status plant species protection. Specifically, the program will include the following: • Preconstruction surveys of the disturbance areas will be performed by a qualified botanist during the appropriate season for detection. Surveys will follow standard survey protocols for rare plants, primarily the Guidelines for Conducting and Reporting Botanical Inventories for Federally Listed, Proposed and Candidate Plants (USFWS 2000) and Protocols for Surveying and Evaluating Impacts to Special Status Native Plant Populations and Natural Communities (CDFW 2018). o If suitable relocation areas occur on or near the affected sites, surveys will also include these potential relocation areas to provide background data for determining transplant success. • The project will avoid impacts on rare, endangered, and threatened plants to the maximum extent possible. For impacts on CESA-listed or ESA-listed species, the JPA will consult with CDFW or the USFWS to obtain appropriate take authorization prior to any ground-disturbing activities and vegetation removal.	JPA.	Pre-construction phase, ideally Design/Permitting Phase.	Availability of mitigation plan prior to construction and on construction site

Mitigation Measure Number	Mitigation Measure	Implemented By	When Implemented	Monitoring or Reporting Action (if applicable)
	• Special-status plants and plant communities that can be avoided will include protection measures to minimize the potential for accidental disturbance. Temporary construction fencing will be installed around protected zones adjacent to the disturbance areas. Fencing will be maintained during construction, and construction crews will be informed about the need to avoid these areas. • An avoidance and relocation plan will be developed and implemented to address special-status plants that cannot be avoided. The plan will be submitted to CDFW for review, and the JPA will resolve CDFW concerns and comments. No ground-disturbing activities or vegetation removal will occur until the plan is implemented. The plan will address and describe methods for: o Topsoil salvage to preserve the seed bank o Seed collection, storage, nursery propagation, and planting o Salvage and planting of other plant propagules o Location of relocation areas on- and offsite o A land protection plan for relocation areas o Methods for monitoring and reporting, including success criteria and adaptive management measures and contingency plans for achieving success; monitoring will occur for a minimum of 5 years • For impacts on special-status species, the JPA will provide compensatory mitigation at an appropriate ratio to be determined based on site conditions and in consultation with CDFW and, if necessary, USFWS. Compensatory mitigation will be provided for the total number of plants and total acreage of habitat supporting those plants impacted. • For impacts on natural community alliances or associations, the JPA will provide compensatory mitigation at an appropriate ratio to be determined based on site conditions and in consultation with CDFW. Mitigation will replace the natural community alliance or association that was affected. Areas that may be affected by permanent fuel modification will be included as part of the total acreage requiring compensation. • If relocation is not possible or if there is a lack of success during the monitoring period, then purchase of mitigation credits or suitable offsite properties (including conservation easements) may be used to fulfill these obligations. The JPA will purchase credits prior to any ground-disturbing activities or vegetation removal.			

Mitigation Measure Number	Mitigation Measure	Implemented By	When Implemented	Monitoring or Reporting Action (if applicable)
5-2	**Perform preconstruction surveys and construction monitoring for special-status wildlife species.** The JPA will retain qualified biologists with appropriate handling permits or will obtain appropriate handling permits to capture, temporarily possess, and relocate wildlife to avoid harm or mortality in connection with project construction and activities. A qualified biologist will prepare a Worker Environmental Awareness Training. The biologist will communicate to workers that, upon encounter with a special-status species, work must stop, the biologist must be notified, and work may only resume once a qualified biologist has determined it is safe to do so. A qualified biologist will prepare a Wildlife Relocation and Avoidance Plan. The plan will describe the special-status species that could occur within the project site and proper avoidance, handling, and relocation protocols. The plan will include species-specific avoidance buffers and suitable relocation areas at least 200 feet outside of the project site. The biologist will submit a copy of the Wildlife Relocation and Avoidance Plan to CDFW for approval prior to any clearing, grading, or excavation work on the project site. To avoid direct injury and mortality of special-status wildlife, a qualified biologist will be onsite to move out of harm's way wildlife of low mobility that would be injured or killed. Wildlife will be protected, allowed to move away on its own (non-invasive, passive relocation), or relocated to suitable habitat adjacent to the project site. In areas where a special-status species is found, work may only occur in these areas after a qualified biologist has determined it is safe to do so. Even so, a qualified biologist will advise workers to proceed with caution. A qualified biologist will be onsite daily during initial ground and habitat-disturbing activities as well as vegetation removal. Then, the biologist will be onsite weekly or every other week for the remainder of the activity until the cessation of all ground- and habitat-disturbing activities, as well as vegetation removal, so that no wildlife is harmed. If any special-status wildlife is harmed during relocation or a dead or injured animal is found, work in the immediate vicinity will stop immediately, the qualified biologist notified, and the dead or injured animal documented immediately. A formal report will be sent to the appropriate agency within 3 days of the incident or finding. The report will include the date, time of the finding or incident (if known), location of the carcass or injured animal, and circumstances of its death or injury (if known). Work in the immediate vicinity may only resume once the proper notifications have been made and additional mitigation measures have been identified to prevent additional injury or death. A qualified biologist will conduct species-specific and season-appropriate surveys for the following species where suitable habitat occurs in the project site. Positive detections of	Program Biologist	Pre-construction During construction	Report to regulatory agencies, as needed

Mitigation Measure Number	Mitigation Measure	Implemented By	When Implemented	Monitoring or Reporting Action (if applicable)
	special-status species and suitable habitat at the detection location will be mapped. If species are detected, the biologist will use visible flagging to mark the detection location. • Least Bell's Vireo: Perform protocol surveys within the Conejo Canyons Open Space and where there is habitat for least Bell's vireo in the project area. Surveys will adhere to the USFWS Least Bell's Vireo Survey Guidelines (USFWS 2001). A final survey report (including negative findings) will be provided to USFWS and CDFW within 45 days following completion of the survey effort. A final survey report will be submitted to USFWS and CDFW prior to any project-related ground-disturbing activities and vegetation removal. If least Bell's vireo is present in the project area, the JPA will fully avoid impacts. A final Least Bell's Vireo Avoidance Plan will be developed prior to implementing project-related ground-disturbing activities and vegetation removal. To fully avoid impacts to least Bell's vireo, no ground-disturbing activities, including staging, or disturbances to native and non-native vegetation, will occur during the least Bell's vireo breeding season from March 15 through September 15 to avoid take of least Bell's vireo birds, nestlings, or eggs. If construction activities occur within this time, nesting bird surveys will be conducted. Active least Bell's vireo nests will be avoided with a 500-foot buffer delineated by high-visibility flagging. Construction activities will not continue within the buffer until the young have fledged or the nest is no longer active. If impacts to least Bell's vireo cannot be avoided, the JPA will consult with the USFWS and CDFW to obtain take authorization. Appropriate take authorization will be obtained prior to any ground-disturbing activities and vegetation removal. • Coastal California Gnatcatcher: Protocol presence or absence surveys for coastal California gnatcatcher will be performed by a qualified biologist with a USFWS Section 10(a)(1)(A) permit. If coastal California gnatcatcher are present, the Pure Water Project and its contractors will avoid impacting occupied habitat by maintaining a 500-foot buffer. In addition, no construction activities will occur within 500 feet of an active nest. Buffers will be maintained until young have fledged (left the nest on their own), as determined by the biologist, or the nest is no longer active. Buffers will be delineated by high-visibility fencing. If these avoidance techniques are not feasible, USFWS and CDFW will be contacted regarding alternative avoidance measures for the species. If coastal California gnatcatcher is present, the JPA will consult with the USFWS to determine whether the project would result in take. Consultation with the USFWS to			

Mitigation Measure Number	Mitigation Measure	Implemented By	When Implemented	Monitoring or Reporting Action (if applicable)
	comply with the ESA is advised well in advance of any ground-disturbing activities or vegetation removal that may impact the gnatcatcher. If a take permit from the USFWS is needed, the JPA will comply with the mitigation measures detailed in the permit. If the project would result in permanent loss of gnatcatcher habitat, the JPA will provide replacement habitat at no less than 2:1 for the total acreage of affected habitat. Assurances for long-term protection of replacement habitat will be provided by the JPA prior to any ground-disturbing activities or vegetation removal that may impact gnatcatcher. • California Legless Lizard and Coastal Whiptail: Surveys will be scheduled during the summer months (June and July) when these animals are most likely to be encountered. Surveys will be conducted with parallel transects at approximately 20 feet apart and walked onsite in appropriate habitat for each species. Suitable habitat consists of areas of sandy, loose, and moist soils, typically under sparse vegetation of scrub, chapparal, and within the duff of oak woodlands. • Western Pond Turtle: Surveys will be conducted during the time of greatest pond turtle activity, typically during the breeding season (May through July) and when pond turtles have not left the water to aestivate or overwinter in the uplands. Surveys and potential habitats will follow the USGS Western Pond Turtle (Emys marmorata) Visual Survey Protocol for the Southcoast Ecoregion (USGS 2006). • Nesting Birds: Preconstruction nesting bird surveys will be performed by a qualified biologist within 500 feet of the construction area no more than 7 days prior to construction when work activities in that area begin (or resume after 2 or more weeks of inactivity) between February 1 and August 31. If the construction area and within 500 feet of the construction area has nesting habitat for raptors, surveys for nesting raptors will begin January 1 to avoid take of birds, raptors, or their eggs. Should an active nest be observed, a qualified biologist will implement a minimum buffer of 300 feet around the migratory bird species nests and 500 feet around active raptor nests. The qualified biologist will notify CDFW of buffers established around any active nests of protected species. Buffers will be maintained until young have fledged (left the nest on their own), as determined by a qualified biologist, or the nest is no longer active. The biologist will monitor active nests daily when construction is occurring and assess the effect on the nesting birds. If the biologist determines that particular activities pose a high risk of disturbing an active nest, the biologist will increase the			

Mitigation Measure Number	Mitigation Measure	Implemented By	When Implemented	Monitoring or Reporting Action (if applicable)
	minimum buffer and recommend additional, feasible measures to minimize the risk of nest disturbance. If work cannot proceed without disturbing the nesting birds, or signs of disturbance are observed by a monitor, work will be stopped or redirected to other areas until the nesting and fledging is completed or the nest has otherwise become inactive. • Bats: Prior to construction, a qualified biologist will complete a habitat assessment for special-status bats to identify potential maternity roost sites or substantial day roost sites. If special-status bat roost sites are identified, then a qualified biologist will complete acoustical monitoring surveys and visual surveys at dusk to identify roost locations and types, the species composition, and number of occupants. If a maternity roost is present, the biologist will determine the extent of the construction buffer around the active roost. The buffer will be maintained from April 1 until the young are flying, typically after August 31. If a roost is present in a bridge or tree in or adjacent to the construction area, the biologist will determine the likelihood of disturbance. The impact of roost eviction rather than roost protection will be evaluated, and roost eviction will occur only when necessary. Any necessary roost eviction will occur at night, between September 1 and March 31 outside the maternity season unless the roost is determined to be a non-maternity roost occupied only by males. • Arroyo Chub and Western Pond Turtle: The JPA will fully avoid all impacts to arroyo chub and western pond turtle along Arroyo Conejo. No work will occur on the stream banks adjacent to Arroyo Conejo during the winter rainy season, typically between December 1 and March 31. Additionally, no work will occur during the combined rainy season and breeding season for arroyo chub (February 1 through August 31) and western pond turtle (March 1 through July 15). For work occurring near Arroyo Conejo, the JPA will monitor construction noise to confirm noise does not affect wildlife in the adjacent river habitat. Construction equipment will use noise-reduction features (such as mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer. Stationary noise sources, such as generators and pumps, at staging areas within 1,400 feet of sensitive receptors should be shielded at the source by an enclosure, temporary sound walls, or acoustic blankets. Where feasible, sound walls or acoustic blankets should have a height of no less than 8 feet, a Sound Transmission Class of 27 or greater, and a surface with a solid face from top to bottom without any openings or cutouts. Unnecessary construction vehicle use and idling time should be minimized to the extent feasible, such that if a vehicle is not required for use immediately or continuously for safe construction activities, the engine should be shut off.			

Mitigation Measure Number	Mitigation Measure	Implemented By	When Implemented	Monitoring or Reporting Action (if applicable)
5-3	**Avoid and minimize impacts to jurisdictional waters, including wetlands.** The Pure Water Project may affect some watercourses identified in undeveloped areas, with an unavoidable wetland impact along Agoura Road (Alternative 1 Agoura Road AWPF only) and at the Las Virgenes Reservoir site (Alternative 2 Reservoir AWPF only). For all impacts to jurisdictional waters, including wetlands, that cannot be avoided, permits must be obtained from the appropriate state and federal agencies. The JPA will notify the appropriate agencies – expected to be the USACE, Regional Board, and CDFW – prior to any ground-disturbing activities and vegetation removal, including staging, near streams. Notifications will be consistent with the permit application submittal requirements in effect at the time of submittal. For these impacts, the Pure Water Project will evaluate all construction footprints in undeveloped areas to avoid and minimize impacts to jurisdictional waters. Avoidance and minimization measures may include: • Maintain a construction buffer from the jurisdictional limits by installing construction fencing to prevent encroachment. If possible, the fencing will be installed at least 10 feet from the jurisdictional limits. • Locate construction staging, including equipment and materials storage, away from the jurisdictional limits, preferably at least 50 feet away. • Implement erosion control measures as prescribed by a Stormwater Pollution Prevention Plan (SWPPP) or Erosion Control Plan. Chapter 8, Geology and Soils (including Mitigation Measure 8-2) and Chapter 11, Hydrology and Water Quality, provide further discussion. For impacts to wetlands that cannot be avoided, compensatory mitigation will be provided. The JPA will provide compensatory mitigation by purchasing credits at an approved mitigation bank within the region or by paying in-lieu fees. Credits or in-lieu fees will be provided at an appropriate ratio subject to the specific requirements of each agency at no less than 1:1.	JPA	Design/Permitting Phase	As required by applicable permits
5-4	**Prepare and implement a mitigation plan for oak trees and oak tree natural communities.** The Pure Water Project is expected to result in impacts to oak trees and oak tree natural communities, including potential tree removal, in several areas based on a tree survey conducted in 2022. In preparation for construction, a program will be developed that describes: • Appropriate avoidance and minimization measures • Identification of oak tree mitigation areas • Success criteria	Program Biologist	Pre-construction	Availability of mitigation plan prior to construction and on construction site

Mitigation Measure Number	Mitigation Measure	Implemented By	When Implemented	Monitoring or Reporting Action (if applicable)
	• Monitoring and reporting processes The program will be developed and implemented in coordination with CDFW and affected local agencies with responsibility for oak tree protection. Specifically, the program will include the following: • Additional surveys by a qualified arborist of all oak trees and oak tree communities to be affected by construction-related disturbance, including both tree removal and encroachment within 5 feet of the driplines of oak trees that will be preserved. In addition to the physical characteristics already recorded, the surveys will include a horticultural evaluation, including physical evidence of disease, identification of pests, and an evaluation of the trees' vigor. • Oak trees that can be avoided will include protection measures to minimize the potential for accidental disturbance. Temporary construction fencing will be installed around the protected zones of all oak trees to be preserved adjacent to the disturbance areas. Fencing will be maintained during construction, and construction crews informed about the need to avoid these areas. • All trees identified for removal will be inspected for contagious tree diseases, such as thousand canker fungus (*Geosmithia morbida*), polyphagous shot-hole borer (*Euwallacea* spp.), and goldspotted oak borer (*Agrilus auroguttatus*). To avoid the spread of infectious tree diseases, diseased trees will not be transported from the site without first being treated using best available management practices relevant to each tree disease observed. • The project will include an oak tree planting plan that includes information on the location of mitigation plantings. Preference is for onsite mitigation within or adjacent to the disturbed areas and areas subject to permanent fuel modification, including as part of site landscaping plans. In addition to oak tree planting, the planting plan will include provisions to maintain the restoration areas in a manner suitable as a natural community. The planting plan will include: o Restoration of functioning and self-sustaining woodlands of similar composition, structure, and function as the affected woodlands. o Restoration of structurally diverse understory vegetation species (grasses, forbs, shrub, subshrub, and vine) occurring in the affected woodlands; acorns and seedlings will originate from plants and trees of the same species as the affected species			

Mitigation Measure Number	Mitigation Measure	Implemented By	When Implemented	Monitoring or Reporting Action (if applicable)
	o Standards for new plantings, such as hole size and depth, soil amendments, irrigation, and protection (for example, tree fences or cages) o Planting schedule o Measures to control exotic vegetation and protection from herbivory o A requirement that four trees will be planted for every oak tree removed that is wider than 4 inches in diameter o Measurable goals and success criteria for establishment of self-sustaining populations based on site and habitat conditions prior to impact and using functional local native oak shrublands and woodlands as reference sites, adaptive management techniques, and contingency measures if success criteria are not met o Annual monitoring criteria and requirements for a minimum of 5 years • If mitigation cannot be achieved through oak tree planting or if there is a lack of success during the monitoring period, then payment of in lieu fees to a local agency or conservation organization or purchase of suitable offsite properties (including conservation easements) may be used to fulfill these obligations.			
Chapter 6. Cultural and Paleontological Resources				
6-1a	**Perform archaeological survey prior to construction in high and medium archaeological sensitivity zones.** Prior to construction, the JPA will determine whether the project is located within a high or medium archaeological sensitivity zone. If the project site is determined to be in a high or medium archaeological sensitivity zone, a qualified archaeologist will perform an archaeological investigation at the site if it has not been surveyed. Subsurface testing, including hand-augured borings and excavated test pits, may be recommended by the archaeologist. The archaeologist will analyze gathered data in relation to the detailed project construction plans. The findings of the investigation will be submitted for JPA review and approval. This report will include an evaluation of the "uniqueness" of all finds, anticipated project-related impacts, and recommendations for mitigating impacts.	Program Archaeologist	Pre-construction	Submit findings of the investigation to the JPA for review.
6-1b	**Halt construction if archaeological resources are discovered.** In the event archaeological resources are discovered, the construction contractor will be responsible for halting construction activities, notifying the JPA, and retaining a qualified archaeologist. The archaeologist will evaluate the uniqueness of the find, contact local Native American and historical organizations, and recommend a course of action. The construction contractor will	Construction Contractor	Construction phase	Contact local Native American and historical organizations.

Mitigation Measure Number	Mitigation Measure	Implemented By	When Implemented	Monitoring or Reporting Action (if applicable)
	receive training regarding the identification of cultural resources by a qualified archaeologist prior to the start of construction activities.			
6-3a	**Prepare a PRMMP.** Prior to construction, a PRMMP will be developed to reduce potential impacts to paleontological resources. The PRMMP will be prepared by a professional paleontologist and will meet SVP criteria (2010). The PRMMP will: • Identify construction impact areas where significant paleontological resources may be encountered and the depths at which those resources are likely to be discovered • Stipulate the location and frequency of monitoring and other appropriate procedures • Describe the significance criteria to be used to determine which resources will be recovered for their data potential, as well as the coordination strategy to conduct adequate monitoring • Describe methods of recovery • Provide procedures for postexcavation preparation and analysis of specimens • Document the final curation of specimens at an accredited facility • Describe data analysis methods • Describe reporting requirements The PRMMP will specify that all paleontological work will be conducted by qualified professionals meeting the SVP criteria (2010) so that encountered resources will be quickly and professionally recovered while not impeding project construction. At the end of the monitoring effort, a Paleontological Monitoring Report will be prepared by the professional paleontologist to document the results of monitoring.	Program Paleontologist	Pre-construction	Prepare the PRMMP prior to the start of construction and prepare the Paleontological Monitoring Report following construction.
6-3b	**Halt construction if paleontological resources are discovered.** Should any paleontological resources (for example, fossils) be encountered during construction activities when a paleontological monitor is not present, work will be halted immediately within 50 feet of the discovery. The project paleontologist will determine the significance of the discovery, evaluate the uniqueness of the find, and prepare a written report documenting the find and recommending further courses of action. Depending on the significance of the discovery, the actions may include avoidance, excavation, documentation, recovery, or other measures determined by the paleontologist. Because proper excavation and removal of paleontological resources do not lessen the scientific value of the resources, recovery is the recommended method of reducing impacts to scientifically important paleontological resources resulting from project-related excavations and would reduce impacts to less than significant.	Program Paleontologist	Construction	If a discovery is made, prepare a written report documenting the find and recommending further actions, if necessary.

Mitigation Measure Number	Mitigation Measure	Implemented By	When Implemented	Monitoring or Reporting Action (if applicable)
6-3c	**Prepare a Paleontological Resources WEAT Program.** Because ground disturbance is associated with some risk of encountering previously undiscovered paleontological resources, prior to the initiation of construction or ground-disturbing activities, a WEAT module for paleontological resources will be prepared by a qualified professional paleontologist, as defined by the SVP (2010). Construction personnel will be trained via the WEAT module regarding the following activities: • Recognition of possible buried paleontological resources • Protection of paleontological resources during construction • Coordination between construction staff and paleontological staff • Construction and paleontological staff roles and responsibilities in implementing the PRMMP • Procedures to be followed if paleontological resources are encountered Personnel will be instructed that unauthorized collection or disturbance of fossils is unlawful. Training materials and formats may include in-person training, prerecorded videos, posters, and informational brochures. Upon completion of WEAT training, the contractor would require workers to sign a form stating that they attended the training and understand and will comply with the information presented.	Program Paleontologist and Contractor	Prior to initiation of construction or ground-disturbing activities	Prepare a WEAT module, train construction personnel, and collect completion forms from workers.
Chapter 8. Geology and Soils				
8-1	**Review regulation requirements, perform site-specific geotechnical and engineering studies, and implement recommendations.** The project and its design engineers will perform site-specific geotechnical and engineering studies as required by local policies to meet the goals and objectives listed in Tables 8-1 through 8-4. The review will verify compliance with federal, state, and local regulations related to reducing earthquake and soils hazards. Approval will be granted for projects in areas of potential geologic hazards only where it can be demonstrated that the project will not be endangered by, or contribute to, the hazardous condition on the site or on adjacent properties. The studies will include identification of site-specific geotechnical and engineering measures. Typical geotechnical or engineering report measures to reduce impacts related to liquefaction, settlement, or other ground failure could include earthwork and foundation remediation, which will comply with applicable provisions of the CBC.	Project Engineers	During design	None
8-2	**Comply with regulations and policies for erosion control.** Prior to start of construction, the project's technical engineering team will review local policies (Tables 8-1 through 8-4) and work with construction contractors to develop and implement a project-specific SWPPP for	Project Engineers and Contractor	Pre-construction, construction, and post-construction	None

Mitigation Measure Number	Mitigation Measure	Implemented By	When Implemented	Monitoring or Reporting Action (if applicable)
	construction projects with a land disturbance area equal to or greater than 1 acre. For projects with disturbance area less than 1 acre, a site-specific Erosion and Sediment Control Plan will be prepared. For projects with any land disturbance, construction will comply with local site development codes and incorporate an effective combination of erosion and sediment control measures identified in the California Stormwater Quality Association (CASQA) Stormwater Best Management Practice Handbook (CASQA 2003). Construction erosion and sediment control BMPs typically include the following measures: • Scheduling site grading during the dry season (April 15 to October 15), when possible • Segregating topsoil during rough grading • Temporarily stabilizing soil during site grading and active construction • Permanently stabilizing site soil after construction • Implementing erosion and sediment controls during construction dewatering activities • Controlling site runon and runoff to isolate the work area and prevent onsite or offsite erosion and sediment transport during construction • Implementing dust suppression measures • Managing stockpiles; in accordance with local standard construction practices, materials will be stockpiled at central locations instead of within work areas, where feasible			
Chapter 10. Hazards and Hazardous Materials				
10-1	**Perform a Phase I investigation as needed prior to construction; and remediate, control, or dispose of contaminated materials as appropriate.** New facility locations will be reviewed for inclusion in the lists of hazardous materials compiled pursuant to Government Code Section 65962.5. Where contamination is suspected, a Phase I site assessment of the proposed work area will be performed prior to start of construction activities, including excavation and other soil-disturbing activities, such as tunneling. The Phase I site assessment will comply with the applicable ASTM International (ASTM) standard for site assessments (currently E-1527-21, Standard Practice For Environmental Site Assessments: Phase I Environmental Site Assessment Process) and will include recommendations for reducing or eliminating the source or mechanisms of contamination, if contamination is found. Recommendations may include removing the contaminated soil and disposing of it at a licensed facility in accordance with regulations.	JPA	Pre-construction	None

Mitigation Measure Number	Mitigation Measure	Implemented By	When Implemented	Monitoring or Reporting Action (if applicable)
10-2	**Los Robles Well Monitoring Program.** Monitoring will specifically look at groundwater level changes and migration of the groundwater plume. The monitoring system will assess changes in hydraulic control of the TFX Aviation groundwater plume. The monitoring will be performed quarterly after resuming pumping from the Los Robles well as part of the Pure Water Project. The JPA will submit a sampling plan to DTSC that includes this quarterly sampling from the existing TFX Aviation monitoring well sites (or replacement monitoring wells) prior to operating the well for the Pure Water Project. The quarterly sampling will start after the well starts operating and may be reduced to semiannually or annually if there is no destabilization of the groundwater plume (with time frame provided in the sampling plan). Should monitoring indicate that hydraulic control of the groundwater plume is being affected, the JPA will reassess the project impact on plume migration in the next quarter subject to review and approval by DTSC.	JPA	Operational phase	Submit sampling plan to DTSC for review and approval.
Chapter 13. Noise				
13-1	**Noise Control Plan.** The contractor will be required to develop a Noise Control Plan identifying how noise would be minimized during construction, and as required, apply for a temporary construction noise variance. Noise-reducing methods that may be implemented include the following: • Follow local noise control requirements as much as possible, with exceptions only as needed (e.g., nighttime construction to minimize traffic disruptions) in collaboration with local jurisdictions. • Minimize the use of impact devices, such as jackhammers, pavement breakers, and hoe rams. Where possible, use concrete crushers or pavement saws rather than hoe rams for tasks such as concrete or asphalt demolition and removal. • Verify that pneumatic impact tools and equipment used at the construction site have intake and exhaust mufflers recommended by the manufacturers to meet relevant noise limitations. • Provide impact noise-producing equipment, such as jackhammers and pavement breakers, with noise-attenuating shields, shrouds, or portable barriers or enclosures to reduce operating noise. • Line or cover hoppers, conveyor transfer points, storage bins, and chutes with sound-deadening material (for example, apply wood or rubber liners to metal bin impact surfaces).	Contractor	Construction phase	Coordination with applicable jurisdictions

Mitigation Measure Number	Mitigation Measure	Implemented By	When Implemented	Monitoring or Reporting Action (if applicable)
	• Avoid blasting and impact-type pile driving to the extent reasonable and feasible. Coordinate these highly intrusive construction activities with the local jurisdictions and provide advance notice to nearby residents and other sensitive receptors. • Use alternative procedures of construction, and select a combination of techniques that generate the least overall noise and vibration. Such alternative procedures could use electric welders powered by remote generators and mix concrete at nonsensitive offsite locations, instead of onsite. • Turn off idling equipment when not in use of periods longer than 30 minutes. • Where building foundation systems are needed, use drilling or alternate foundations systems instead of driven piles where reasonable and feasible. • Operate equipment so as to minimize banging, clattering, buzzing, and other annoying types of noises, especially near residential and other noise-sensitive areas during the evening and nighttime hours. • To the extent feasible, configure the construction site in a manner that keeps noisier equipment and activities as far as possible from noise-sensitive locations and nearby buildings. • Consider the use of broadband or white noise backup alarms as allowed by Cal/OSHA during evening and nighttime hours. • Maximize physical separation, as far as practicable, between noise generators and noise receptors. Separation includes providing enclosures for stationary items of equipment and noise barriers around particularly noisy areas at the project site, and locating stationary equipment to minimize noise and vibration impacts on the community. • Minimize noise-intrusive impacts during most noise-sensitive hours. Plan noisier operations during times of highest ambient noise levels.			
Chapter 14. Recreation				
14-1	**Prepare Trail Closure and Restoration Plan.** The JPA will prepare trail closure and restoration plans for the Westlake Vista Trail and Conejo Canyon Open Space Trail in collaboration with MRCA, the City of Westlake Village, COSCA, and the City of Thousand Oaks. The plans will contain the following information: • Notification procedures so that trail users are aware of the closures. Notification will consist of posting information at trailheads, newspaper notices, website updates,	JPA	Pre-construction	Prepare trail closure and restoration plans in collaboration with MRCA, the City of Westlake Village, COSCA, and the City of Thousand Oaks.

Mitigation Measure Number	Mitigation Measure	Implemented By	When Implemented	Monitoring or Reporting Action (if applicable)
	and other similar measures. The notifications will describe the closure start dates and expected closure durations, and will redirect trail users to other trails in the area. • Provisions to maintain access to the Pentachaeta Trail as much as possible during construction, including the ability to park at the trailhead and safely access the trail while construction is occurring along the Westlake Vista Trail. • Restoration of the trailhead area, including replacing demolished or damaged fencing, trailhead signage, and wayfinding features. • Trench backfill and surface restoration plans appropriate for restoration use. Grades along the restored pipeline corridor will match the existing grades to the extent possible. The top layer of backfill material will consist of decomposed granite or similar material using best practices for trail construction. • If Alternative 2 Reservoir AWPF is selected as the preferred alternative, additional collaboration with MRCA will be required to determine whether use of the access road for recreation is feasible. Because of the duration of the closure and the changed character of the trail surface following restoration, and because of the permanent changes under Alternative 2 Reservoir AWPF, the impact cannot be reduced to a less than significant level. The impact would remain significant and unavoidable.			
Chapter 15. Transportation and Traffic				
15-1	**Transportation Management Plan:** A TMP will be prepared to address construction impacts on transportation facilities. Pipeline construction will be planned and scheduled to minimize traffic impacts to the extent feasible, and the TMP will further reduce impacts by addressing the following: • Potential impacts from construction activities on vehicular, transit, pedestrian, and bicycle access • Potential impacts from construction activities on mobility, including: o Temporary lane and roadway, sidewalk, bicycle facility, and freeway ramp closures o Detours o Increases in traffic volumes, including: ▪ Regular traffic and construction traffic ▪ Construction equipment	Contractor	Pre-construction	Coordination with applicable jurisdictions

Mitigation Measure Number	Mitigation Measure	Implemented By	When Implemented	Monitoring or Reporting Action (if applicable)
	▪ Materials delivery vehicles ▪ Waste and haul vehicles ▪ Employee commutes o Construction parking o Emergency services (such as fire, police, ambulances) Development of the TMP will be coordinated with the affected local jurisdictions and other potentially affected parties (such as school bus and transit operators and police, fire, and emergency services providers). The TMP will identify: • Specific TMP strategies • The parties responsible for implementing those strategies • The agencies and parties the TMP strategies will be coordinated with • Implementation timing Specific activities in the TMP may include: • Install traffic control devices, as specified in Caltrans' California Manual on Uniform Traffic Control Devices (Caltrans 2021), where needed to maintain safe driving conditions, including: o Use of signage to alert motorists and bicyclists of construction activities, potential hazards, and travel detours o Flaggers when appropriate • Coordinate with the applicable jurisdictions, including local agencies and transit providers. • Provide construction notification procedures for: o Police, public works, fire departments, and other public service providers o Cycling organizations, bike shops, schools, and homeowner associations • Inform contractors and subcontractors of work hours, modes and locations of transportation, and parking for construction workers. • Describe the procedures for construction area evacuation in case of an emergency declared by the city, county, or other local authorities. • Identify emergency routes available and open for public emergency personnel. • Designate areas where nighttime construction will occur, if needed.			

Mitigation Measure Number	Mitigation Measure	Implemented By	When Implemented	Monitoring or Reporting Action (if applicable)
	• Provide information to the public for contact in case of emergency or complaint. Publicize and display contact information on signs in proximity to construction areas.			
Chapter 16. Tribal Cultural Resources				
6-1b	**Halt construction if archaeological resources are discovered.** In the event of the discovery of archaeological resources, the construction contractor will be responsible for halting construction activities, notifying the lead agency, and retaining a qualified archaeologist. The archaeologist will be required to evaluate the uniqueness of the find, contact local Native American Tribes and historical organizations, and recommend a course of action. The construction contractor will receive training regarding the identification of cultural resources by a qualified archaeologist prior to the start of the construction activities.	Construction Contractor	Construction phase	Contact local Native American and historical organizations.

AGENDA ITEM NO. 6.C

DATE: December 13, 2022

TO: JPA Board of Directors

FROM: Facilities and Operations

SUBJECT: Rancho Solar and Battery Energy Storage System Project: Award

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SUMMARY:

On December 6, 2021, the JPA Board approved Resolution No. 15, authorizing and approving the execution of all necessary agreements with Tesla in the forms approved by JPA Counsel for a solar and Battery Energy Storage System (BESS) at the Rancho Las Virgenes Composting Facility and a BESS-only for the Recycled Water Pump Station (RWPS) at LVMWD Headquarters.

Staff and its consultant, TerraVerde, have been negotiating with Tesla since the end of 2021 to execute the necessary agreements and start the project construction. However, due to supply chain difficulties, higher equipment and material costs, and a shortage of batteries from Tesla, staff has not been able to execute the agreements based on the original proposals for the two projects.

Given the circumstances, staff and TerraVerde proceeded with an additional Request for Proposals and received a new proposal from Distributed Solar Development, LLC (DSD, formally GE Solar) with the following terms: 1.1-megawatt solar with 500-kilowatt (kW) BESS and a Power Purchase Agreement (PPA) rate of 6.89 cents per kilowatt-hour (KWh) with 0% escalation for 25 years. The BESS maintenance cost is approximately (pending final State Self-Generation Incentive Grant, SGIP, grant funding) $2,986 per month with 0% escalation for 25 years. The net projected savings to the JPA is $7,404,193 over the 25-year project duration. These terms compare favorably to the original Tesla proposal of 10 cents per KWh that corresponded to a net projected savings of $2.9 million over the same 25-year duration. The additional savings are possible due to a higher Federal Investment Tax Credit available through the recently-passed Inflation Reduction Act (IRA), lower PPA rate and higher Southern California Edison rate to offset the cost.

The Rancho Solar and Battery Storage System requires no initial capital investment from the JPA. DSD will reimburse the JPA for approximately $200,000 of CEQA and TerraVerde support costs as a part of the proposed Power Purchase Agreement for the solar and BESS installation at Rancho. Staff recommends authorization and approval to proceed with DSD for the Solar and BESS project at the Rancho Composting Facility.

RECOMMENDATION(S):

Conduct a public hearing and upon its conclusion: (1) pass, approve and adopt proposed Resolution No. 25, authorizing the Administering Agent/General Manager to execute of all necessary agreements in the forms approved by JPA Counsel; and (2) authorize the Administering Agent/General Manager to execute a scope change with TerraVerde Energy, LLC, in the amount of $15,028, for the additional cost to negotiate with Tesla, circulate a second Request for Proposals and negotiate terms with Distributed Solar Development, LLC (DSD) for the Rancho Solar and Battery Energy Storage System Project.

RESOLUTION NO. 25

A RESOLUTION OF THE GOVERNING BOARD OF THE LAS VIRGENES-TRIUNFO JOINT POWERS AUTHORITY FINDINGS ON ENERGY SAVINGS AND DETERMINING OTHER MATTERS IN CONNECTION WITH A POWER PURCHASE AGREEMENT

(Reference is hereby made to Resolution No. 25 on file in the JPA's Resolution Book and by this reference the same is incorporated herein.)

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

There is no capital investment required from the JPA for the proposed Solar and Battery Energy Storage System at Rancho other than a commitment to purchase electricity produced by the solar project at 6.89 cents per kilowatt-hour (KWh) with 0% escalation for 25 years. The current SCE average cost for the JPA is approximately 20 cents per kWh. The Battery Energy Storage System has a monthly cost of $2,986 with 0% escalation for 25 years. The net projected savings to the JPA is $7,404,193 over the 25-year project duration.

DISCUSSION:

The proposed DSD Solar and Battery Energy Storage System (BESS) proposal provides a significantly higher net project savings to the JPA ($7.4 million vs. $2.9 million) than the original Tesla proposal. The BESS will allow the JPA to hedge against long-term escalation in electricity costs and take advantage of the increased Federal Investment Tax Credit provided through the recently-passed Inflation Reduction Act. The proposal also provide significant environmental benefits with the renewable energy generation. The estimated cost-savings shown on TerraVerde's Pro Forma (copy attached as Exhibit A) are based on a very conservative annual 3% escalation in electricity costs. The annual increase in electricity costs over the past several years has far exceeded the 3% estimated. As a result, the JPA will realize increased cost-savings when the electricity rates escalate more than the 3% annual projection reflected in the Pro Forma.

California Government Code Sections 4217.10 through 4217.18 allow public agencies,

including water districts, to enter into energy services contracts, which include energy services contracts for the design and installation of solar photovoltaic and battery energy storage projects, without a formal competitive bidding process. In December 2020, and again in September 2022, the JPA issued a Request for Proposals (RFP) and conducted a selection process with the assistance of TerraVerde Energy (TerraVerde) to obtain proposals for the design and installation of a solar photovoltaic and battery energy storage system. California Government Code section 4217.12 allows the JPA to select the proposal that best serves the JPA's interests. Following the second RFP process, and additional due diligence and reference checks, DSD LLC. is recommended as the selected contractor to install, operate and retain ownership of the proposed Solar Photovoltaic and Battery Energy Storage System at the Rancho Las Virgenes Composting Facility.

Prior to approving the solar Power Purchase Agreement for the solar and battery energy storage services, the JPA's Board must fulfill the following two requirements under Government Code Section 4217.12:

- Hold a regularly scheduled public hearing on the solar Power Purchase Agreement and post a public notice at least two weeks prior to the public hearing. The notice of the public hearing was posted on Monday, November 28, 2022.
- Find that the anticipated cost to the JPA for thermal or electrical energy or conservation services provided by the project under the solar Power Purchase Agreement will be less than the anticipated marginal cost to the JPA for thermal, electrical or other energy that would have been consumed by the JPA in the absence of those purchases. Based on the Cash Savings Pro Forma that TerraVerde has provided (see Exhibit A), there is sufficient evidence to support the finding.

Several weeks ago, staff received a notice from Tesla that additional batteries may become available for the JPA's proposed 2,682-kWh Battery Energy Storage System at the Recycled Water Pumping Station (RWPS) at LVMWD Headquarters. However, Tesla proposed a non-negotiable agreement for the project. The non-negotiable agreement contains much less favorable terms for the JPA. These terms include weak indemnity, environmental indemnity in Tesla's favor and dispute resolution provisions that are different from the JPA's standards. Given a much smaller savings to the JPA (approximately $1 million over a 15-year period) and a required JPA initial investment of $210,000, staff recommends deferring the BESS project at the RWPS and waiting for the BESS market to further mature such that the cost-savings are move favorable.

A California Environmental Quality Act (CEQA) Initial Study was performed for the proposed project. Based on the results of the study, the proposed project elements qualify for a categorical exemption based on Sections 15301, 15303 and 15304a of CEQA for minor modifications and alterations to existing facilities and land. On December 6, 2021, the JPA Board approved a finding that the proposed project is exempt from the provisions of CEQA and a Notice of Exemption was filed with the Los Angeles County Clerk's Office and State Office of Planning and Research.

Prepared by: John Zhao, Director of Facilities and Operations

ATTACHMENTS:
Proposed Resolution No. 25
Exhibit A - Updated Pro Forma

RESOLUTION NO. 25

A RESOLUTION OF THE GOVERNING BOARD OF THE LAS VIRGENES-TRIUNFO JOINT POWERS AUTHORITY FINDINGS ON ENERGY SAVINGS AND DETERMINING OTHER MATTERS IN CONNECTION WITH A POWER PURCHASE AGREEMENT

WHEREAS, it is the policy of the State of California and the intent of the State Legislature to promote all feasible means of energy conservation and all feasible uses of alternative energy supply sources; and

WHEREAS, Las Virgenes-Triunfo Joint Powers Authority (**"JPA"**) desires to reduce the steadily rising costs of meeting the energy needs at its facilities; and

WHEREAS, Government Code section 4217.12(a)(1) authorizes a public agency to enter into an energy service contract with respect to an energy conservation facility on terms that the public agency's governing board determinations are in the best interests of the public agency and if the governing board finds that the anticipated cost to the public agency for the energy provided by the energy conservation facility under the energy contract will be less than the anticipated marginal cost to the JPA of thermal, electrical or other energy that would have been consumed by the JPA in the absence of those purchases; and

WHEREAS, TerraVerde Energy, LLC (**"TerraVerde"**), has provided the JPA with analysis showing the benefits of implementing certain energy conservation measures through the installation of a photovoltaic energy generating facility and battery energy storage facility, and TerraVerde's analysis (**"Analysis"**) is attached hereto as Exhibit A and made part hereof by this reference; and

WHEREAS, the JPA proposes to enter into a power purchase agreement with Distributed Solar Development, LLC. (**"Company"**), pursuant to which Company will design, construct, install and operate on JPA property certain energy saving improvements consisting of a photovoltaic energy generating facility and battery energy storage facility and arrange with the local utility for interconnection of the facilities, which will generate energy savings for the site on which such facilities are located (**"Project"**); and

WHEREAS, the site where such facilities will be located is: Rancho Las Virgenes Composting Facility; and

WHEREAS, the Analysis includes data showing that the anticipated cost to the JPA for the electrical energy provided by the Project will be less than the anticipated cost to the JPA of electrical energy that would have been consumed by the JPA in the absence of such measures; and

WHEREAS, the Board proposes to enter into the power purchase agreement substantially in the form presented at this meeting, subject to such changes, insertions or omissions as the JPA's designee reasonably deems necessary following the Board's adoption of this Resolution; and

WHEREAS, pursuant to Government Code section 4217.12, this Board has held a public hearing, public notice of which was given at least two weeks in advance, to receive public comment.

NOW, THEREFORE, based upon the above-referenced recitals, the Board hereby finds, determines and orders as follows:

1. The above recitals are true and correct.

2. The terms of the power purchase agreement in the form presented to this meeting are in the best interests of the JPA.

3. In accordance with Government Code section 4217.12, and based on data provided by the Analysis, the Board finds that the anticipated cost to the JPA for electrical energy provided by the Project will be less than the anticipated cost to the JPA of electrical energy that would have been consumed by the JPA in the absence of the Project.

4. The Board hereby approves the power purchase agreement in accordance with Government Code section 4217.12.

5. The JPA's designee is hereby authorized and directed to negotiate any further changes, insertions, and omissions to the power purchase agreement as they reasonably deem necessary, and thereafter to execute and deliver the power purchase agreement following the Board's adoption of this Resolution. The JPA's designee is further authorized and directed to execute and deliver any and all papers, instruments, opinions, certificates, affidavits and other documents and to do so or cause to be done any and all other acts and things necessary or proper for carrying out this resolution and said agreements.

PASSED, APPROVED AND ADOPTED on the _____ day of _____, 2022

_____
Jay Lewitt, Chair

ATTEST:

_____
Leon Shapiro, Vice Chair

APPROVED AS TO FORM:

_____
W. Keith Lemieux, JPA Counsel

EXHIBIT A

ANALYSIS OF BENEFITS

[Attached]

LVMWD - Composting Plant

Pro Forma

4217 Exhibit A

Scenarios Included in this Pro Forma:

#1 - NEM-A 2.0: Solar Power Purchase Agreement and Battery Payments to Provider

Cash Flow

TerraVerde ENERGY

	Electricity		Utility Savings					Expenses				Cash Position					
Year	Annual Solar Production (kWh)	Solar Savings per kWh Produced	Savings from Solar	Savings from Storage due to Demand Reduction	Savings from Storage due to Arbitrage	Storage Savings (Total)	**Subtotal: Annual Utility Bill Savings**	PPA Payments	Battery Payments to Provider	Asset Management Service (Solar & Storage)	**Subtotal: Annual Operating Expenses**	Net Benefits (Solar)	Net Benefits (Storage)	Net Benefits (Total)	**Cumulative Cash Position**	**Conservative Cumulative Cash Position**	Term
2023	-	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	0
2024	2,159,598	$ 0.1390	$ 300,158	$ 34,582	$ 36,582	$ 71,164	$ 371,322	$ (148,796)	$ (35,832)	$ (5,000)	$ (189,628)	$ 147,362	$ 34,332	$ 181,694	$ 181,694	$ 144,562	1
2025	2,148,800	$ 0.1432	$ 307,617	$ 35,620	$ 35,419	$ 71,038	$ 378,655	$ (148,052)	$ (35,832)	$ (5,175)	$ (189,059)	$ 155,425	$ 34,171	$ 189,596	$ 371,290	$ 296,292	2
2026	2,138,056	$ 0.1475	$ 315,261	$ 36,688	$ 34,929	$ 71,617	$ 386,878	$ (147,312)	$ (35,832)	$ (5,356)	$ (188,500)	$ 163,664	$ 34,714	$ 198,378	$ 569,668	$ 455,982	3
2027	2,127,366	$ 0.1404	$ 298,673	$ 37,789	$ 37,927	$ 75,716	$ 374,389	$ (146,576)	$ (35,832)	$ (5,544)	$ (187,951)	$ 147,663	$ 38,775	$ 186,438	$ 756,106	$ 604,982	4
2028	2,116,729	$ 0.1446	$ 306,095	$ 38,923	$ 37,718	$ 76,640	$ 382,736	$ (145,843)	$ (35,832)	$ (5,738)	$ (187,412)	$ 155,663	$ 39,661	$ 195,324	$ 951,430	$ 762,032	5
2029	2,106,145	$ 0.1489	$ 313,702	$ 40,090	$ 38,156	$ 78,246	$ 391,948	$ (145,113)	$ (35,832)	$ (5,938)	$ (186,884)	$ 163,838	$ 41,226	$ 205,064	$ 1,156,494	$ 927,901	6
2030	2,095,615	$ 0.1534	$ 321,497	$ 41,293	$ 39,062	$ 80,355	$ 401,852	$ (144,388)	$ (35,832)	$ (6,146)	$ (186,366)	$ 172,193	$ 43,294	$ 215,486	$ 1,371,980	$ 1,103,202	7
2031	2,085,137	$ 0.1580	$ 329,487	$ 42,532	$ 39,989	$ 82,520	$ 412,007	$ (143,666)	$ (35,832)	$ (6,361)	$ (185,859)	$ 180,732	$ 45,416	$ 226,148	$ 1,598,128	$ 1,288,149	8
2032	2,074,711	$ 0.1628	$ 337,674	$ 43,808	$ 40,936	$ 84,743	$ 422,418	$ (142,948)	$ (35,832)	$ (6,584)	$ (185,364)	$ 189,460	$ 47,594	$ 237,054	$ 1,835,182	$ 1,482,961	9
2033	2,064,337	$ 0.1676	$ 346,066	$ 45,122	$ 41,903	$ 87,025	$ 433,091	$ (142,233)	$ (35,832)	$ (6,814)	$ (184,879)	$ 198,381	$ 49,830	$ 248,212	$ 2,083,393	$ 1,687,864	10
2034	2,054,016	$ 0.1727	$ 354,665	$ 46,476	$ 42,892	$ 89,368	$ 444,033	$ (141,522)	$ (35,832)	$ (7,053)	$ (184,407)	$ 207,501	$ 52,125	$ 259,627	$ 2,343,020	$ 1,903,087	11
2035	2,043,746	$ 0.1778	$ 363,479	$ 47,870	$ 43,075	$ 90,945	$ 454,423	$ (140,814)	$ (35,832)	$ (7,300)	$ (183,946)	$ 216,825	$ 53,653	$ 270,477	$ 2,613,497	$ 2,128,122	12
2036	2,033,527	$ 0.1832	$ 372,511	$ 49,306	$ 43,229	$ 92,535	$ 465,046	$ (140,110)	$ (35,832)	$ (7,555)	$ (183,497)	$ 226,357	$ 55,192	$ 281,549	$ 2,895,047	$ 2,363,167	13
2037	2,023,359	$ 0.1887	$ 381,768	$ 50,785	$ 43,354	$ 94,140	$ 475,908	$ (139,409)	$ (35,832)	$ (7,820)	$ (183,061)	$ 236,103	$ 56,744	$ 292,846	$ 3,187,893	$ 2,608,422	14
2038	2,013,242	$ 0.1943	$ 391,255	$ 52,309	$ 43,448	$ 95,757	$ 487,012	$ (138,712)	$ (35,832)	$ (8,093)	$ (182,638)	$ 246,068	$ 58,306	$ 304,374	$ 3,492,267	$ 2,864,095	15
2039	2,003,176	$ 0.2002	$ 400,978	$ 53,878	$ 62,155	$ 116,033	$ 517,011	$ (138,019)	$ (35,832)	$ (8,377)	$ (182,228)	$ 256,258	$ 78,526	$ 334,783	$ 3,827,050	$ 3,147,177	16
2040	1,993,160	$ 0.2062	$ 410,942	$ 55,494	$ 60,178	$ 115,673	$ 526,615	$ (137,329)	$ (35,832)	$ (8,670)	$ (181,831)	$ 266,677	$ 78,107	$ 344,784	$ 4,171,834	$ 3,439,300	17
2041	1,983,195	$ 0.2124	$ 421,154	$ 57,159	$ 59,346	$ 116,505	$ 537,659	$ (136,642)	$ (35,832)	$ (8,973)	$ (181,447)	$ 277,333	$ 78,879	$ 356,212	$ 4,528,046	$ 3,741,746	18
2042	1,973,279	$ 0.2187	$ 431,620	$ 58,874	$ 59,089	$ 117,963	$ 549,583	$ (135,959)	$ (35,832)	$ (9,287)	$ (181,078)	$ 288,231	$ 80,273	$ 368,504	$ 4,896,550	$ 4,055,292	19
2043	1,963,412	$ 0.2253	$ 442,345	$ 60,640	$ 58,763	$ 119,403	$ 561,749	$ (135,279)	$ (35,832)	$ (9,613)	$ (180,724)	$ 299,376	$ 81,649	$ 381,025	$ 5,277,575	$ 4,380,142	20
2044	1,953,595	$ 0.2321	$ 453,338	$ 62,459	$ 59,445	$ 121,904	$ 575,242	$ (134,603)	$ (35,832)	$ (9,949)	$ (180,384)	$ 310,776	$ 84,083	$ 394,858	$ 5,672,434	$ 4,717,476	21
2045	1,943,827	$ 0.2390	$ 464,603	$ 64,333	$ 60,857	$ 125,190	$ 589,794	$ (133,930)	$ (35,832)	$ (10,297)	$ (180,059)	$ 322,436	$ 87,299	$ 409,735	$ 6,082,169	$ 5,068,231	22
2046	1,934,108	$ 0.2462	$ 476,149	$ 66,263	$ 62,301	$ 128,564	$ 604,712	$ (133,260)	$ (35,832)	$ (10,658)	$ (179,750)	$ 334,362	$ 90,600	$ 424,963	$ 6,507,131	$ 5,432,723	23
2047	1,924,437	$ 0.2536	$ 487,981	$ 68,251	$ 63,776	$ 132,027	$ 620,008	$ (132,594)	$ (35,832)	$ (11,031)	$ (179,456)	$ 346,563	$ 93,989	$ 440,552	$ 6,947,683	$ 5,811,274	24
2048	1,914,815	$ 0.2612	$ 500,107	$ 70,299	$ 65,284	$ 135,583	$ 635,690	$ (131,931)	$ (35,832)	$ (11,417)	$ (179,179)	$ 359,043	$ 97,467	$ 456,510	$ 7,404,193	$ 6,204,215	25
	50,871,389	**$ 0.1873**	**$ 9,529,126**	**$ 1,260,842**	**$ 1,209,813**	**$ 2,470,655**	**$ 11,999,781**	**$ (3,505,039)**	**$ (895,800)**	**$ (194,749)**	**$ (4,595,588)**	**$ 5,868,288**	**$ 1,535,905**	**$ 7,404,193**	**$ 7,404,193**	**$ 6,204,215**	

Disclaimers and Assumptions

1) Projections of future savings are calculated based on patterns of previous electricity usage with billing data from August 2021 through July 2022, and assume that historical usage patterns hold at the same level over the life of the project.

2) Projections of future savings are subject to rate tariff eligibility over the life of the installation. This analysis uses SCE rate tariffs published October 2022.

3) This analysis assumes the electrical service will not require significant upgrades.

4) Projections of future savings are based on interconnection of all sites under NEM 2.0 tariff. Remaining capacity under the NEM 2.0 tariff is subject to availability.

5) This analysis assumes the decommissioning of the cogenerators behind meter V345N-001137 such that this meter is eligible to be removed from Standby service.

6) Applicable NEM 2.0 tariff eligibility is assumed to be available for 20 years from Permission to Operate. Projections of savings shown beyond year 20 are subject to change based on any future NEM, or similar, tariffs in effect at that time.

7) Asset Management Services include system performance monitoring and detailed energy & financial reporting.

8) The vendor is expected to reimburse $200,000 of additional District costs including third-party consultants and inspectors.

9) The Battery Payments to Provider rate shown in this analysis does not include consideration for resiliency/backup power capability.

10) This analysis does not include consideration for a discount rate on the cost of capital.

11) No part of TerraVerde Energy's deliverables, messaging, presentation or anything else shared with its clients should be construed by the client or any other entity as advice on scope for future contracts, work orders or other engagements.