LAS VIRGENES TRIUNFO JOINT POWERS AUTHORITY

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

AGENDA

JOINT POWERS AUTHORITY - REGULAR MEETING

MONDAY, MAY 4, 2026 – 5:00 PM

PUBLIC PARTICIPATION: The public may join this meeting virtually or attend in person in the Board Room. Teleconference participants will be muted until recognized at the appropriate time by the Chair. To join via teleconference, please use the following Webinar ID:

Webinar ID: https://lvmwd.zoomgov.com/j/1614298927

To join by telephone, please dial (669) 900-6833 or (346) 248-7799 and enter Webinar ID: 161 429 8927

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; or inform the Executive Assistant/Clerk of the Board if attending in person.

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 Nancy Lawrence, Executive Assistance/Clerk of the Board, at (818) 251-2123 or nlawrence@lvmwd.gov 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 or accommodation, in order to attend or participate in a meeting, including auxiliary aids or services, may request such reasonable modification or accommodation by contacting the Executive Assistant/Clerk of the Board by telephone at (818) 251-2123 or via email to nlawrence@lvmwd.gov at least 48 hours prior to the 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**

3. **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*

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 an item, that item will be removed from the Consent Calendar for separate action.

   4.A **Statement of Revenues, Expenses, and Changes in Net Position: March 2026** **(Pg. 4)**
   Receive and file the Statement of Revenues, Expenses and Changes in Net Position for the period ending on March 31, 2026.

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

   5.A **State and Federal Legislative Update** **(Pg. 7)**

   5.B **Pure Water Project Las Virgenes-Triunfo: Update** **(Pg. 69)**

6. **ACTION ITEMS**

   6.A **Pure Water Project Las Virgenes-Triunfo: Authorization of Memorandum of Agreement with City of Thousand Oaks** **(Pg. 73)**
   Authorize the Administering Agent/General Manager to execute the Memorandum of Agreement with the City of Thousand Oaks, in the total net amount of $3,618,726, for the installation of a reverse osmosis concentrate pipeline and fiber optic conduit.

   6.B **Rancho Las Virgenes Farm Sprayfields Repurposing Study: Authorization** **(Pg. 94)**

Authorize the Administering Agent/General Manager to execute a professional services agreement with Woodard and Curran, in the amount of $307,458, to complete the Rancho Las Virgenes Farm Sprayfields Repurposing Study.

7. **BOARD COMMENTS**

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

9. **FUTURE AGENDA ITEMS**

10. **INFORMATION ITEMS**

10.A **Hydraulic Modeling for Sewer and Potable Water Systems** **(Pg. 125)**

10.B **On-Call Construction Management and Inspection Services** **(Pg. 181)**

10.C **Climate Action and Adaptation Plan (CAAP): Annual Update** **(Pg. 245)**

10.D **Contractual Laboratory Services: Award** **(Pg. 257)**

10.E **Contract Laboratory Services: Contract Increase and Extension** **(Pg. 259)**

11. **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*

12. **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. 4.A

DATE: May 4, 2026

TO: JPA Board of Directors

FROM: Finance and Technology

SUBJECT: Statement of Revenues, Expenses, and Changes in Net Position: March 2026

SUMMARY:

This report provides a year-to-date summary of unaudited Fiscal Year 2025-26 financial results for the JPA.

Through the first nine months of Fiscal Year 2025-26, the JPA generated operating revenues of $2.8 million, 1.3 percent above prior year operating revenues of $2.7 million. Operating revenues were 85.4 percent of the annual budget of $3.2 million, ahead of expectations through the March 31, 2026. Year-to-date operating expenses were $19.1 million for the current fiscal year, 2.1 percent above prior year expenses of $18.8 million, slightly below budget expectations through 75 percent of the year.

As of March 31, 2026, the JPA's net position (excess of assets over liabilities) was $126.6 million. The entirety of the net position consisted of the JPA's investment in capital assets by its participants, Las Virgenes Municipal Water District (LVMWD) and Triunfo Water & Sanitation District (TWSD).

RECOMMENDATION(S):

Receive and file the Statement of Revenues, Expenses and Changes in Net Position for the period ending on March 31, 2026.

DISCUSSION:

JPA operating revenues, comprised primarily of wholesale recycled water sales, were $2.8 million through March 31, 2026, 1.3 percent above prior year sales of $2.7 million for the same period. JPA recycled water deliveries to its customers, LVMWD and TWSD were down 14.0 percent year-over-year through the first nine months of the fiscal year. The decrease in deliveries was offset by an increase to the wholesale recycled water rate charged by the JPA to its customers, Las Virgenes Municipal Water District (LVMWD) and Triunfo Water and Sanitation District (TWSD), from $758.01 per acre-foot during the prior fiscal year to $873.47 per acre-foot during the current fiscal year. Rate increases were approved by the JPA Board to recover estimated recycled water system operating and administrative costs in Fiscal Year 2025-26. The decrease in operating revenue was also offset by an increase in "other income" of $54,000 as a result of the recognition of cell tower revenues in the current fiscal year.

JPA operating expenses year-to-date through March 2026 were $19.1 million, which were $0.3 million (or 2.1 percent) above the prior year's operating expenses of $18.8 million. Actual expenses encompassed 72.5 percent of the $26.4 million annual operating budget, in line with expectations through 75 percent of the fiscal year.

Tapia Water Reclamation Facility operating expenses of $4.3 million through the first nine months of the fiscal year were $0.4 million (or 9.1 percent) above prior year expenses of $3.9 million. This increase in expenses at the Tapia Water Reclamation Facility were driven mainly by higher labor and energy costs in the current fiscal year versus the prior year.

Recycled water transmission and distribution costs of $0.9 million were down $0.5 million (or 34.6 percent) through the first nine months of the fiscal year versus the prior year's expenses of $1.4 million. The decrease was driven mainly by a one-time cost for the repair of a 14-inch recycled water main in the prior year, resulting in higher outside service costs versus the current year as well as a decrease in energy costs as a result of realized solar credits.

Expenses of $2.2 million year-to-date through March 2026 at the Rancho Las Virgenes Composting Facility were down 0.5 million (or 17.5 percent) versus the prior year's expenses of $2.7 million due mainly from a lowered cost to in supplies and materials and reduction in costs associated with biosolids removal.

General and administrative (G&A) expenses were $11.1 million through the first nine months of the fiscal year, which equated to 80.5 percent of the $13.9 million budgeted for Fiscal Year 2025-26, slightly above expectations through 75 percent of the fiscal year.

As of March 31, 2026, the JPA's net position (excess of assets over liabilities) was $126.6 million. The entirety of the net position consisted of the JPA’s investment in capital assets by its participants, Las Virgenes Municipal Water District and Triunfo Water & Sanitation District.

Attachment A provides a statement summarizing the JPA's Fiscal Year 2025-26 year-to-date financial results through March 31, 2026.

GOALS:

Ensure Effective Utilization of the Public's Assets and Money

Prepared by: Debbie Rosales, Finance Manager

ATTACHMENTS:
Statement of Revenues, Expenses, and Changes in Net Position: March 2026

LAS VIRGENES-TRIUNFO JOINT POWERS AUTHORITY
Statements of Revenues, Expenses, and Changes in Net Position
For the Months Ended March 31, 2026 (Preliminary) and 2025
(dollars in thousands)

	Annual Budget	*Through 75% of fiscal year* Actual Year-to-Date		Variance with Prior Year Positive (Negative)
	2025/26	2025/26	2024/25	2025/26 to 2024/25
OPERATING REVENUES:				
Wholesale recycled water sales	$ 3,173	$ 2,661	$ 2,680	$ (19)
Other income	55	97	43	54
Total operating revenues	**3,228**	**2,758**	**2,723**	**35**
OPERATING EXPENSES:				
Treatment Plant	5,281	4,265	3,910	355
Recycled water transmission and distribution	2,534	908	1,388	(480)
Compost Plant	3,991	2,201	2,667	(466)
Sewer	438	391	241	150
General and administrative	13,774	11,089	10,354	735
Other operating expenses	375	293	199	94
Total operating expenses	**26,393**	**19,147**	**18,759**	**388**
OPERATING INCOME (LOSS) BEFORE BILLING TO PARTICIPANTS	(23,165)	(16,389)	(16,036)	(353)
Billing to Participants	23,574	16,040	15,605	435
OPERATING INCOME (LOSS)	**409**	**(349)**	**(431)**	**82**
NONOPERATING REVENUES (EXPENSES):				
Interest income (expense)	-	259	90	169
Other revenues (expenses)	-	58	192	(134)
Total nonoperating revenues (expenses)	**-**	**317**	**282**	**35**
CHANGES IN NET POSITION	**409**	**(32)**	**(149)**	**117**
NET POSITION:				
Beginning of fiscal year	126,646	126,646	105,811	20,835
Ending Net Position	**$ 127,055**	**$ 126,614**	**$ 105,662**	**$ 20,952**

Las Virgenes-Triunfo Joint Powers Authority

April 21, 2026

Ana Schwab, Lowry Crook, Michael Brain, Chris Keosian, Madeline Voitier, and Alex Dunn

Congress

Congress is back in session following its annual spring recess in observance of several religious holidays. The U.S. Department of Homeland Security (DHS) remains shut down for a third month, as Congress has yet to pass the DHS fiscal year 26 funding bill. Disagreements among lawmakers regarding the policy and legislative measures necessary to reopen the agency remain unresolved.

Separately, the fiscal year 27 Appropriations process has formally kicked off, with the Trump Administration delivering the President's Budget request to Congress (more details included below), and congressional appropriators beginning their annual hearing and markup processes.

This summer, Congress is also poised to consider its regularly renewed agricultural policy and nutrition assistance legislation (the "Farm Bill"), as well as surface transportation authorization legislation (the "Highway Bill"). Preliminary discussions have also begun around whether the chambers may take up another Budget Reconciliation bill. Should Congress pursue this strategy, it would give the current "Republican Trifecta" governing coalition another major opportunity to advance pillars of the Administration's agenda before November's mid-term elections. Importantly, reconciliation bills do not need to overcome the Senate's 60-vote threshold to end a filibuster.

As the fiscal year deadline nears and the mid-term election activities intensify, Congress faces a crowded agenda that will force leadership to prioritize, negotiate, and—where possible—capitalize on procedural tools that allow for swift action.

Senate ENR Subcommittee Reviews Western Water and Hydropower Legislation

On March 17, the Senate Energy and Natural Resources Subcommittee on Water and Power held a legislative hearing on a package of pending water and hydropower bills. The measures addressed a range of western water priorities, including snowpack forecasting, water recycling and reuse, water storage development, urban canal safety, drought response tools, project delivery assistance, and hydropower licensing improvements.

Subcommittee Chairman John Hoeven (R-ND) emphasized the importance of reliable water supplies for communities, agriculture, and tribal nations, highlighting the need for practical federal tools to strengthen infrastructure and improve long-term supply reliability. Ranking Member Ron Wyden (D-OR) similarly pointed to intensifying drought, declining snowpack, and changing hydrology as key drivers of water stress across the West, calling for stronger federal leadership and more sustainable water management strategies.

Members highlighted several legislative proposals aimed at improving project delivery and water management outcomes. Senator Alex Padilla (D-CA) promoted S. 3738, the *MORE WATER Act*, which would reauthorize and expand the Bureau of Reclamation's large-scale water recycling program and streamline administrative project approval processes, allowing projects to move forward without project-by-project congressional authorization. Padilla emphasized that lengthy approval timelines remain a major barrier to advancing water infrastructure, arguing that a better balance between programmatic and project-specific authorities is needed to accelerate construction and deployment.

Padilla also highlighted his other bill S. 3737, the *GROW SMART Act*, which would fund voluntary, farmer-led demonstration projects focused on improving agricultural water efficiency. The bill is designed to support innovative approaches—such as advanced irrigation strategies and water-efficient technologies—to reduce water demand and lower costs, particularly in regions facing significant supply constraints.

Witness testimony from Bureau of Reclamation Deputy Commissioner David Palumbo reflected general support for many of these policy goals, while raising implementation considerations. Palumbo agreed that expanded programmatic authorities, such as those proposed in the *MORE WATER Act*, would allow Reclamation to act more quickly and "more nimbly" in addressing drought and advancing projects, while emphasizing the importance of maintaining a balance with project-specific authorizations.

Palumbo also underscored the growing imbalance between water supply and demand across the West and expressed support for efforts like the *GROW SMART Act*, noting that

voluntary, locally driven efficiency projects could help shift water management toward achieving more with less. At the same time, he indicated that some proposed programs could be incorporated into existing authorities, such as WaterSMART, rather than creating new standalone programs. He also raised concerns about provisions that would increase non-reimbursable federal cost exposure, including proposals related to urban canal safety in Sen. James Risch's (R-ID) S. 2753, the *Urban Canal Modernization Act*.

The hearing underscored bipartisan interest in advancing practical western water legislation focused on improving forecasting, strengthening drought response tools, expanding recycling and storage, and streamlining federal processes. However, it also highlighted ongoing questions around program structure, federal cost-sharing, and how best to balance new authorities with existing programs. While no clear legislative path emerged, the discussion signaled continued momentum behind efforts to make federal water programs more flexible, efficient, and responsive to regional water supply challenges.

Senate EPW Subcommittee Examines ESA Implementation Challenges

On March 18, the Senate Environment and Public Works Subcommittee on Fisheries, Water, and Wildlife held a hearing examining ongoing challenges and opportunities in implementing the Endangered Species Act (ESA). Members and witnesses discussed whether reforms should focus on improving species recovery outcomes through greater flexibility and incentives, or prioritize maintaining the law's existing structure while increasing agency capacity and resources.

Subcommittee Chairman Senator Pete Ricketts (R-NE) emphasized concerns that, despite decades of implementation, the ESA has not delivered sufficient species recovery and can create conflicts with infrastructure operations, water management, and disaster response. He highlighted the need for clearer regulatory definitions, improved transparency in federal decision-making, and greater reliance on state-led conservation efforts and locally developed science.

Democratic members, led by Ranking Member Sen. Adam Schiff (D-CA), expressed continued support for the ESA's core framework, noting its effectiveness in preventing extinction. Schiff argued that many implementation challenges stem from staffing and funding shortages at the U.S. Fish and Wildlife Service (USFWS), and suggested that targeted investments and process improvements, rather than major statutory changes, could improve permitting efficiency and recovery outcomes.

Witness testimony reflected broad agreement that ESA implementation could be improved, particularly through approaches that better align conservation with working landscapes and regional water management systems. Thomas Riley of Riley Consulting emphasized the importance of locally grounded science, clear recovery milestones, and transparency to support long-term stakeholder participation. Brian Yablonski of the Property and Environment Research Center advocated for shifting toward incentive-based conservation policies that reward incremental recovery progress and provide regulatory flexibility. Jake Li of Defenders of Wildlife highlighted the need for increased agency capacity and argued that many improvements can be achieved under existing law through better use of current tools and authorities.

The hearing also highlighted bipartisan interest in improving coordination with states and landowners, expanding voluntary conservation incentives, and creating clearer pathways for regulatory flexibility as species recover. Members raised concerns about the use of generalized or outdated scientific data in federal decision-making and emphasized the importance of incorporating locally relevant information, particularly in western water systems where conditions vary significantly by region.

The discussion underscored continued bipartisan support for the ESA but also highlighted ongoing disagreements over the appropriate balance between regulatory requirements and flexibility, the role of federal versus state authority, and whether legislative changes are necessary to improve implementation. While no specific legislative proposal emerged, the hearing signaled continued interest in reforms aimed at making ESA implementation more transparent, predictable, and focused on measurable recovery outcomes.

Senate Democrats Express Objection to Proposed EPA Section 401 Waiver Rule

On April 8, 2026, a group of Senate Democrats raised formal objections to a proposed rule by the Environmental Protection Agency that would limit how states and tribes review water quality impacts of major energy projects. These reviews, required under the Clean Water Act, are currently used to assess and potentially block or condition permits for projects such as dams and pipelines.

Led by Senator Alex Padilla (D-CA), the lawmakers argued that the proposal would significantly weaken state authority and undermine the Clean Water Act's principle of shared federal-state responsibility. They contend it would restrict states' ability to consider broader environmental impacts—such as effects on fish habitats, erosion, and water temperature—by narrowing reviews to specific pollutant discharges.

The proposed rule, offered by the Trump Administration, is intended to streamline permitting by imposing a one-year deadline for state decisions and limiting the scope of reviews. Federal officials say the changes would improve efficiency, transparency, and consistency, and prevent misuse of the law to delay energy projects.

However, critics warn the rule could create additional administrative burdens in some states. For example, projects might require both federal certification and separate state permits, potentially increasing costs and delays rather than reducing them.

Federal Budget/Appropriations

FY27 POTUS Budget Request to Congress Released

On April 3, 2026, the White House released the President's Fiscal Year 2027 (FY27) Budget Request to Congress. The President's Budget Request outlines the Administration's policy priorities and recommended spending levels for Congress and typically marks the beginning of the annual federal budget process. This is a nonbinding proposal, as Congress holds the "power of the purse" and has final authority over all federal appropriations decisions.

Overall, the Trump Administration's FY27 budget proposal calls for a 10% cut to nondefense discretionary spending for the fiscal year beginning October 1, 2026.

Below are notable proposed figures from the FY27 Budget Request which may be of significance to the JPA:

Environmental Protection Agency (EPA)

- The FY27 Budget Request proposes $4.2 billion in funding for EPA, a $4.6 billion or 52% decrease from the 2026 enacted level
- The FY26 budget called for a 55% reduction, but Congress ultimately only cut EPA by 4 percent

State Revolving Funds (SRFs)

- The FY27 Budget Request proposes to cut the Clean Water and Drinking Water SRF programs by $2.5 billion or approximately 90%

- The Administration proposed a similarly drastic cut to these programs in the FY26 budget request, but were rebuffed by Congress
- Specifically, the FY27 Budget request proposes $155 million for the Clean Water State Revolving Fund (CWSRF) and $150 million for the Drinking Water State Revolving Fund (DWSRF). This represents a reduction from FY26 enacted levels of $746.1 million for the CWSRF and $410.7 million for the DWSRF
- The Administration argues that states should be responsible for funding their own water infrastructure projects, rather than relying on the federal government to finance them through the SRFs
- The Administration also takes issue with these funds being "heavily earmarked" by Congress and argues that the Bipartisan Infrastructure Law previously gave a "massive investment" to these programs

Water Infrastructure Finance and Innovation Act (WIFIA)

- Under the FY27 Budget Request, WIFIA would receive no new funding outside of the $7.8 million for EPA to continue administering the program
- In FY26, Congress provided WIFIA with approximately $72 million in funding
- The budget clarifies that new WIFIA loans will be originated through existing carryover funding from prior years' appropriations

U.S. Department of the Interior (Interior)

- Overall, FY27 Budget Request proposes $15.9 billion for Interior, a decrease of -12.9% from FY26 levels.
- The FY27 Budget Request once again proposes to unify the federal government's wildland fire programs at Interior and at the Department of Agriculture's Forest Service into a U.S. Wildland Fire Service at Interior.

Bureau of Reclamation (Reclamation)

- The FY27 Budget Request proposes $1.3 billion for Reclamation, with a request of $1.112 billion for Reclamation's Water and Related Resources account, a decrease of $358 million from FY26 enacted.
- The request includes:
    - $32 million for the California Bay-Delta Restoration Account, equal to FY26 enacted;
    - $64 million for the Central Valley Project Restoration Account, equal to collections and an increase of $1.6 million from FY26 enacted;

- $112.611 million for the Lower Colorado River Basin Development Fund, an increase of $104.932 million from FY26 enacted;
  - This account funds major water and power projects in the Lower Colorado River Basin Project Act;
- $0 for the WaterSMART Title XVI program, a decrease of $12.5 million from FY26 enacted;
- $0 for the WaterSMART Grants program, a decrease of $15 million from FY26 enacted;
- $0 for the WIIN Act Water Storage program;
- $0 for the San Gabriel Basin Restoration Fund, a decrease of $3.237 million form FY26 enacted.

United States Army Corps of Engineers, Civil Works (Corps)

- The FY27 Budget Request for the Corps proposes $6.663 billion for the Civil works Program, a decrease of $3.778 billion from FY26 enacted.
- The request includes:
  - $1.3 billion for the Construction account, a decrease of $1.9 billion from FY26 enacted, including $420 million for Prado Dam, CA., and $80 Million for the American River Common Features, Natomas Basin, CA.;
  - $0 for the Corps' WIFIA Program, a decrease of $7 million from FY26 enacted;
  - $6 million for Scheduling of Reservoir Operations (nationwide), a decrease of $6.5 million from the FY26 request.

Department of Homeland Security

- The FY27 Budget Request proposes $63 billion for DHS, a $2.2 billion or 3.3% decrease from the 2026 Continuing Resolution level
- Notably, the passage of the Working Families Tax Cut Act (WFTC)—also known as the One Big Beautiful Bill Act—allocated more than $190 billion over five years for DHS to implement the Administration's border security and immigration enforcement priorities

Federal Emergency Management Agency (FEMA)

- The FY27 Budget Request proposes to cut FEMA's non-disaster grant programs by $1.3 billion

- The Administration states that the proposal reduces "wasteful" FEMA grant programs it characterizes as inefficient and refocuses the agency on core emergency management functions

Cybersecurity and Infrastructure Security Agency (CISA)

- The FY27 Budget Request proposes to cut CISA funding by $707 million
- The Administration states that this move refocuses CISA on its core mission—Federal network defense and enhancing the security and resilience of critical infrastructure--rather than what it deems to be wasteful spending

U.S. Department of Agriculture (USDA)

- The FY27 Budget Request proposes $20.8 billion in discretionary funding for USDA, a $4.9 billion decrease from FY26 enacted levels.
- The request includes $50 million for USDA reorganization and staff reductions in Washington, D.C.

U.S. Forest Service

- The FY27 Budget Request proposes $2.14 billion in discretionary funding, a reduction from $8.61 billion in FY26.
- Eliminates funding for:
  - Forest and Rangeland Research
  - State, Private, and Tribal Forestry accounts
- Continues proposal to transfer Wildland Fire Management to the Department of the Interior under a unified U.S. Wildland Fire Service.

Natural Resources Conservation Service (NRCS – Programs)

- The FY27 request proposes $111 million, down from $903 million in FY26.
- Staffing declines from 11,542 (FY25) to 9,241 (FY26–FY27), a reduction of 2,301 positions.

Watershed and Flood Prevention Operations (WFPO)

- FY27 proposed $0 in funding, down from $50 million in FY26. ($32 million of FY26 funding went to an earmarked account)
- Mandatory funding under the OBBBA provides $150 million annually in mandatory, partially offsetting discretionary cuts.

U.S. Department of Commerce

- The FY27 Budget Request proposes $9.2 billion, a $1.3 billion decrease from FY26 enacted levels.
- The budget proposes consolidating permitting under the Endangered Species Act of 1973 and Marine Mammal Protection Act of 1972 into a single program within the Department of the Interior. This is currently split between the U.S. Fish and Wildlife Service and NOAA.

National Oceanic and Atmospheric Administration (NOAA)

- FY27 funding: $4.45 billion, down from $6.16 billion in FY26.
- Eliminates $1.6 billion in funding for the Office of Oceanic and Atmospheric Research (OAR), effectively ending NOAA's research labs and cooperative institutes.

National Weather Service (NWS)

- Proposed funding: $1.368 billion, a slight increase of $8 million.

National Environmental Satellite, Data, and Information Service

- FY27 $321 million, a $77 million decrease.

Administration/Regulatory

Trump Administration Announces $540 million for California Water Infrastructure

On March 17, 2026, the Trump Administration announced $540 million in funding from the *One Big Beautiful Bill Act of 2025* for California water infrastructure projects, primarily targeting repairs to aging canals in the Central Valley that have been damaged by land subsidence caused by extensive groundwater pumping. The largest allocations include $235 million for the Delta-Mendota Canal and $200 million for the Friant-Kern Canal, both critical to delivering water to agricultural areas.

An additional $40 million is designated for planning efforts to raise Shasta Dam and expand its reservoir capacity. Supporters, including water agencies and agricultural interests, argue

this project would improve long-term water supply reliability. However, it faces strong opposition from Native American tribes, environmental groups, and fishing advocates, who cite concerns about environmental harm, impacts on salmon populations, flooding of culturally significant sites, and high projected costs.

Federal officials stated the investments aim to enhance water security, modernize infrastructure, and support communities and industries reliant on stable water supplies. While the funding has been welcomed by some state water agencies, critics argue that certain projects—particularly the Shasta Dam expansion—would provide limited public benefit while posing significant environmental and financial risks.

Trump Administration Convenes Rarely-Used Committee to Review ESA Waivers in Gulf

The Endangered Species Committee—often called the "God Squad"—met on March 31, 2026, for the first time since 1992, to consider a request to exempt oil and gas operations in the Gulf of Mexico from ESA protections on national security grounds. The request, and convening of the group which consists of Secretary of the Interior Doug Burgum, Secretary of Agriculture Brooke Rollins, Secretary of the Army Daniel P. Driscoll, Chairman of the Council of Economic Advisors Pierre Yared (Acting), Administrator of the Environmental Protection Agency Lee Zeldin, and Administrator of NOAA Neil Jacobs, signals a notable shift in how the Trump Administration plans to apply the Endangered Species Act (ESA).

The request, put forward by Defense Secretary Pete Hegseth, argued that ongoing environmental litigation could threaten energy production and, in turn, U.S. strategic interests. The Committee accepted that argument and approved a sweeping exemption covering the entire Gulf oil and gas program.

What makes this decision stand out is its scale. The ESA's exemption process has historically been used sparingly and for specific projects. Here, the Committee granted a blanket waiver, effectively setting aside requirements to protect more than two dozen endangered species across the vast gulf region. Although officials indicated that some mitigation measures may remain, it is unclear how—or whether—those protections will be enforced.

This marks a departure from the Committee's traditional role as a last-resort decision-maker in narrowly defined conflicts. Instead, the exemption was issued preemptively, without clear evidence that oil and gas operations were at immediate risk. The decision has already drawn legal challenges and raised broader questions about how far the ESA's national security provision can be stretched; potentially reshaping the balance between energy development and species protection in the years ahead.

EPA Unveils Plan to Combat Microplastics in Drinking Water

On April 2, 2026, the U.S. Environmental Protection Agency (EPA), in coordination with the U.S. Department of Health and Human Services (HHS), announced a series of actions aimed at addressing microplastics and other emerging contaminants in drinking water. Central to the announcement is a new draft Contaminant Candidate List (CCL), which identifies substances that may require future regulation under the Safe Drinking Water Act.

For the first time, the list includes microplastics and certain pharmaceuticals, alongside other chemical groups such as PFAS and disinfection byproducts. Federal officials described this step as part of a broader effort to expand research, guide state-level actions, and eventually inform regulatory decisions. HHS also committed significant funding—approximately $144 million—for research into how microplastics affect human health and how they might be measured and removed from the body.

The initiative is characterized by federal agencies as an early, science-driven step rather than an immediate regulatory change. Placement on the CCL does not impose requirements on water utilities but signals that the substances are priorities for further study. Officials emphasized that additional research is needed to better understand the prevalence of microplastics, their health impacts, and the technical feasibility of monitoring and removal. Scientists note that microplastics are widespread in the environment and have been detected in human tissues, though uncertainties remain due to varying methodologies and the complexity of plastic-related chemicals.

A notable unresolved issue is whether microplastics will be included in the EPA's upcoming Unregulated Contaminant Monitoring Rule (UCMR), which would require water systems to test for and report their presence. Such monitoring is widely seen as a necessary precursor to regulation, but challenges remain, including the lack of standardized testing methods and sufficient laboratory capacity.

USBR Takes Action to Stabilize Colorado River System Amid Historic Drought

On April 17, 2026, the U.S. Bureau of Reclamation announced a set of emergency operational measures in response to worsening drought conditions across the Colorado River Basin, where reservoir storage has fallen to roughly 36% of capacity. Extremely low snowpack and unusually high spring temperatures have further reduced expected inflows, particularly at Lake Powell, which is projected to receive only about 29% of its historical average runoff this year. Without intervention, water levels at Lake Powell could drop below the minimum threshold required for hydropower generation at Glen Canyon Dam by late

summer 2026, creating risks for water deliveries, electricity production, and downstream river operations.

To address these concerns, federal officials are preparing to transfer between 660,000 acre-feet and 1 million acre-feet of water from Flaming Gorge Reservoir beginning in April 2026 for a period of one year. Reclamation is also going to be reducing the annual release from Lake Powell to Lake Mead by 1.48 million acre-feet through September 2026. Together, these measures are expected to raise Lake Powell's elevation by approximately 54 feet by spring 2027, and ensure the lake remains 10 feet above the threshold required to generate hydropower—and send water downstream.

While these actions are intended to protect the overall system, they are expected to have downstream consequences. Reduced releases from Lake Powell will likely accelerate declining water levels at Lake Mead, potentially decreasing hydropower capacity at Hoover Dam by up to 40% in the near term. Additional impacts may include reduced recreational access at several reservoirs and parks, altered ecological conditions in the Grand Canyon, and challenges for fisheries. In the announcement, Interior officials emphasized that water rights will not be affected by the changes at Flaming Gorge or Lake Powell, based on the 2019 Drought Response Operating Agreements, and no additional releases are planned from other upstream reservoirs due to their already low levels.

The situation also coincides with the pending expiration of current Colorado River operating agreements at the end of 2026. Negotiations among basin states on a new framework are ongoing but unresolved, raising the possibility of federal intervention if consensus is not reached. Federal agencies indicated they will continue working with states, tribes, and other partners while preparing to establish post-2026 operational guidelines if necessary.

Federal Agencies Issue Advisory Warning of Potential Cyber-Attacks on U.S. Water Infrastructure

On April 7, 2026, several federal agencies, including the U.S. Environmental Protection Agency (EPA), Federal Bureau of Investigation (FBI), Cybersecurity and Infrastructure Security Agency (CISA), and National Security Agency (NSA), issued a joint advisory warning that cyberattacks linked to Iranian actors are targeting U.S. water infrastructure.

According to the advisory, these incidents have caused technical disruptions in water systems, including interference with mechanical sensors and human-machine interfaces. Officials caution that such breaches could interrupt water treatment processes, damage

equipment, introduce contaminants, and undermine public confidence in essential services.

The agencies emphasize that water systems are particularly vulnerable due to their importance to public health and critical services such as hospitals. Reported impacts so far include operational disruptions and financial losses.

The advisory outlines steps for identifying vulnerabilities and strengthening cybersecurity defenses, while urging water utilities to promptly report incidents and collaborate with federal authorities to mitigate risks and prevent further damage.

U.S. EPA Publishes "Water Reuse Action Plan 2.0"

On April 16, 2026, the U.S. Environmental Protection Agency (EPA) published its Water Reuse Action Plan (WRAP) 2.0. The plan provides an updated national framework to advance the safe and effective reuse of water resources across the United States, and builds on earlier WRAP efforts by prioritizing coordination among federal, state, and local stakeholders, while addressing regulatory, technical, and financial barriers that limit broader adoption. WRAP 2.0 emphasizes water reuse as a crucial approach for enhancing long-term water supply reliability, particularly in the face of increasing demand, population growth, and climate-related stressors such as drought.

A central focus of the plan is the integration of reused water into municipal systems to diversify supply portfolios. Treated wastewater, stormwater, and other alternative sources can be applied to both potable and non-potable uses, including landscape irrigation, industrial cooling, groundwater recharge, and, in some cases, drinking water augmentation through advanced treatment—such as Pure Water Las Virgenes-Triunfo. For municipalities, these applications provide several benefits, including improved drought resilience, reduced dependence on traditional freshwater sources, and decreased pollutant discharge into natural water bodies. The plan also highlights how water reuse can support economic development by ensuring more reliable supplies for urban growth and industry.

In the agricultural sector, WRAP 2.0 identifies irrigation with reclaimed water as an especially significant opportunity. Reused water offers a consistent and drought-resistant supply that can reduce competition between agricultural and urban users for limited freshwater resources. Additionally, appropriately treated reclaimed water may contain nutrients beneficial for crop production, potentially lowering fertilizer requirements. The plan stresses the importance of "fit-for-purpose" treatment approaches to ensure that water quality aligns with specific agricultural uses while protecting soil health, crop safety, and public health.

WRAP 2.0 also underscores environmental benefits associated with expanded water reuse. By redirecting treated wastewater for beneficial uses, communities can reduce nutrient and pollutant loads entering rivers and streams, support ecosystem health, and enhance groundwater recharge to prevent subsidence. The plan acknowledges challenges surrounding the development of reused water sources, including significant infrastructure costs, and promises to expand federal funding mechanisms for water reuse projects.

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April 2026 Bill Tracking Matrix

House of Representatives

Legislation	Summary	Last Action	JPA Delegation Cosponsors
H.R. 168 - Targeted Operations to Remove Catastrophic Hazards (TORCH) Act	This bill aims to reduce wildfire risks and restore forest health by streamlining forest management projects and removing regulatory delays. Key provisions include expanded wildfire recovery zones, vegetation removal near power lines, grazing initiatives to reduce fire hazards, and strengthened partnerships between federal, state, and local agencies. The bill prioritizes proactive, large-scale wildfire mitigation to protect rural communities and ecosystems.	04/04/2025 Referred to the Subcommittee on Forestry and Horticulture	
H.R. 178 - To require the Secretary of Agriculture to carry out activities to suppress wildfires, and for other purposes.	This bill requires the Secretary of Agriculture to engage in wildfire suppression and management activities that apply to Forest Service land within 24 hours of identifying a fire.	07/23/2025 Ordered to be Reported (Amended) by Voice Vote	
H.R. 204 - ACRES Act	This bill requires the Departments of Agriculture and the Interior to report annually on hazardous fuels reduction activities, detailing the number of federal acres treated and implementing standardized procedures for tracking and verifying data. It also mandates analysis of the effectiveness of these activities in reducing wildfire risk and distinguishes acres treated within and outside the wildland-urban interface. Additionally, the Government Accountability Office must study the bill's implementation and report findings to Congress.	03/04/2026 Committee on Energy and Natural Resources. Ordered to be reported without amendment favorably.	
H.R. 231 - Colorado River Basin System Conservation Extension Act	This bill would extend the System Conservation Pilot Program, which was created to test voluntary water conservation measures to manage severe drought in the Colorado River Basin. The legislation extends the current pilot program through 2026. *Companion bill of S.154.*	02/12/2025 Reported by Unanimous Consent by House Natural Resources	
H.R. 246 - SALT Fairness for Working Families Act	This bill increases the limit on the individual income tax deduction for certain state and local taxes, which is currently $10,000 per year ($5,000 for a married taxpayer filing a separate return). The bill increases the limit to $15,000 (twice that amount in the case of a joint return).	01/09/2025 Referred to the House Committee on Ways and Means	
H.R. 337 - Groundwater Recharge Technical Assistance Act	This bill would rovide $3 million annually to support groundwater recharge projects. This would require the Secretary of the Interior to use unobligated funds under the Bipartisan Infrastructure Law Western Water funding for aquifer storage, clean drinking water, and flood protection efforts.	01/13/2025 Referred to the House Committee on Natural Resources	

H.R. 338 - Every Drop Counts Act	This bill would would expand the Bipartisan Infrastructure Law's Small Storage Program by making it easier for groundwater recharge projects to qualify for funding, increase the amount of water they can store, and stabilize underground aquifers.	11/19/2025 Subcommittee Hearings Held	
H.R.345 - Fire Department Repayment Act	This bill would establishe standard operating procedures for fire suppression costs agreements; reviews and modify fire suppression costs agreements as necessary; ensure the fire suppression costs agreements align with cooperative fire protection agreements; and expedites reviews of standard operating procedures.	07/23/2025 Ordered to be Reported (Amended) by Unanimous Consent	
H.R.430 - SALT Deductibility Act	This bill would eliminate the $10,000 cap on the federal tax deduction for state and local taxes (SALT). The cap, which applies from 2018 through 2025, would otherwise expire in 2026.	01/15/2025 Referred to the House Committee on Ways and Means	**Rep. Julia Brownley**
H.R.435 - Direct Hire To Fight Fires	This bill would grabt permanent direct-hire authority to the USDA and Department of the Interior to fill wildland firefighter and support roles more efficiently. It also requires both agencies to adopt policies that improve recruitment and retention, including easing transfers between agencies. Additionally, the bill mandates annual reports to Congress and the public on staffing needs, vacancies by state, and hiring challenges.	07/15/2025 Ordered to be Reported by Unanimous Consent	
H.R.471 Fix Our Forests Act	This bill aims to simplify and expedite environmental reviews for forest management projects in high-risk wildfire areas. It would also promote innovative technologies, modernize standards, and create a framework for research and development in wildfire and land management, while also providing financial assistance to communities and tribes. Additionally, the bill strengthens the Good Neighbor policy to include tribes, facilitating cooperative forest management among various agencies.	03/06/2025 Senate Committee on Agriculture, Nutrition, and Forestry Subcommittee on Conservation, Forestry, Natural Resources, and Biotechnology. Hearings held	**Rep. George Whitesides**
H.R.517 - Filing Relief for Natural Disasters Act	This bill would empower state and territory governors to extend federal tax filing deadlines during state-declared emergencies, providing relief without requiring federal disaster declarations. It also doubles the mandatory filing extension for federally-declared disasters from 60 to 120 days. *Companion bill of S. 132.*	07/24/2025 Became Public Law No: 119-29	
H.R.527 - Strengthening Wildfire Resiliency Through Satellites Act	This bill would direct the Secretary of the Interior to establish a competitive grant program to fund satellite-based wildfire monitoring, with at least three grants awarded for high-resolution imaging and data analysis. The bill authorizes appropriations of $20 million annually from fiscal years 2026 to 2028 to support the program.	01/16/2025 Referred to the House Committee on Natural Resources	

H.R.528 - Post-Disaster Reforestation and Restoration Act	This bill would require the Secretary of the Interior to establish a program for reforestation and restoration of federal lands affected by unplanned disturbances. It involves identifying and prioritizing restoration projects, funding them through grants and contracts, and engaging stakeholders. The Secretary must also submit annual progress reports to Congress, focusing on funding needs, project status, and ecological restoration.	09/15/2025 Placed on the Union Calendar, Calendar No. 232	
H.R.550 - Wildfire Insurance Coverage Study Act	This bill would require the Government Accountability Office (GAO) to conduct a study on insurance coverage for damages caused by wildfires. The study will assess wildfire risk across the U.S., analyze trends in insurance coverage, and examine factors influencing rates and policy renewals. It will also evaluate the regulatory responses of state insurance agencies, including their actions to address increasing premiums and the availability of coverage.	01/16/2025 Referred to the House Committee on Financial Services	**Rep. Brad Sherman**
H.R.573 - Studying NEPA's Impact on Projects Act	The bill would require the Council on Environmental Quality (CEQ) to issue an annual report on the impacts of the National Environmental Policy Act (NEPA) on federal projects. The report must detail litigation trends, timelines, and costs associated with environmental reviews, as well as the length of environmental assessments and impact statements.	12/10/2025 Passed House and Received in the Senate and referred to the Committee on Environment and Public Works	
H.R.582 - Community Protection and Wildfire Resilience Act	This bill will empower communities to implement science-based methods for mitigating wildfire damage and provide funding to design and implement new Community Protection and Wildfire Resilience Plans with community members, first responders, and relevant state agencies.	01/21/2025 Referred to the Committee on Science, Space, and Technology, and in addition to the Committees on Natural Resources, and Agriculture	
H.R.605 - Headwaters Protection Act	This bill seeks to reauthorize and improve the Water Source Protection Program under the Healthy Forests Restoration Act of 2003. It aims to protect and restore watershed health, water supply and quality, municipal and agricultural water supply systems, and water-related infrastructure, as well as forest health from insect infestation, disease, or wildfire. The bill expands the scope to include "adjacent land" (non-Federal land within the same watershed as National Forest System land). *Companion bill of S.2701*	02/28/2025 Referred to the Subcommittee on Conservation, Research, and Biotechnology	
H.R.743 - Tim's Act	This bill aims to improve conditions for wildland firefighters by increasing their pay, offering rest and mental health leave, and expanding retirement and healthcare benefits. It includes housing stipends, tuition assistance, and unpaid family leave for those not covered by the Family and Medical Leave Act. The bill also calls for a national database to track job-related health risks and reduce harmful exposures.	03/07/2025 Referred to the Subcommittee on Forestry and Horticulture	**Rep. Julia Brownley**
H.R 766 - Surveilling Effluent Water for Epidemic Response (SEWER) Act	This bill would amend the Public Health Service Act to establish a national wastewater surveillance system. The bill directs the Secretary of Health and Human Services, through the CDC, to coordinate efforts to detect and monitor infectious diseases in wastewater, such as COVID-19, influenza, and other pathogens, for public health emergency preparedness. The bill also authorizes $150 million in funding annually from 2025 to 2029 to support this initiative.	01/28/2025 Referred to the House Committee on Energy and Commerce	

H.R. 831 - Lower Colorado River Multi-Species Conservation Program Amendment Act	This bill would ensure that state contributions to conservation projects in the Lower Colorado River Basin are able to earn interest and grow before being allocated. It does this by establishing an interest-bearing account for state contributions to the LCR MSCP. *Companion bill of S.291.*	03/17/2026 Passed House and received in the Senate	
H.R.834 - Disaster Assistance Fairness Act	This bill would require FEMA to clear debris from homeowners associations and condominiums when state or local governments deem it a threat to safety or economic recovery. It also clarifies that FEMA should provide financial assistance for repairing essential common elements like roofs, HVAC systems, stairwells, plumbing, and electricity. *Companion bill of S.352.*	02/01/2025 Referred to the Subcommittee on Economic Development, Public Buildings, and Emergency Management	
H.R.836 - Emergency Wildfire Fighting Technology Act	This bill requires the Forest Service and the Department of the Interior to jointly evaluate the container aerial firefighting system, which uses airdrop-capable disposable containers of water or fire retardant to increase the number of airlift assets available for wildfire emergencies. The agencies must assess its effectiveness in mitigating and suppressing wildfires and report their findings to Congress.	02/06/2025 Received in the Senate and Read twice and referred to the Committee on Agriculture, Nutrition, and Forestry	**Rep. George Whitesides**
H.R.1235 - Federal Infrastructure Bank Act	This bill would create the Federal Infrastructure Bank and its parent entity, the Federal Infrastructure Bank Holding Company (FIBHC), to finance revenue-generating infrastructure projects through loans, equity investments, and guarantees—reserving at least 10% for rural areas. The bank is barred from funding projects tied to the Chinese government and will be overseen by the Federal Reserve. It also establishes a tax credit for early equity investors and includes financial safeguards like an Infrastructure Guarantee Fund.	02/12/2025 Referred to the Subcommittee on Highways and Transit	
H.R. 1267 - Water Systems PFAS Liability Protection Act	This bill would exempt water utilities from liability under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 with respect to releases of perfluoroalkyl and polyfluoroalkyl substances (PFAS).	02/12/2025 Referred to the Committee on Energy and Commerce, and in addition to the Committee on Transportation and Infrastructure	
H.R. 1285 - Water Infrastructure Subcontractor and Taxpayer Protection Act	This bill seeks to ensure that federal water infrastructure projects stay on schedule and protect local communities and workers. It requires primary contractors on federally funded water projects to hold a surety bond, ensuring that local sponsors and subcontractors are compensated if the contractor defaults before the project is completed. *Companion bill of S. 570*	02/13/2025 Referred to the Committee on Transportation and Infrastructure, and in addition to the Committee on Energy and Commerce	**Rep. Julia Brownley**
H.R.1356 - Mudslide Recovery Act	This bill directs the Departments of Interior and Homeland Security to launch a pilot grant program designed to help communities repair the extensive damage caused by mudflows.	02/13/2025 Referred to the Subcommittee on Economic Development, Public Buildings, and Emergency Management	**Rep. Brad Sherman**

H.R.1721 - Critical Infrastructure Manufacturing Feasibility Act	This bill would direct the Secretary of Commerce to study which high-demand critical infrastructure products are currently imported, assess the costs of domestic production, and evaluate the feasibility of manufacturing these goods in rural communities and industrial parks. The findings must be reported to Congress within 18 months of enactment. *Companion bill of S. 1872.*	04/29/2025 Received in the Senate and referred to the Committee on Commerce, Science, and Transportation	
H.R.1849 - Disaster Mitigation and Tax Parity Act	This bill would exempt rebates that homeowners receive for hardening their homes against natural disasters from federal taxes.	03/05/2025 Referred to the House Committee on Ways and Means	**Rep. Julia Brownley**
H.R.1871 - 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. *Companion bill of S.857.*	03/05/2025 Referred to the House Committee on Ways and Means	
H.R.1894 - FISH Act	This bill gives the Fish and Wildlife Service (FWS) the sole authority to protect endangered or threatened species that are anadromous species (species of fish that spawn in fresh or estuarine waters and that migrate to ocean waters) or catadromous species (species of fish that spawn in ocean waters and migrate to fresh or estuarine waters). Currently, the FWS shares this authority with the National Marine Fisheries Service.	03/06/2025 Referred to the House Committee on Natural Resources	
H.R.1897 - ESA Amendments Act	This bill aims to improve the Endangered Species Act by clarifying definitions, focusing on species recovery, and streamlining permitting processes. It establishes flexible timelines for species listings, supports state-led recovery efforts, and reduces duplicative procedures. The Act also promotes accountability, improves regulatory certainty, and enhances the review process for species management.	12/17/2025 Markup held and reported out of committee 25-16	
H.R.1923 - Modernizing Wildfire Safety and Prevention Act	This bill aims to address the growing threat of large wildfires through firefighter recruitment and retention, updated response technology, and public health measures. It establishes training programs and benefits to support wildland firefighters, improves fire response with risk mapping and a new fire environment office, and creates a nationwide real-time air quality monitoring system.	03/06/2025 Referred to the Committee on Natural Resources, and in addition to the Committees on Agriculture, Education and Workforce, Oversight and Government Reform, Armed Services, Energy and Commerce, Science, Space, and Technology, Transportation and Infrastructure, and Small Business	
H.R.1938 - Department of Defense PFAS Discharge Prevention Act	This bill seeks to address PFAS contamination from military facilities by requiring updates to stormwater discharge permits. It directs the Secretary of Defense to request permit modifications to include quarterly monitoring of PFAS discharges and the implementation of best management practices to reduce contamination. Additionally, the bill allocates a portion of PFAS remediation funding to annual testing of stormwater runoff at Department of Defense facilities.	03/06/2025 Referred to the Committee on Armed Services, and in addition to the Committee on Transportation and Infrastructure	
H.R.1943 - Wildland Firefighter Paycheck Protection Act	This bill would establish special base pay rates for federal wildland firefighters, increasing their salaries across General Schedule grades. It also introduces premium pay for firefighters deployed to major incidents, provides rest and recuperation leave, and ensures continued funding for pay increases to address recruitment and retention challenges.	03/06/2025 Referred to the Committee on Oversight and Government Reform, and in addition to the Committees on Natural Resources, and Agriculture	**Rep. George Whitesides**

H.R. 2093 - To amend the Federal Water Pollution Control Act with respect to permitting terms	This bill would extend the maximum term for certain permits issued under the National Pollutant Discharge Elimination System (NPDES) program from 5 years, to 10.	03/14/2025 Referred to the House Committee on Transportation and Infrastructure	
H.R.2269 - WIPPES Act	This bill would require the Federal Trade Commission to issue regulations requiring certain products to have "Do Not Flush" labeling, and for other purposes. *Companion bill of S. 1092.*	06/23/2025 Passed House via suspension, received in the Senate	
H.R.2344 - Water ISAC Threat Protection Act	This bill would provide funding for clean water and wastewater utilities to become members of the Water Information Sharing and Analysis Center (WaterISAC). The WaterISAC is a critical source of information and best practices for water systems to protect against, mitigate, and respond to threats. *Companion bill of S. 1118.*	03/25/2025 Referred to the Subcommittee on Water Resources and Environment	
H.R.2594 - To establish a Water Risk and Resilience Organization to develop risk and resilience requirements for the water sector	This bill would establish the Water Risk and Resilience Organization (WRRO), a non-governmental entity certified by the EPA to develop cybersecurity risk and resilience requirements for water systems serving over 3,300 people. The WRRO will create and enforce cybersecurity standards, monitor compliance, and assess system vulnerabilities, while the EPA retains approval and oversight authority. The bill also authorizes $10 million in funding and ensures coordination with state and federal rules without preempting state authority.	04/02/2025 Referred to the Committee on Transportation and Infrastructure, and in addition to the Committee on Energy and Commerce	
H.R.2766 - Special District Fairness and Accessibility Act	This bill would create the first formal federal definition of "special district." The bill also directs the White House Office of Management and Budget (OMB) to provide guidance to federal agencies to recognize special districts as local governments, ensuring they have access to appropriate federal financial assistance. *Companion bill of S.2014.*	03/18/2026 Committee Consideration and Mark-up Session Held	**Rep. Julia Brownley, Rep. George Whitesides**
H.R.2940 - Advancing Water Reuse Act	This bill seeks to establish a new investment credit, specifically the "qualifying water reuse project credit." This proposed credit would equal 30 percent of the qualified investment for projects that install water recycling systems in industrial or manufacturing facilities, replace freshwater use with recycled water, or build municipal water recycling systems.	04/17/2025 Referred to the House Committee on Ways and Means	
H.R.3035 - Restoring WIFIA Eligibility Act	This bill would seek to ensure that if a project's funding is repaid entirely through non-federal revenue sources and the recipient is not a federal agency, then the assistance will be classified as non-federal for budgeting purposes under the Federal Credit Reform Act of 1990. This change is intended to expand access to WIFIA loans and loan guarantees by preventing federal classification from limiting support for state, local, and other non-federal infrastructure projects. *Companion bill of S.1760.*	04/28/2025 Referred to the Subcommittee on Water Resources and Environment	
H.R.3110 - PFAS–Free Procurement Act	This bill would prohibit the federal procurement of products containing perfluorooctane sulfonate or perfluorooctanoic acid—commonly known as PFAS—and facilitate the procurement of PFAS-free products.	04/30/2025 Referred to the House Committee on Oversight and Government Reform	

H.R.3158 - Help Hoover Dam Act	This bill would authorize the Bureau of Reclamation to access approximately $50 million in long-stranded, unused funds from the Colorado River Dam Fund for operations, maintenance, and improvements at the Hoover Dam. It also allows Reclamation to partner with hydropower contractors to carry out authorized activities such as upgrades, clean-up efforts, and maintenance. *Companion bill of S.1570.*	05/01/2025 Read twice and referred to the Committee on Energy and Natural Resources	
H.R.3272 - COMPOST Act	This bill would add composting as a conservation practice for USDA conservation programs. Both the act of producing compost from organic waste and using compost on a farm would qualify as a conservation practice.	05/08/2025 Referred to the House Committee on Agriculture	**Rep. Julia Brownley**
H.R.3300 - Forest Protection and Wildland Firefighter Safety Act	This bill would exempt aerial fire retardant use from NPDES permits during wildfires.	05/08/2025 Referred to the Subcommittee on Water Resources and Environment	
H.R.3376 - Water Affordability, Transparency, Equity, and Reliability Act of 2025	This bill proposes a range of measures aimed at improving water quality and infrastructure across the country. Key provisions include efforts to address contaminants such as lead and PFAS, expanded grant support for low-income communities to help prevent water service shutoffs, and the creation of a $35 billion annual trust fund to support water and sewer system upgrades. The legislation also includes workforce development components intended to create jobs in the communities where projects are implemented. *Companion bill of S. 1730*	05/13/2025 Referred to the Subcommittee on Water Resources and Environment	
H.R.3427 - Water Resources Technical Assistance Review Act	This bill would require the Comptroller General of the United States to review all clean water-related technical assistance authorities of the Environmental Protection Agency. *Companion bill of S.3317.*	09/16/2025 Received in the Senate and Read twice and referred to the Committee on Environment and Public Works	
H.R.3525 - Regulatory Accountability Act	This bill seeks to limit agency overreach by requiring new rules to be clearly tied to congressional authority, ending rulemaking via informal guidance, and strengthening transparency through public comment and data disclosure. It also reforms the Congressional Review Act and ensures courts independently review agency interpretations rather than deferring to them. *Companion bill of S. 1708.*	05/20/2025 Referred to the House Committee on the Judiciary	
H.R.3553 - BRUSH Fires Act	This bill would direct the Secretary of Agriculture to carry out a study with respect to the effectiveness of available wildfire mitigation methods in reducing the risk of wildfire and the severity of damages from wildfire in communities within or adjacent to shrubland ecosystems	02/10/2026 Subcommittee Hearings Held	**Rep. Julia Brownley, Rep. George Whitesides**

H.R.3717 - Golden Mussel Eradication and Control Act	This bill would amend the Nonindigenous Aquatic Nuisance Prevention and Control Act of 1990 to specifically address the golden mussel, with a focus on the Sacramento-San Joaquin Delta. The bill authorizes $15 million annually from FY26–FY30 to support research, demonstration programs, and competitive grants for prevention, monitoring, control, and eradication methods. It also requires the development of guidelines, early warning systems, and coordination among federal, state, and local entities to mitigate ecological and infrastructure impacts.	06/04/2025 Referred to the Committee on Transportation and Infrastructure, and in addition to the Committee on Natural Resources	
H.R.3816 - Weather Act Reauthorization	This bill seeks to enhance the accuracy and effectiveness of weather forecasting and emergency preparedness. It focuses on modernizing research programs, supporting development of advanced forecasting technologies, and improving communication of severe weather events. The legislation also expands NOAA's ability to work with private sector data providers and continues support for key public tools used in drought and soil moisture monitoring.	06/06/2025 Referred to the Committee on Science, Space, and Technology, and in addition to the Committees on Natural Resources, Energy and Commerce, and Foreign Affairs	
H.R. 3857 - Snow Water Supply Forecasting Reauthorization Act	This bill would amend the existing program to integrate advanced snowpack measurement and modeling techniques, including airborne laser altimetry and physics-based hydrologic models. The bill removes a prior reporting requirement, emphasizes improved real-time snow and water supply forecasts, and authorizes $3 million annually for FY 2027 through 2031.	03/17/2026 Committee on Energy and Natural Resources Subcommittee on Water and Power hearings held	
H.R.3862 - Clean Water SRF Parity Act	This legislation would amend eligibility provisions for the Federal Water Pollution Control Act's Clean Water State Revolving Fund (CWSRF), so that private wastewater providers have the ability to benefit from the program's low-interest loans.	06/10/2025 Referred to the House Committee on Transportation and Infrastructure	
H.R.3888 - Water Quality Criteria Development and Transparency Act	This bill would require the EPA to use a public notice-and-comment process before finalizing new criteria, allowing input from communities, industries, and other stakeholders. The bill also allows for limited judicial review to help ensure that EPA decisions are transparent, legally justified, and within the agency's authority.	06/10/2025 Referred to the House Committee on Transportation and Infrastructure	
H.R.3892 - Financing Lead Out of Water (FLOW) Act	This bill would simplify the tax process for public water systems to use tax-exempt bonds for replacing private lead service lines by exempting these projects from the "business use test." This change reduces delays and costs caused by the current requirement to verify business operations at each affected residence. *Companion bill of S.2007.*	06/10/2025 Referred to the House Committee on Ways and Means	
H.R. 3897 - Confidence in Clean Water Permits Act	This bill seeks to clarify that permits issued under the National Pollutant Discharge Elimination System (NPDES) must include clear and specific pollutant limits. It affirms that permit holders are considered in compliance if they adhere to the terms of their permit, in line with the U.S. Supreme Court's decision in *San Francisco v. EPA* .	06/11/2025 Referred to the House Committee on Transportation and Infrastructure	

H.R. 3898 - Promoting Efficient Review for Modern Infrastructure Today (PERMIT) Act	Package of Clean Water Act (CWA) reform bills intended to streamline the federal permitting process for infrastructure projects, including energy and water initiatives. It sets timelines for agency reviews, encourages coordination between federal agencies, and allows the use of prior environmental analyses when new projects are substantially similar. The bill aims to make permitting more efficient while ensuring compliance with existing environmental laws such as NEPA and the Endangered Species Act.	12/15/2025 Passed House and Received in the Senate and referred to the Committee on Environment and Public Works	
H.R. 3899 - Clarifying Federal General Permits Act	This bill would authorize the EPA to issue general permits under the National Pollutant Discharge Elimination System (NPDES) and requires the agency to either renew these permits or provide at least two years' notice if a permit will not be renewed.	06/11/2025 Referred to the House Committee on Transportation and Infrastructure	
H.R. 3900 - Water Quality Technology Availability Act	This bill would require that any technology used to meet wastewater discharge standards under effluent limitation guidelines (ELGs) must be commercially available within the United States.	06/11/2025 Referred to the House Committee on Transportation and Infrastructure	
H.R.3902 - Restoring Federalism in Clean Water Permitting Act	This bill would direct the Administrator of the Environmental Protection Agency to review and evaluate current regulations governing the process by which states assume authority for issuing Section 404 Clean Water Act permits, with the goal of making the process more efficient and encouraging broader state participation. It also sets a 60-day limit for judicial review of the EPA's approval of state program assumptions.	06/11/2025 Referred to the House Committee on Transportation and Infrastructure	
H.R.3922 - Cross-Boundary Wildfire Solutions Act	This bill seeks to enhance the effectiveness and efficiency of wildfire mitigation efforts across different land ownerships by identifying gaps in existing federal policies and encouraging greater coordination among agencies and stakeholders. *Companion bill of S.2033.*	02/11/2026 Ordered to be Reported in the Nature of a Substitute (Amended) by Unanimous Consent	
H.R.3924 - Wildfire Risk Evaluation Act	This bill would direct the Secretary of Agriculture, the Secretary of the Interior, and the Secretary of Homeland Security to carry out a quadrennial fire review. The findings will be used to guide long-term strategies to improve wildfire preparedness, response, and coordination among federal agencies. *Companion bill of S.2039*	12/11/2025 Subcommittee Hearings Held	
H.R.3928 - Improving Water Quality Certifications and American Energy Infrastructure Act	This bill clarifies the scope and process of state water quality certifications under Section 401 of the Clean Water Act. It limits evaluations to the direct impacts of the federally licensed or permitted activity on water quality, not unrelated sources. The bill also establishes clearer procedures and timelines, including requiring states to provide written decisions based solely on water quality considerations and to notify applicants within 90 days if additional information is needed to process their request.	06/11/2025 Referred to the House Committee on Transportation and Infrastructure	

H.R.3934 - Water Quality Standards Attainability Act	This bill would require that water quality standards (WQS), developed by states and approved by the EPA, consider the feasibility of meeting those standards using commercially available treatment technologies. It also directs that long-term control plans for combined storm and sanitary sewer systems be taken into account during the standard-setting process.	06/11/2025 Referred to the House Committee on Transportation and Infrastructure	
H.R.3991 - Research for Healthy Soils Act	This legislation would authorize the U.S. Department of Agriculture to make grants available to study the incidence and impacts of microplastics and PFAS in biosolids on farmland. *Companion bill of S. 2500.*	06/12/2025 Referred to the House Committee on Agriculture	
H.R.4038 - Wildfire Response and Preparedness Act	This bill would create a 30-minute national standard response time to the extent practical to any wildland fire on federal land administered by the Secretaries of Agriculture and the Interior. *Companion bill of S.902.*	01/14/2026 Subcommittee Hearings Held	
H.R.4075 - Fire Weather Development Act	This bill would direct the Administrator of the National Oceanic and Atmospheric Administration (NOAA) to establish a program to improve fire weather and fire environment forecasting, detection, and delivery of products or services through collaboration with other Federal and State agencies or departments, local emergency managers, and relevant entities.	06/23/2025 Referred to the House Committee on Science, Space, and Technology	
H.R.4109 - Recycling and Composting Accountability Act	This bill would direct the Environmental Protection Agency (EPA) to improve data collection and transparency around recycling and composting infrastructure across the United States. It requires the EPA to collaborate with states, local governments, and tribes to assess and report on the current state of composting and recycling facilities, estimate participation and contamination rates, and evaluate access to these services. The bill mandates regular reporting on federal agency recycling performance, studies how recyclable materials are diverted from reuse markets, and encourages market development for recycled and composted materials	06/24/2025 Referred to the House Committee on Energy and Commerce	
H.R.4121 - Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2026	This bill provides FY2026 appropriations for the Department of Agriculture (USDA), the Food and Drug Administration, and related agencies, including the following that manage or assist in recovery of wildfire damage: U.S. Forest Service (USFS) Natural Resources Conservation Service (NRCS) *House version of S.2256*	Signed 11/12/2025 Public Law 119-37	
H.R.4144 - Groundwater Rise and Infrastructure Preparedness Act	This bill would direct the U.S. Geological Survey (USGS) to map projected groundwater rise along the U.S. coastline through 2100 and assess its impacts on flooding risk and saltwater intrusion. The bill mandates the creation of public tools for planners and emergency managers and calls for a two-phase study, in collaboration with the National Academies, to evaluate how groundwater rise may affect infrastructure—such as roads, sewers, and building foundations—as well as public health risks, including contamination of drinking water and farmland.	06/25/2025 Referred to the House Committee on Natural Resources	

H.R.4168 - PFAS National Drinking Water Standard Act	This bill would codify the EPA's final PFAS National Primary Drinking Water Regulation, establishing enforceable maximum contaminant levels (MCLs) for six of the most hazardous PFAS chemicals, including PFOA and PFOS, in public drinking water systems.	06/26/2025 Referred to the House Committee on Energy and Commerce	
H.R.4181 - Wildfire Infrastructure and Landowner Tax Relief Act	This bill aims to encourage homeowners to invest in wildfire mitigation by offering targeted federal tax relief. It excludes from taxable income any government or nonprofit assistance used for hazardous fuel reduction or firefighting infrastructure on personal property, and allows an above-the-line tax deduction for out-of-pocket expenses related to wildfire prevention. The bill is designed to reduce financial barriers to proactive fire risk reduction and support community resilience.	06/26/2025 Referred to the House Committee on Ways and Means	
H.R.4192 - Military PFAS Transparency Act	This bill would requirs the Department of Defense to submit annual, site-specific reports on PFAS cleanup progress, funding, and challenges. It calls for improved, risk-based cleanup strategies and expanded lab testing capacity. The bill also mandates the creation of a public dashboard within one year to provide accessible, up-to-date information on PFAS cleanup efforts.	06/26/2025 Referred to the House Committee on Armed Services	
H.R.4213 - Department of Homeland Security Appropriations Act, 2026	This bill provides FY2026 appropriations for the Department of Homeland Security (DHS), including the relevant agencies and activities: Federal Emergency Management Agency (FEMA)	06/26/2025 Placed on the Union Calendar, Calendar No. 139	
H.R.4302 - Improving Atmospheric River Forecasts Act	This bill would require the National Oceanic and Atmospheric Administration (NOAA) to establish a forecast improvement program within the National Weather Service. *Companion bill of S.322.*	07/07/2025 Referred to the House Committee on Science, Space, and Technology	**Rep. George Whitesides**
H.R.4315 - National Infrastructure Investment Corporation (NIIC) Act	This bill would create a bank that would be authorized to provide loans and loan guarantees to local infrastructure projects, giving local governments another potential funding source in addition to support provided by the Bipartisan Infrastructure Law or other federal and state funding sources.	07/10/2025 Referred to the House Committee on Transportation and Infrastructure	
H.R.4466 - Cultivating Investment in Recycling and Circular Local Economies (CIRCLE) Act	This bill would create a 30% investment tax credit to encourage upgrades and expansion of recycling infrastructure in the U.S. This credit would gradually phase out over 10 years. Local governments could also receive direct rebates for their recycling investments.	07/16/2025 Referred to the House Committee on Ways and Means	

H.R.4486 - Microplastics Safety Act	This bill would direct the Food & Drug Administration to submit a report to Congress on the human health impacts of exposure to microplastics in food and water, focusing on risks to children's health, the endocrine system, and reproductive health, as well as associated risks related to cancer and chronic illnesses. *Companion bill of S.2353.*	07/17/2025 Referred to the House Committee on Energy and Commerce	
H.R.4503 - ePermit Act	This bill aims to improve environmental reviews and authorizations through the use of interactive, digital, and cloud-based platforms. This is intended to enhance coordination among Federal, State, and local agencies and project sponsors, make community engagement more accessible, and increase transparency by establishing robust data architectures and modern software solutions. The bill seeks to achieve these goals by developing data standards, prototype tools, and a unified interagency data system, including a common authorization portal. *Companion bill to S.3800.*	12/10/2025 Passed in House and Received in the Senate and referred to the Committee on Environment and Public Works	
H.R.4553 - Energy and Water Development and Related Agencies Appropriations Act, 2026	This bill provides FY2025 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 several independent agencies. *House version of S.3293.*	Signed 01/23/2026 Public Law 119-74	
H.R.4556 - Protect Our Treatment for Enamel, Erosion, and Tooth Health (TEETH) Act	This bill would would require the Environmental Protection Agency (EPA) to consult and publish a rapid response evidence review by independent and nonpartisan experts at the National Academies of Sciences, Engineering, and Medicine (NASEM) when proposing new water fluoridation guidance.	07/21/2025 Referred to the House Committee on Energy and Commerce	
H.R.4669 - FEMA Act	This bill would restore FEMA as an independent Cabinet-level agency to lead disaster response more effectively. It would speed recovery by providing states with project-based grants, reducing bureaucracy, and encouraging mitigation investments. The bill would reform permitting and procurement, establish a Recovery Task Force to close old disaster cases, simplify aid applications, and improve communication with survivors. It would enhance pre-disaster mitigation, maintain state flexibility on building codes, prohibit political bias in aid, increase transparency, and mandate reviews to improve FEMA's policies and reduce fraud.	09/03/2025 Ordered to be Reported (Amended) by the Yeas and Nays: 57 - 3	
H.R.4733 - Low-Income Household Water Assistance Program Establishment Act	This bill would make permanent a national water assistance program by directing the Secretary of Health and Human Services to provide grants to states, territories, and tribes to help low-income households pay drinking water and wastewater bills. The program would align eligibility with existing federal assistance programs like LIHEAP, TANF, and SNAP, ensuring consistent income requirements. It would also provide technical support to small, rural, and Tribal water systems to improve service delivery.	07/23/2025 Referred to the Committee on Transportation and Infrastructure, and in addition to the Committee on Energy and Commerce	**Rep. Julia Brownley**
H.R.4754 - Department of the Interior, Environment, and Related Agencies Appropriations Act, 2026	This bill provides FY2025 appropriations for the Department of the Interior, the Environmental Protection Agency (EPA), and several related agencies including the U.S. Fish and Wildlife Service, the U.S. Forest Service. *House version of S.2431.*	Signed 01/23/2026 Public Law 119-74	

H.R.4776 - SPEED Act	The bill proposes changes to the National Environmental Policy Act (NEPA) permitting process. It would establish shorter permitting timelines, modify requirements for environmental analyses, and define “Major Federal Action” to clarify when NEPA applies. The bill also includes provisions for judicial review of NEPA claims, such as a 150-day filing deadline, a revised standard of review, and limits on certain procedural measures that can delay projects. *Counterpart bill to S.3224*	12/18/2025 Passed House 221-196	
H.R.4903 - Plastic Health Research Act	This bill establishes a comprehensive federal research program on plastic exposure health effects, covering macro-, micro-, and nanoplastics. It authorizes grants for research entities, creates "Centers of Excellence for Plastic Exposure Health Research," and requires annual congressional reporting. The legislation appropriates $10 million annually from 2026-2030 for each program section, prioritizing improved research methodologies and addressing knowledge gaps in plastic-related health impacts.RetryClaude can make mistakes. Please double-check responses.	08/05/2025 Referred to the House Committee on Energy and Commerce	
H.R.4961 - Public Utility Remediation and Enhancement for Water Act	This bill aims to establish a grant program administered by the Environmental Protection Agency (EPA) to help publicly owned treatment works comply with requirements for treating emerging contaminants, PFAS. The legislation authorizes $200,000,000 for each of the fiscal years 2026 through 2028 to fund these efforts.	08/12/2025 Referred to the House Committee on Transportation and Infrastructure	
H.R.5002 - Protect Americans from Climate Disasters Act	This bill seeks to reinstate all employees and programs at the National Oceanic and Atmospheric Administration (NOAA) that assist communities in preparing for and mitigating damage from extreme weather events. This includes ensuring the National Weather Service, is fully staffed.	08/19/2025 Referred to the Committee on Natural Resources, and in addition to the Committee on Science, Space, and Technology	
H.R.5072 - Water Crisis Prevention Act	This bill seeks to require the Comptroller General of the United States to conduct a review concerning existing Federal Emergency Management Agency (FEMA) funding available to States, localities, individuals, and small businesses after water infrastructure failures. Upon completing this review, the Comptroller General will submit a report to Congress with recommendations for identifying high-risk areas and providing funding to mitigate future water infrastructure disasters.	08/29/2025 Referred to the House Committee on Transportation and Infrastructure	
H.R.5078 - PILLAR Act	The bill would reauthorize the State and Local Cybersecurity Grant Program for ten years, maintaining a 60% federal cost share for single entities and 70% for multi-entity groups. It offers a 5% bonus in federal cost share for adopting multi-factor authentication by FY2028. The Act broadens coverage to include operational technology, promotes responsible AI use, prioritizes outreach to small communities, and requires state and local entities to plan for sustaining cybersecurity investments long term.	11/18/2025 Received in the Senate and referred to the Committee on Homeland Security and Governmental Affairs	
H.R.5089 - Weather Act Reauthorization Act	This bill seeks to reauthorize and amend the 2017 Weather Research and Forecasting Innovation Act to enhance NOAA's weather research and forecasting capabilities. The legislation focuses on improving public safety through better tornado, hurricane, and tsunami warnings while investing in AI, high-performance computing, and modernized radar systems. It also expands commercial weather data partnerships and provides specialized forecasting services for agriculture and water management.	09/10/2025 Ordered to be Reported (Amended) by Voice Vote	**Rep. George Whitesides**

H.R.5166 - Financial Services and General Government Appropriations Act, 2026	This bill provides FY2026 funding for the Department of the Treasury, the Executive Office of the President, the judiciary, the District of Columbia, and several independent agencies. *House version of S.3290.*	Signed 02/03/2026 Public Law 119-75	
H.R.5342 - Commerce, Justice, Science, and Related Agencies Appropriations Act, 2026	This bill provides FY2025 appropriations to the Department of Commerce, the Department of Justice (DOJ), the science agencies, and several related agencies. Within that includes the National Oceanic and Atmospheric Administration (NOAA). *House version of S.2354.*	Signed 01/23/2026 Public Law 119-74	
H.R.5513 - Water Infrastructure Resiliency Act	This bill seeks to expand eligibility for additional subsidization for various technological investments. Specifically, the amendment targets processes, materials, techniques, and technology—including asset management software and advanced construction systems—used to meet goals related to water-efficiency, energy-efficiency, and stormwater runoff mitigation.	09/20/2025 Referred to the Subcommittee on Water Resources and Environment	
H.R.5566 - Water Infrastructure Resilience and Sustainability Act	The legislation would reauthorize the following three water infrastructure resilience programs for five years (Fiscal Year 2027-2031), at current authorization levels: Drinking Water System Infrastructure Resilience and Sustainability Program Midsize and Large Drinking Water System Infrastructure Resilience and Sustainability Program Clean Water Infrastructure Resiliency and Sustainability Program *Companion bill to S.3590.*	09/26/2025 Referred to the Committee on Energy and Commerce, and in addition to the Committee on Transportation and Infrastructure	
H.R.5610 - Improving Drought Monitoring Act	This bill would extend the Drought Monitor program through 2030, create an interagency working group to improve data consistency and reliability, and require coordination between the Farm Service Agency and Forest Service. The group must develop better data methods and report recommendations to Congress within a year.	09/26/2025 Referred to the House Committee on Agriculture	
H.R.5652 - Wildfire Recovery Act	This bill would amend the Stafford Act to guarantee that the federal government covers at least 75% of eligible fire management assistance costs. It directs FEMA to establish, within three years, criteria for raising the federal cost share based on the financial burden to state and local governments. The bill also requires FEMA to update its policies to reimburse governments for the predeployment of firefighting assets in anticipation of wildfires.	09/30/2025 Referred to the House Committee on Transportation and Infrastructure	
H.R.5661 - Water Preservation and Affordability Act	This bill would amend the Federal Water Pollution Control Act to promote “resource preservation techniques” such as water and energy efficiency and stormwater mitigation. It requires their use in funded projects and increases funding for wastewater efficiency and clean water resiliency programs through FY2031.	09/30/2025 Referred to the House Committee on Transportation and Infrastructure	

H.R.5730 - Sewer Overflow and Stormwater Reuse Grant Reauthorization Act	This bill would reauthorize federal funding for the Sewer Overflow and Stormwater Reuse Municipal Grants Program under the Federal Water Pollution Control Act. The bill updates the program's authorization to provide $350 million annually for fiscal years 2026 through 2031.	10/10/2025 Referred to the House Committee on Transportation and Infrastructure	
H.R.5823 - Watershed Protection and Forest Recovery Act	This bill would authorize the Secretary of Agriculture to carry out emergency watershed protection measures on National Forest System (NFS) land by establishing the "Emergency Forest Watershed Program". These measures are defined as actions necessary for runoff retardation, soil-erosion prevention, and flood mitigation resulting from a natural disaster or natural occurrence that causes sudden impairment to natural resources on NFS land.	10/24/2025 Referred to the House Committee on Agriculture	
H.R.5833 - Clean Water Affordability Act	This bill would update the Federal Water Pollution Control Act to expand and clarify how states can provide additional financial assistance through their Clean Water State Revolving Funds (CWSRF). The bill raises the cap on how much of a state's annual federal capitalization grant can be used for subsidization—such as grants, negative-interest loans, or principal forgiveness—to the greater of 50% of that grant or the state's 10-year average of excess state contributions. It also requires states to use at least 20% of their federal grant for subsidization if there are eligible applications.	10/24/2025 Referred to the House Committee on Transportation and Infrastructure	
H.R.5834 - Critical Water Supplies for Resilient Communities Act	This bill seeks to modernize and extend the federal program that funds alternative water source projects. The bill removes the "pilot program" designation and converts it into a full grant authority, while updating the definition of "critical water supply needs" to focus on publicly informed local, regional, or statewide water supply and drought-resilience planning. It also requires EPA to submit annual reports to Congress detailing funded projects and how they meet identified water supply challenges. Finally, the bill extends the program's authorization through 2031.	10/24/2025 Referred to the House Committee on Transportation and Infrastructure	
H.R.5846 - Solid Waste Infrastructure for Recycling Grant Program Reauthorization Act	This bill would reauthorize funding for the Solid Waste Infrastructure for Recycling Grant Program. Specifically, the legislation amends the Save Our Seas 2.0 Act to allocate $65,000,000 annually for the program from fiscal years 2027 through 2036.	10/28/2025 Referred to the House Committee on Transportation and Infrastructure	
H.R.5868 - Water Cybersecurity Enhancement Act	This bill seeks to address the growing threat of cyberattacks against public water systems. Specifically, the legislation seeks to provide grants under the Drinking Water Infrastructure Risk and Resilience Program to fund training programs and materials. These new provisions would support public water systems in protecting themselves from and effectively responding to cyberattacks, extending the program's authorization from 2026 through 2031.	10/28/2025 Referred to the House Committee on Energy and Commerce	

H.R.6075 - Water Infrastructure Modernization Act	This bill would amend the Federal Water Pollution Control Act to modernize water infrastructure by defining "intelligent water infrastructure technology," including real-time monitoring, AI-driven optimization, predictive maintenance, and advanced digital design tools, and by reauthorizing the alternative water source pilot program while doubling authorized funding to $50 million through 2028.	11/18/2025 Referred to the House Committee on Transportation and Infrastructure	
H.R.6090 - FRESHER Act	This bill would amend the Federal Water Pollution Control Act, directing the Interior Secretary to study the environmental impacts of stormwater runoff from oil and gas operations, with findings due to Congress within one year.	11/18/2025 Referred to the House Committee on Transportation and Infrastructure	**Rep. Brad Sherman**
H.R.6094 - Fire Innovation Unit Act	This bill would establish a seven-year public-private wildfire technology pilot, led jointly by the Agriculture and Interior Departments, to test and deploy innovative prevention, detection, and mitigation technologies, with participating agencies and partners defined and annual reports to Congress required. *Companion bill of S.3190.*	11/18/2025 Referred to the Committee on Natural Resources, and in addition to the Committees on Agriculture, and Science, Space, and Technology	
H.R.6116 - Safe Hydration is an American Right in Energy Development Act	This bill would require testing and public reporting of underground drinking water sources before, during, and after hydraulic fracturing operations, prohibit injection without compliance, and direct EPA to maintain a public database, with an exemption where no drinking water source exists within one mile of a site.	11/18/2025 Referred to the House Committee on Energy and Commerce	**Rep. Brad Sherman**
H.R.6163 - Determination of NEPA Adequacy Streamlining Act	This bill would allow federal agencies to rely on prior environmental reviews for new projects deemed substantially the same, or to modify existing documents to meet NEPA requirements when they are not.	11/19/2025 Referred to the House Committee on Natural Resources	
H.R.6204 - Large-Scale Water Recycling Reauthorization Act	This bill would reauthorize the Large-Scale Water Recycling by an additional 5 years. *Companion bill to S.3693.*	11/20/2025 Referred to the House Committee on Natural Resources	
H.R.6229 - Water Infrastructure Finance and Innovation Act Amendments of 2025	This bill would reauthorize the WIFIA program and update it to better support small and rural communities by defining "small community" as those with populations under 25,000 and requiring expanded outreach and technical assistance, including engineering and financial planning support. The bill authorizes the use of collaborative project delivery methods such as design-build and construction management at-risk, directs a study on their effectiveness, reauthorizes Corps of Engineers Water Infrastructure Financing funding of $68 million for EPA and $15 million for the Army Corps through FY 2029, and extends secured loan maturities to up to 55 years for projects with useful lives exceeding 35 years.	11/20/2025 Referred to the Committee on Transportation and Infrastructure, and in addition to the Committee on Energy and Commerce	

H.R.6279 - Urban Canal Modernization Act	This bill would amend the Omnibus Public Land Management Act of 2009 to authorize certain extraordinary operation and maintenance work specifically for "urban canals of concern". An "urban canal of concern" is defined as a transferred works or segment that, if it were to fail, would result in an estimated at-risk population exceeding 100 individuals, and which the Secretary of the Interior determines to be an urban canal reach. The bill authorizes the Secretary or the transferred works operating entity to carry out necessary extraordinary operation and maintenance work on these canals. *Companion bill of S.2753.*	11/21/2025 Referred to the House Committee on Natural Resources	
H.R.6626 - PFAS Accountability Act	This bill would amend the Toxic Substances Control Act to establish a federal cause of action for individuals significantly exposed to PFAS, require medical monitoring at the expense of responsible manufacturers, and provide detailed provisions for claims, including presumptions of exposure for individual and class-action plaintiffs, while preserving state-law remedies. *Companion bill to S.3460.*	12/11/2025 Referred to the Committee on Energy and Commerce, and in addition to the Committee on the Judiciary	
H.R.6639 - Water Agency and Transparency Enhancement Review (WATER) Act	This bill would codify parts of Executive Order 14181 to streamline water resources and disaster-response efforts in California. Specifically, the bill would create interagency coordination at the federal level to address permitting obstacles for water projects, with a focus on the National Environmental Policy Act (NEPA) and the Endangered Species Act (ESA). It directs the Secretaries of the Interior and Commerce to identify major surface and groundwater projects, assign compliance officials, and propose changes to regulations or procedures that “unduly burden” these projects by causing unnecessary delays, costs, or obstacles.	12/11/2025 Referred to the House Committee on Natural Resources	
H.R.6640 - Build Now Act	This bill would streamline environmental reviews for Central Valley Project (CVP) enhancement projects by requiring completion within one year of permit submission. The bill defines “CVP enhancement project” and clarifies that “environmental review” includes NEPA and ESA Section 7 compliance. If the deadline is missed, the agency must either grant an extension with the applicant’s consent or deny the permit	12/11/2025 Referred to the House Committee on Natural Resources	
H.R.6641 - Central Valley Water Solution Act	This bill would provide financial and technical support for over 20 water infrastructure projects in California’s Central Valley, including groundwater banking, recharge basins, reverse osmosis plants, and canal subsidence correction. Most funding would be non-reimbursable and exempt from matching requirements, but projects must comply with environmental laws and coordinate with tribes and state agencies.	12/11/2025 Referred to the House Committee on Natural Resource	
H.R.6667 - PFAS Research and Development Reauthorization Act	This bill would reauthorize EPA’s research and development authority on PFAS through 2030. The bill extends funding for projects measuring PFAS in air and water, studying human health impacts, and mitigating environmental contamination.	12/11/2025 Referred to the Committee on Energy and Commerce, and in addition to the Committees on Science, Space, and Technology	

H.R.6668 - Clean Water Standards for PFAS Act	This bill would require EPA to develop Clean Water Act water quality criteria for all measurable PFAS or PFAS classes within three years and establish effluent limitations guidelines (ELGs) for eight priority industry categories. The bill mandates immediate PFAS monitoring for three additional industries—Pulp, Paper, and Paperboard; Airports; and Electrical and Electronic Components—with a determination on ELG standards by December 31, 2026. It also requires EPA to promulgate Method 1633 by January 31, 2026, authorizes $1 billion from FY 2026–2030 to help publicly owned treatment works address PFAS contamination, and provides $12 million annually over the same period to support EPA implementation. *Companion bill of S.3457.*	12/11/2025 Referred to the House Committee on Transportation and Infrastructure	
H.R.6669 - No Taxation on PFAS Remediation Act	This bill would amend the Internal Revenue Code to exclude from federal income tax any reimbursements individuals receive for cleaning up PFAS contamination, particularly in communities without municipal water service. The bill also extends the statute of limitations for related credits or refunds and applies retroactively to reimbursements made in taxable years beginning after December 31, 2020	12/11/2025 Referred to the House Committee on Ways and Means	
H.R.6984 - Data Center Transparency Act	This bill would require data centers to report on their environmental impacts, including water use, recycling practices, and greenhouse gas and pollutant emissions. The EPA would provide quarterly updates, while the Energy Information Administration would track electricity consumption and effects on residential utility costs.	01/08/2026 Referred to the House Committee on Energy and Commerce	
H.R.6990 - PROTECT Act	This bill would require the EPA to classify all PFAS chemicals as hazardous air pollutants within 180 days and, within one year, identify and regulate industrial sources of emissions.	01/08/2026 Referred to the House Committee on Energy and Commerce	
H.R.7376 - Local Water Protection Act	This bill would reauthorize $200 million annually for the voluntary grant fund to give local and state governments the flexibility to make conservation improvements aimed at decreasing water pollutants through partnerships within their communities.	02/11/2026 Ordered to be Reported by Voice Vote	
H.R.7461 - FEMA Accountability Act	This bill would increase transparency in disaster funding by requiring FEMA to submit monthly reports to Congress on the status of the Disaster Relief Fund. These reports must detail spending, unobligated balances, and delayed projects, follow standardized data formats, and be publicly posted online within ten days to improve oversight and accessibility.	02/10/2026 Referred to the House Committee on Transportation and Infrastructure	
H.R.7543 - Plastic Pellet Free Waters Act	This bill would require the Environmental Protection Agency to establish regulations prohibiting the discharge of plastic pellets into waterways. The bill directs EPA to incorporate zero-discharge standards into federal and state wastewater and stormwater permits for manufacturers, processors, and transporters of pre-production plastics, aiming to prevent spills and runoff that contribute to microplastic pollution and protect water quality.	02/12/2026 Referred to the House Committee on Transportation and Infrastructure	
H.R.7567 - Farm, Food, and National Security Act of 2026	This is the 2026 iteration of the Farm Bill, which would reauthorize and modify Department of Agriculture programs through FY2031.	03/04/2026 Ordered to be Reported (Amended) by the Yeas and Nays: 34 - 17	

H.R.7845 - DROUGHT Act	This bill would increase flexibility under the WIFIA program by allowing certain high-priority projects—such as those in extreme drought areas, low-income communities, or of regional or national significance—to receive up to 90 percent federal financing, up from the current 80 percent cap. The bill also prioritizes these projects for funding while maintaining existing loan repayment terms, timelines, and interest rates.	03/05/2026 Referred to the Committee on Transportation and Infrastructure, and in addition to the Committee on Energy and Commerce	
H.R.7889 - Advancing Water Research and Collaboration Act	This bill would reauthorize the Water Resources Research Act (WRRA) from Fiscal Year 2026 through Fiscal Year 2029 and increase the appropriations authorization for the program from $15 million to $16 million per year. The Water Resources Research Act of 1984, established a network of Water Resources Research Institutes (WRRIs) in each state that work to address state & regional water challenges with federal funds.	03/09/2026 Referred to the House Committee on Natural Resources	**Rep. Julia Brownley**
H.R.8016 - Forever Chemical Regulation and Accountability Act	This bill would establish a comprehensive framework to assess, report on, and phase out non-essential uses of PFAS. The bill requires studies on health and environmental risks, mandates reporting and phase-out schedules for manufacturers, and directs EPA to eliminate releases of PFAS into the environment within 10 years. It also sets deadlines for removing PFAS from certain consumer products, creates regional response hubs for cleanup and alternatives, imposes fees to support oversight, strengthens legal accountability for contamination, and updates liability rules to ensure affected individuals can pursue claims. *Companion bill to S.4153.*	03/19/2026 Referred to the Committee on Energy and Commerce, and in addition to the Committees on Oversight and Government Reform, Science, Space, and Technology, Transportation and Infrastructure, and Armed Services	
H.R.8027 - Advanced Wastewater Treatment Assistance Act	This bill would establish a five-year federal grant program to support water utilities in deploying advanced treatment technologies that remove contaminants such as PFAS and reduce harmful algal blooms. The bill authorizes $1 billion over five years to cover up to 50 percent of project costs, directs at least 49 percent of funding to financially disadvantaged communities with waived cost-share requirements, limits administrative costs, and requires a national study on the effectiveness of these technologies.	03/19/2026 Referred to the House Committee on Transportation and Infrastructure	
Senate			
Legislation	**Summary**	**Last Action**	**JPA Delegation Cosponsors**
S.77 - The Early Participation in Regulations Act	This bill would mandate that federal agencies provide an advance notice of proposed rule making for "major rules," which have significant economic or regulatory impact to encourage early public input.	01/13/2025 Read twice and referred to the Committee on Homeland Security and Governmental Affairs	
S.91 - Western Wildfire Support Act	The bill mandates the USDA and Department of the Interior to establish spatial fire management plans by FY2026. It creates Treasury accounts for wildfire funding, programs for training volunteer firefighters, grants for slip-on tank units, the Theodore Roosevelt Genius Prize for invasive species management, and a related advisory board. The Department of Defense must reimburse wildfire suppression costs caused by its activities, and the Joint Fire Science Program will advance drone research for firefighting. It also requires disaster preparedness programs to include post-fire assistance and authorizes FEMA to fund state-operated websites for post-fire recovery resources.	12/02/2025 Committee on Energy and Natural Resources Subcommittee on Public Lands, Forests, and Mining. Hearings held	

S.120 - Disaster Housing Reform for American Families Act	Under current law, FEMA provides mobile homes as temporary housing for disaster victims for up to 18 months. This bill would expand this by allowing victims to transition into disaster-resilient single-family homes with four units or less, designed to resemble affordable housing and meet federal standards for quality, flood management, and disaster resilience. After victims return to permanent homes, these properties would be repurposed as long-term affordable housing through local public housing agencies or private programs.	01/16/2025 Read twice and referred to the Committee on Homeland Security and Governmental Affairs	**Sen. Alex Padilla**
S.132 - Filing Relief for Natural Disasters Act	This bill would empower state and territory governors to extend federal tax filing deadlines during state-declared emergencies, providing relief without requiring federal disaster declarations. It also doubles the mandatory filing extension for federally-declared disasters from 60 to 120 days. *Companion bill of H.R. 517.*	01/16/2025 Read twice and referred to the Committee on Finance	
S.133 - Fire Suppression and Response Funding Assurance Act	This bill would help ensure that state and local fire suppression resources pre-deployed for wildfires qualify for FEMA's Fire Management Assistance Grants (FMAG). It also allows flexibility to increase the federal cost share above the current 75% limit during extreme events. While the bill doesn't require a higher federal cost share, it permits adjustments for consecutive fires or severe circumstances, providing greater support for wildfire response efforts.	01/16/2025 Read twice and referred to the Committee on Homeland Security and Governmental Affairs	**Sen. Alex Padilla**, **Sen. Adam Schiff**
S. 135 - Wildland Firefighter Paycheck Protection Act	This bill seeks to prevent attrition and ensure workforce stability by making permanent pay increases for wildland firefighters, introducing a dedicated pay scale, and providing additional pay for fire deployments and prolonged incidents. It also directs agencies to align work-life balance policies and improve rest and recuperation measures to reduce burnout.	01/16/2025 Read twice and referred to the Committee on Homeland Security and Governmental Affairs	**Sen. Alex Padilla**, **Sen. Adam Schiff**
S.140 - Wildfire Prevention Act	This bill would streamline environmental processes for removing hazard trees near forest roads, trails, and power lines to reduce fire risks. It also directs land management agencies to use livestock grazing for vegetation management and establishes a pilot program to promote new technologies in wildfire prevention, detection, communication, and mitigation.	12/02/2025 Committee on Energy and Natural Resources Subcommittee on Public Lands, Forests, and Mining. Hearings held	
S.154 - Colorado River Basin System Conservation Extension Act	This bill would extend the System Conservation Pilot Program, which was created to test voluntary water conservation measures to manage severe drought in the Colorado River Basin. The legislation extends the current pilot program through 2026. *Comaonion bill to H.R. 231.*	06/23/2025 Held at the desk in House	
S.291 - Lower Colorado River Multi-Species Conservation Program Amendment Act	This bill would ensure that state contributions to conservation projects in the Lower Colorado River Basin are able to earn interest and grow before being allocated. It does this by establishing an interest-bearing account for state contributions to the LCR MSCP. *Companion bill to H.R. 831.*	02/04/2026 Committee on Energy and Natural Resources. Ordered to be reported without amendment favorably	**Sen. Alex Padilla, Sen. Adam Schiff**

S.306 - Fire Ready Nation Act	This bill would establish an official Fire Weather Services Program within NOAA to enhance wildfire response. It funds research and new technology to improve fire forecasts and creates a Fire Weather Testbed to develop advanced firefighting tools, including unmanned aircraft for data collection. The bill also facilitates data sharing across federal agencies to improve coordination and codifies the Incident Meteorologist Service, ensuring IMET forecasters continue supporting emergency responders while receiving fair compensation for extended deployments.	09/11/2025 Held at the desk in House	**Sen. Alex Padilla**
S.322 - Improving Atmospheric River Forecasts Act	This bill would require the National Oceanic and Atmospheric Administration (NOAA) to establish a forecast improvement program within the National Weather Service. *Companion bill of H.R.4302.*	01/29/2025 Read twice and referred to the Committee on Commerce, Science, and Transportation	**Sen. Alex Padilla**
S.350 - Wildfire Emergency Act	This bill would grant the U.S. Forest Service pilot authority to use private financing to expand up to 20 forest restoration projects. It funds workforce development for forest conservation and wildland firefighting and establishes a DOE energy resilience program to keep critical facilities operational during wildfires. The bill expands DOE weatherization grants, providing up to $13,000 for low-income households to install wildfire-resistant upgrades. It also accelerates wildfire detection efforts, creates a prescribed fire-training center in the West, and authorizes $50 million for community land stewardship grants.	07/17/2025 Referred to the Committee on Agriculture, Nutrition, and Forestry	**Sen. Alex Padilla**
S. 352 - Disaster Assistance Fairness Act	This bill would require FEMA to clear debris from homeowners associations and condominiums when state or local governments deem it a threat to safety or economic recovery. It also clarifies that FEMA should provide financial assistance for repairing essential common elements like roofs, HVAC systems, stairwells, plumbing, and electricity. *Companion bill of H.R. 834.*	01/30/2025 Read twice and referred to the Committee on Homeland Security and Governmental Affairs	
S. 453 - Wildfire Intelligence Collaboration and Coordination Act	This bill would create a national Wildfire Intelligence Center to improve the federal response to wildfires. The center, established through a collaboration between the Department of Agriculture, Department of Commerce, and Department of the Interior, would streamline coordination and facilitate information sharing across federal and state agencies, tribal entities, academia, and the private sector.	02/06/2025 Read twice and referred to the Committee on Agriculture, Nutrition, and Forestry	**Sen. Alex Padilla**
S.570 - Water Infrastructure Subcontractor and Taxpayer Protection Act	This bill seeks to ensure that federal water infrastructure projects stay on schedule and protect local communities and workers. It requires primary contractors on federally funded water projects to hold a surety bond, ensuring that local sponsors and subcontractors are compensated if the contractor defaults before the project is completed. *Companion bill of H.R. 1285.*	02/13/2025 Read twice and referred to the Committee on Environment and Public Works	
S.647 - Regional Leadership in Wildland Fire Research Act	This bill would create regional research centers at universities nationwide to advance wildfire mitigation and research. These centers would develop fire and vegetation models and technologies tailored to their regions. A National Center Coordination Board would oversee their work, while Regional Advisory Boards, including wildfire agencies and Tribal and state governments, would provide guidance.	02/20/2025 Read twice and referred to the Committee on Commerce, Science, and Transportation	**Sen. Alex Padilla**

S.857 - 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. *Companion bill of H.R.1871.*	03/05/2025 Read twice and referred to the Committee on Finance	**Sen. Alex Padilla, Sen. Adam Schiff**
S.861 - Disaster Assistance Simplification Act	This bill would require the Federal Emergency Management Agency (FEMA) to establish a universal application across federal agencies for disaster survivors who are seeking federal assistance to recover from hurricanes, floods, wildfires, and other natural disasters.	11/07/2025 Placed on Senate Legislative Calendar under General Orders. Calendar No. 264	
S.902 - Wildfire Response and Preparedness Act	This bill would create a 30-minute national standard response time to the extent practical to any wildland fire on federal land administered by the Secretaries of Agriculture and the Interior. *Companion bill of H.R.4038.*	12/02/2025 Committee on Energy and Natural Resources Subcommittee on Public Lands, Forests, and Mining. Hearings held	
S.1092 - WIPPES Act	This bill would require the Federal Trade Commission to issue regulations requiring certain products to have "Do Not Flush" labeling, and for other purposes. *Companion bill of H.R.2269.*	09/19/2025 Placed on Senate Legislative Calendar under General Orders. Calendar No. 166	**Sen. Alex Padilla**
S.1118 - Water ISAC Threat Protection Act	This bill would provide funding for clean water and wastewater utilities to become members of the Water Information Sharing and Analysis Center (WaterISAC). The WaterISAC is a critical source of information and best practices for water systems to protect against, mitigate, and respond to threats. *Companion bill of H.R.2344*	03/25/2025 Read twice and referred to the Committee on Environment and Public Works	
S.1462 - Fix Our Forests Act	This bill aims to simplify and expedite environmental reviews for forest management projects in high-risk wildfire areas. It would also promote innovative technologies, modernize standards, and create a framework for research and development in wildfire and land management, while also providing financial assistance to communities and tribes. Additionally, the bill strengthens the Good Neighbor policy to include tribes, facilitating cooperative forest management among various agencies. *Companion bill of H.R. 471.*	10/27/2025 Placed on Senate Legislative Calendar under General Orders. Calendar No. 212	**Sen. Alex Padilla**
S.1480 - American Infrastructure Bonds Act	This bill aims to assist state and local governments finance infrastructure projects. It proposes the creation of a taxable, direct-pay bond program, which would give governments more affordable borrowing options—especially important for rural communities facing high interest rates.	04/10/2025 Read twice and referred to the Committee on Finance	

S.1481 - LOCAL Infrastructure Act	This bill seeks to help state and local governments save money by reinstating a financial tool known as advance refunding. This tool allows governments to refinance existing tax-exempt municipal bonds at lower interest rates when market conditions improve—similar to refinancing a mortgage.Advance refunding was previously a common way for governments to reduce borrowing costs and free up funds for local projects like schools, hospitals, and infrastructure. However, it was repealed in 2017. The bill would amend the tax code to restore this option.	04/10/2025 Read twice and referred to the Committee on Finance	
S.1484 - FORECAST Act	This bill would aim to strengthen the United States' ability to predict extreme weather events weeks to years in advance by enhancing NOAA's subseasonal-to-seasonal (S2S) forecasting capabilities. The bill appropriates $28.5 million for FY 2026 and 2027, along with additional funds as needed, to improve data models, computing infrastructure, and collaboration with research institutions. It also establishes a workforce development program to train experts in advanced forecasting technologies like AI, machine learning, and high-performance computing	04/10/2025 Read twice and referred to the Committee on Commerce, Science, and Transportation	**Sen. Alex Padilla**
S.1523 - Water Research Optimization Act	This bill would seek to modernize and streamline hydrological forecasting within the National Weather Service by placing all 13 River Forecast Centers under the oversight of the Office of Water Protection. The bill also formally designates the National Water Center (NWC)—located at the University of Alabama—as NOAA's lead hub for coordinating water-related operational research and activities across federal agencies.	10/21/2025 Placed on Senate Legislative Calendar under General Orders. Calendar No. 196	
S.1549 - Water Cybersecurity Enhancement Act	This bill would amend the Safe Drinking Water Act to expand the Drinking Water Infrastructure Risk and Resilience Program by providing grants for cybersecurity training and preparedness. Specifically, it allows funding for training programs, manuals, and guidance materials focused on protecting community water systems from and responding to cyberattacks. The bill extends program eligibility and funding authorization through fiscal years 2026 to 2031.	05/01/2025 Read twice and referred to the Committee on Environment and Public Works	
S.1570 - Help Hoover Dam Act	This bill would authorize the Bureau of Reclamation to access approximately $50 million in long-stranded, unused funds from the Colorado River Dam Fund for operations, maintenance, and improvements at the Hoover Dam. It also allows Reclamation to partner with hydropower contractors to carry out authorized activities such as upgrades, clean-up efforts, and maintenance. *Companion bill of H.R. 3158.*	05/01/2025 Read twice and referred to the Committee on Energy and Natural Resources	**Sen. Alex Padilla, Sen. Adam Schiff**
S. 1708 - Regulatory Accountability Act	This bill seeks to limit agency overreach by requiring new rules to be clearly tied to congressional authority, ending rulemaking via informal guidance, and strengthening transparency through public comment and data disclosure. It also reforms the Congressional Review Act and ensures courts independently review agency interpretations rather than deferring to them. *Companion bill of H.R. 3525.*	05/12/2025 Read twice and referred to the Committee on Homeland Security and Governmental Affairs	
S.1730 - Water Affordability, Transparency, Equity, and Reliability Act of 2025	This bill proposes a range of measures aimed at improving water quality and infrastructure across the country. Key provisions include efforts to address contaminants such as lead and PFAS, expanded grant support for low-income communities to help prevent water service shutoffs, and the creation of a $35 billion annual trust fund to support water and sewer system upgrades. The legislation also includes workforce development components intended to create jobs in the communities where projects are implemented. *Companion bill of H.R. 3376.*	05/13/2025 Read twice and referred to the Committee on Environment and Public Works	

S.1743 - Extreme Heat Economic Study Act	This bill directs the National Integrated Heat Health Information System (NIHHIS) and its partner agencies to conduct and publish a comprehensive study within four years on the economic impacts of extreme heat events. The study must evaluate costs related to public health, insurance and workers' compensation, energy use, infrastructure damage, agricultural losses, labor productivity, and business interruptions. It also requires recommendations for developing a national tracking system for heat-related healthcare costs and labor impacts. The bill authorizes $3.5 million to carry out the study and aims to inform future policies for mitigating the growing financial toll of extreme heat.	05/13/2025 Read twice and referred to the Committee on Commerce, Science, and Transportation	
S.1760 - Restoring WIFIA Eligibility Act	This bill would seek to ensure that if a project's funding is repaid entirely through non-federal revenue sources and the recipient is not a federal agency, then the assistance will be classified as non-federal for budgeting purposes under the Federal Credit Reform Act of 1990. This change is intended to expand access to WIFIA loans and loan guarantees by preventing federal classification from limiting support for state, local, and other non-federal infrastructure projects. *Companion bill of H.R.3035.*	05/14/2025 Read twice and referred to the Committee on the Budget	
S. 1872 - Critical Infrastructure Manufacturing Feasibility Act	This bill would direct the Secretary of Commerce to study which high-demand critical infrastructure products are currently imported, assess the costs of domestic production, and evaluate the feasibility of manufacturing these goods in rural communities and industrial parks. The findings must be reported to Congress within 18 months of enactment. *Companion bill of H.R. 1721.*	11/10/2025 Held at the desk in House	
S.1963 - Emergency Disaster Relief Fund Act of 2025	This bill would repleneish the Disaster Relief Fund (DRF) with $25 billion in supplemental appropriations.	06/05/2025 Read twice and referred to the Committee on Homeland Security and Governmental Affairs	
S.2007 - Financing Lead Out of Water (FLOW) Act	This bill would simplify the tax process for public water systems to use tax-exempt bonds for replacing private lead service lines by exempting these projects from the "business use test." This change reduces delays and costs caused by the current requirement to verify business operations at each affected residence. *Companion bill of H.R.3892.*	06/10/2025 Read twice and referred to the Committee on Finance	
S.2014 - Special District Fairness and Accessibility Act	This bill would create the first formal federal definition of "special district." The bill also directs the White House Office of Management and Budget (OMB) to provide guidance to federal agencies to recognize special districts as local governments, ensuring they have access to appropriate federal financial assistance. *Companion bill of H.R. 2766.*	06/10/2025 Read twice and referred to the Committee on Homeland Security and Governmental Affairs	
S.2033 - Cross-Boundary Wildfire Solutions Act	This bill seeks to enhance the effectiveness and efficiency of wildfire mitigation efforts across different land ownerships by identifying gaps in existing federal policies and encouraging greater coordination among agencies and stakeholders. *Companion bill of H.R.3922*	12/02/2025 Committee on Energy and Natural Resources Subcommittee on Public Lands, Forests, and Mining. Hearings held	

S.2039 - Wildfire Risk Evaluation Act	This bill would direct the Secretary of Agriculture, the Secretary of the Interior, and the Secretary of Homeland Security to carry out a quadrennial fire review. The findings will be used to guide long-term strategies to improve wildfire preparedness, response, and coordination among federal agencies. *Companion bill of H.R.3924*	06/11/2025 Read twice and referred to the Committee on Homeland Security and Governmental Affairs	
S.2247 - Disaster Assistance Improvement and Decentralization (AID) Act	This bill seeks to modernize federal disaster response by improving the Stafford Act and advancing reforms to make FEMA more efficient and locally responsive. It aims to cut red tape, allowing state and local governments—particularly small communities with limited capacity—to better tailor recovery efforts to local needs. The bill provides technical and financial support to help navigate the complex disaster assistance process and ensures more predictable federal funding. It also prevents future presidential administrations from pausing or cutting off aid during active recovery efforts.	07/10/2025 Read twice and referred to the Committee on Finance	
S.2256 - Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2026	This bill provides FY2026 appropriations for the Department of Agriculture (USDA), the Food and Drug Administration, and related agencies. *Senate version of H.R.4121.*	Signed 11/12/2025 Public Law 119-37	
S.2353 - Microplastics Safety Act	This bill would direct the Food & Drug Administration to submit a report to Congress on the human health impacts of exposure to microplastics in food and water, focusing on risks to children's health, the endocrine system, and reproductive health, as well as associated risks related to cancer and chronic illnesses. *Companion bill of H.R.4486.*	07/17/2025 Read twice and referred to the Committee on Health, Education, Labor, and Pensions	
S.2354 - Commerce, Justice, Science, and Related Agencies Appropriations Act, 2026	This bill provides FY2025 appropriations to the Department of Commerce, the Department of Justice (DOJ), the science agencies, and several related agencies. Within that includes the National Oceanic and Atmospheric Administration (NOAA). *Senate version of H.R. 5342.*	Signed 01/23/2026 Public Law 119-74	
S.2374 - Climate Change Resiliency Fund for America Act	This bill would would authorize the Treasury Department to issue $200 million to $1 billion annually in tax-exempt "climate bonds." These bonds would be available for purchase by any American to support the fund. The Department of Commerce would administer the Climate Change Resiliency Fund, providing grants to finance infrastructure projects aimed at strengthening the nation's resilience against increasing extreme weather events.	07/22/2025 Read twice and referred to the Committee on Finance	
S.2388 - Water Infrastructure Modernization Act	This bill bill seeks to amend the Federal Water Pollution Control Act to reauthorize and expand a pilot program for alternative water source projects. Key provisions include defining "intelligent water infrastructure technology" to encompass advanced systems for wastewater treatment, stormwater management, leak detection, and real-time monitoring. Furthermore, the proposed legislation increases authorized grant funding from $25,000,000 to $50,000,000 annually until 2028 and outlines reporting requirements for the Administrator regarding project grants and improvements.	07/23/2025 Read twice and referred to the Committee on Environment and Public Works	

S.2421 - CLEAR Waters Act	This bill aims to amend the Federal Water Pollution Control Act by explicitly defining and adding exclusions to the term "navigable waters." Specifically, it seeks to exclude waste treatment systems, ephemeral features that only flow due to precipitation, and groundwater from this classification. The bill empowers the Administrator and the Secretary of the Army to identify additional features for exclusion.	07/23/2025 Read twice and referred to the Committee on Environment and Public Works	
S.2430 - Wildfire Insurance Coverage Study Act	This bill would require a federal study to better understand how increasing wildfire risks affect homeowners' and commercial property insurance coverage. The study would assess the scope of wildfire risks, the availability and cost of insurance, insurer refusals to renew policies based on location, state regulatory responses, and the need for a national wildfire risk map. The goal is to provide clearer data to address rising premiums, coverage losses, and improve protections for homeowners in wildfire-prone areas.	07/24/2025 Read twice and referred to the Committee on Banking, Housing, and Urban Affairs	
S.2431 - Department of the Interior, Environment, and Related Agencies Appropriations Act, 2026	This bill provides FY2025 appropriations for the Department of the Interior, the Environmental Protection Agency (EPA), and several related agencies including the U.S. Fish and Wildlife Service, the U.S. Forest Service. *Senate version of H.R.4754.*	Signed 01/23/2026 Public Law 119-74	
S.2437 - Snow Water Supply Forecasting Program Reauthorization Act	This bill aims to amend the existing Snow Water Supply Forecasting Program Authorization Act. The proposed changes focus on enhancing the program through the development and deployment of integrated snowpack measuring and modeling technologies, including imaging spectroscopy and machine learning. It also seeks to improve water supply forecasting for better water management decisions across multiple jurisdictions and reauthorizes funding for the program from fiscal years 2027 through 2031.	03/17/2026 Committee on Energy and Natural Resources Subcommittee on Water and Power hearings held	
S.2472 - Department of Defense PFAS Discharge Prevention Act	This bill would mandate the Secretary of Defense to request modifications to stormwater discharge permits for military facilities. These modifications would require quarterly monitoring of PFAS discharges and the implementation of best management practices or control technologies to reduce these pollutants. Furthermore, the bill stipulates that at least one percent of funds allocated for PFAS remediation efforts must be used annually to support these monitoring and reduction activities.	07/28/2025 Read twice and referred to the Committee on Armed Services	
S.2500 - Research for Healthy Soils Act	This legislation would authorize the U.S. Department of Agriculture to make grants available to study the incidence and impacts of microplastics and PFAS in biosolids on farmland. *Companion bill of H.R.3991.*	07/29/2025 Read twice and referred to the Committee on Agriculture, Nutrition, and Forestry	
S.2583 - NOAA Weather Radio Modernization Act	This bill would mandate the expansion and modernization of the NOAA Weather Radio network, ensuring its 24/7 operation, resilience to emergencies, and improved coverage, especially in underserved or high-risk areas. Additionally, the bill calls for the development of national standards for flash flood alert systems and proposes a reclassification of certain NOAA employee positions as protective services, along with a 10-year staffing plan to support critical forecasting and warning functions.	07/31/2025 Read twice and referred to the Committee on Commerce, Science, and Transportation	

S.2701 - Headwaters Protection Act	This bill seeks to reauthorize and improve the Water Source Protection Program under the Healthy Forests Restoration Act of 2003. It aims to protect and restore watershed health, water supply and quality, municipal and agricultural water supply systems, and water-related infrastructure, as well as forest health from insect infestation, disease, or wildfire. The bill expands the scope to include "adjacent land" (non-Federal land within the same watershed as National Forest System land). *Companion bill of H.R.605.*	09/03/2025 Read twice and referred to the Committee on Agriculture, Nutrition, and Forestry	
S.2753 - Urban Canal Modernization Act	This bill would amend the Omnibus Public Land Management Act of 2009 to authorize certain extraordinary operation and maintenance work specifically for "urban canals of concern". An "urban canal of concern" is defined as a transferred works or segment that, if it were to fail, would result in an estimated at-risk population exceeding 100 individuals, and which the Secretary of the Interior determines to be an urban canal reach. The bill authorizes the Secretary or the transferred works operating entity to carry out necessary extraordinary operation and maintenance work on these canals. *Companion bill of H.R.6279.*	03/17/2026 Committee on Energy and Natural Resources Subcommittee on Water and Power hearings held	
S.3140 - Flood Protection and Infrastructure Resilience Act	This bill would update USDA conservation and watershed programs to strengthen flood protection and long-term watershed resilience. It allows the Emergency Watershed Protection Program to implement restoration measures that go beyond addressing immediate damage when doing so benefits the watershed's long-term health and reduces repeated impairments. The bill increases federal cost-share options for rehabilitating aging watershed infrastructure, including higher support—up to 90% of total costs—for projects in limited-resource areas. It also updates the Regional Conservation Partnership Program to explicitly include flood and drought mitigation, improved watershed-scale resilience, and broader conservation of soil, water, wildlife, and agricultural land.	11/06/2025 Read twice and referred to the Committee on Agriculture, Nutrition, and Forestry	
S.3190 - Fire Innovation Unit Act	This bill would establish a seven-year public-private wildfire technology pilot, led jointly by the Agriculture and Interior Departments, to test and deploy innovative prevention, detection, and mitigation technologies, with participating agencies and partners defined and annual reports to Congress required. *Companion bill of H.R.6094.*	11/18/2025 Read twice and referred to the Committee on Homeland Security and Governmental Affairs	
S.3224 - SPEED Act	This bill would amend NEPA to streamline environmental reviews by clarifying its procedural role, limiting analysis to proximate and reasonably foreseeable impacts, and excluding speculative effects. The bill also imposes expedited judicial review timelines to reduce delays in permitting and economic development projects. *Counterpart bill to H.R.4776.*	11/19/2025 Read twice and referred to the Committee on Environment and Public Works	
S.3290 - Financial Services and General Government Appropriations Act, 2026	This bill provides FY2026 funding for the Department of the Treasury, the Executive Office of the President, the judiciary, the District of Columbia, and several independent agencies. *Senate version of H.R.5166.*	Signed 02/03/2026 Public Law 119-75	
S.3293 - Energy and Water Development and Related Agencies Appropriations Act, 2026	This bill provides FY2025 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 several independent agencies. *Senate version of H.R.4553.*	Signed 01/23/2026 Public Law 119-74	

S.3317 - Water Resources Technical Assistance Review Act	This bill would require the Comptroller General of the United States to review all clean water-related technical assistance authorities of the Environmental Protection Agency. *Companion bill of H.R.3427.*	12/03/2025 Read twice and referred to the Committee on Environment and Public Works	**Sen. Adam Schiff**
S.3353 - Relief for Farmers Hit with PFAS Act	This bill would provide state-level funding to support farmers affected by PFAS contamination. Authorized uses include financial assistance, PFAS testing for soil and water, health monitoring, equipment upgrades, alternative production or remediation strategies, educational programs, and research on remediation systems. The bill also establishes a USDA task force to identify additional eligible programs for PFAS-related assistance and provide technical support to states for coordinated responses.	12/04/2025 Read twice and referred to the Committee on Agriculture, Nutrition, and Forestry	
S.3457 - Clean Water Standards for PFAS Act	This bill would require EPA to develop Clean Water Act water quality criteria for all measurable PFAS or PFAS classes within three years and establish effluent limitations guidelines (ELGs) for eight priority industry categories. The bill mandates immediate PFAS monitoring for three additional industries—Pulp, Paper, and Paperboard; Airports; and Electrical and Electronic Components—with a determination on ELG standards by December 31, 2026. It also requires EPA to promulgate Method 1633 by January 31, 2026, authorizes $1 billion from FY 2026–2030 to help publicly owned treatment works address PFAS contamination, and provides $12 million annually over the same period to support EPA implementation. *Companion bill of H.R.6668.*	12/11/2025 Read twice and referred to the Committee on Environment and Public Works	
S.3460 - PFAS Accountability Act	This bill would amend the Toxic Substances Control Act to establish a federal cause of action for individuals significantly exposed to PFAS, require medical monitoring at the expense of responsible manufacturers, and provide detailed provisions for claims, including presumptions of exposure for individual and class-action plaintiffs, while preserving state-law remedies. *Companion bill to H.R.6626.*	12/11/2025 Read twice and referred to the Committee on Environment and Public Works	
S.3465 - UPGRADE Act	This bill would strengthen the Safe Drinking Water Act by providing sustained technical and financial support for small, rural, and economically disadvantaged water systems through FY 2031. The bill expands the Small, Underserved, and Disadvantaged Communities Grant Program to include unincorporated communities, allowing them to work with states and local partners to address contaminated wells, failing septic systems, and other water access challenges. It also reauthorizes funding for qualified nonprofits to assist small systems in improving water quality, mitigating contaminants, and maintaining safe drinking water for vulnerable populations.	12/11/2025 Read twice and referred to the Committee on Environment and Public Works	
S.3590 - Water Infrastructure Resilience and Sustainability Act	The legislation would reauthorize the following three water infrastructure resilience programs for five years (Fiscal Year 2027-2031), at current authorization levels: Drinking Water System Infrastructure Resilience and Sustainability Program Midsize and Large Drinking Water System Infrastructure Resilience and Sustainability Program Clean Water Infrastructure Resiliency and Sustainability Program *Companion bill to H.R.5566*	01/07/2026 Read twice and referred to the Committee on Environment and Public Works	

S.3609 - Community Protection and Wildfire Resilience Act	This bill would establish a new FEMA-led grant program, in coordination with the Forest Service, to help states, tribes, and local governments strengthen wildfire preparedness and community resilience. The bill authorizes $1 billion annually to support the development and implementation of Community Protection and Wildfire Resilience Plans, funding activities such as early detection, evacuation planning, protection of vulnerable populations, home and infrastructure hardening, defensible space, and emergency communications. Grants would prioritize high-risk, low-income, and recently impacted communities, expand eligibility for structure hardening under existing programs, and require studies on insurance incentives, federal wildfire authorities, hazard mapping, and first-responder radio interoperability.	01/08/2026 Read twice and referred to the Committee on Homeland Security and Governmental Affairs	**Sen. Alex Padilla**
S.3693 - Large-Scale Water Recycling Reauthorization Act	This bill would reauthorize the Large-Scale Water Recycling by an additional 5 years. *Companion bill to H.R.6204.*	03/17/2026 Committee on Energy and Natural Resources Subcommittee on Water and Power hearings held	
S.3709 - Streamlining Federal Grants Act of 2026	This bill seeks to modernize federal grant management by establishing a Grants Council and requiring agencies to designate senior officials to oversee grant policies and improve service delivery. The bill standardizes data practices, promotes plain-language funding notices, and aims to reduce administrative barriers, particularly for underserved applicants. It also requires agencies to develop publicly reviewed improvement plans and enhances oversight and reporting to improve the accessibility and effectiveness of federal grant programs.	01/28/2026 Read twice and referred to the Committee on Homeland Security and Governmental Affairs	
S.3732 - Water Security and Drought Resilience Act	This bill would reauthorize and expand the Infrastructure Investment and Jobs Act's Small Storage Program, which supports projects that increase surface or groundwater storage between 200 and 30,000 acre-feet. The bill also establishes a new grant program for natural water retention and release projects—such as aquifer recharge, floodplain restoration, and runoff timing adjustments—that enhance water availability using nature-based approaches and existing storage systems.	03/17/2026 Committee on Energy and Natural Resources Subcommittee on Water and Power hearings held	**Sen. Alex Padilla**
S.3737 - GROW SMART Act	This bill would update federal drought policy by funding collaborative water-sharing projects among agricultural, municipal, and industrial users. The bill supports water-efficient approaches—such as water-thrifty crops and advanced technologies like agrovoltaics and hydroponics. Eligible participants, including irrigation districts, Tribes, and nonprofits, could receive up to 75 percent federal cost-sharing for long-term drought resilience projects, with funding authorized to help protect groundwater supplies and stabilize rural economies during severe water shortages.	03/17/2026 Committee on Energy and Natural Resources Subcommittee on Water and Power hearings held	**Sen. Alex Padilla**
S.3738 - MORE WATER Act	This bill would reauthorize the Bureau of Reclamation's large-scale recycled water program, providing federal grants covering up to 25 percent of project costs. In addition to restoring funding authority, the bill streamlines the approval process by reauthorizing expired programmatic approvals and creating a new framework that allows projects to move forward without requiring separate congressional authorization for each one. The goal is to accelerate construction timelines, reduce costs, and expand water recycling capacity.	03/17/2026 Committee on Energy and Natural Resources Subcommittee on Water and Power hearings held	**Sen. Alex Padilla**

S.3800 - ePermit Act	This bill aims to improve environmental reviews and authorizations through the use of interactive, digital, and cloud-based platforms. This is intended to enhance coordination among Federal, State, and local agencies and project sponsors, make community engagement more accessible, and increase transparency by establishing robust data architectures and modern software solutions. The bill seeks to achieve these goals by developing data standards, prototype tools, and a unified interagency data system, including a common authorization portal. *Companion bill to H.R.4503.*	02/05/2026 Read twice and referred to the Committee on Environment and Public Works	**Sen. Alex Padilla**
S.3854 - Advanced Weather Model Computing Development Act	This bill would establish a partnership between the Department of Energy and NOAA to improve weather and climate forecasting through advanced computing technologies. The bill supports the creation of research centers at national laboratories, promotes collaboration on tools such as artificial intelligence and high-performance computing, and requires regular reporting to Congress to track progress in enhancing forecasting capabilities and workforce development.	02/12/2026 Read twice and referred to the Committee on Commerce, Science, and Transportation	
S.3895 - Fairness in Federal Disaster Declarations Act	This bill would revise how FEMA evaluates requests for disaster assistance by requiring standardized, weighted criteria for determining eligibility. The bill directs FEMA to consider localized impacts, community trauma, and economic conditions such as poverty levels and tax base, and applies these criteria retroactively to certain past denials. The goal is to create a more consistent and transparent process for distributing federal disaster aid.	02/24/2026 Read twice and referred to the Committee on Homeland Security and Governmental Affairs	
S.3923 - Weather Research and Forecasting Innovation Reauthorization Act	This bill seeks to strengthen federal forecasting and emergency communication systems by improving atmospheric river prediction, wildfire weather forecasting, and drought monitoring. The bill directs NOAA to enhance coordination with agencies like FEMA, upgrade weather radio technology, and expand research and tools for hazard prediction, while also requiring NOAA and USGS to incorporate atmospheric river risks into landslide preparedness efforts.	03/04/2026 Committee on Commerce, Science, and Transportation. Ordered to be reported with amendments favorably	
S.4022 - Disaster Recovery Improvement Act	This bill would establish an interagency task force to evaluate and improve federal disaster recovery programs. The task force—led by FEMA and including multiple federal agencies, as well as state and local officials—would identify gaps in existing programs, gather input from local leaders, and develop recommendations to streamline aid delivery and reduce delays, including during transitions between presidential administrations.	03/05/2026 Read twice and referred to the Committee on Homeland Security and Governmental Affairs	
S.4146 - Local Data for Better Conservation Act	This bill would require the Secretary of the Interior to incorporate relevant data collected by state agencies when making decisions to list or delist species under the Endangered Species Act. The goal is to ensure that federal determinations are based on the most complete and available scientific information.	03/19/2026 Read twice and referred to the Committee on Environment and Public Works	
S.4153 - Forever Chemical Regulation and Accountability Act	This bill would establish a comprehensive framework to assess, report on, and phase out non-essential uses of PFAS. The bill requires studies on health and environmental risks, mandates reporting and phase-out schedules for manufacturers, and directs EPA to eliminate releases of PFAS into the environment within 10 years. It also sets deadlines for removing PFAS from certain consumer products, creates regional response hubs for cleanup and alternatives, imposes fees to support oversight, strengthens legal accountability for contamination, and updates liability rules to ensure affected individuals can pursue claims. *Companion bill to H.R.8016.*	03/19/2026 Read twice and referred to the Committee on Environment and Public Works	

S.4213 - Data Center Water and Energy Transparency Act	This bill would require large data centers—those with at least 25 megawatts of capacity—to report annual electricity and water usage to federal or state agencies. The bill also mandates five-year projections and efficiency plans, enabling better assessment of impacts on utility systems, communities, and the environment. It includes enforcement mechanisms such as fees and penalties for noncompliance, with the goal of improving transparency and accountability in the data center industry.	03/25/2026 Read twice and referred to the Committee on Energy and Natural Resources	

BBK
BEST BEST & KRIEGER LLP
ATTORNEYS AT LAW

To: Las Virgenes - Triunfo Joint Powers Authority

From: Best Best and Krieger

Date: April 21, 2026

Re: Legislation to Consider for Support Positions

H.R. 8027 – Advanced Wastewater Treatment Assistance Act

Introduced in the House on March 19, 2026 by Representatives Haley Stevens (D-MI-11) and Brian Fitzpatrick (R-PA-01).

The Advanced Wastewater Treatment Assistance Act would establish a five-year federal grant program to support water utilities in deploying advanced treatment technologies aimed at removing contaminants such as PFAS and mitigating harmful algal blooms. The bill authorizes $1 billion over five years and would cover up to 50 percent of eligible project costs. It also directs at least 49 percent of funding to financially disadvantaged communities, with cost-share requirements waived for those recipients. Additionally, the legislation requires a national study evaluating the effectiveness of advanced treatment technologies.

On March 19, 2026, the bill was referred to the House Committee on Transportation and Infrastructure. No members of the JPA's delegation are co-sponsors of the bill. There is currently no Senate companion bill.

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119TH CONGRESS
2D SESSION

H. R. 8027

To establish a grant program for advanced wastewater treatment projects, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

MARCH 19, 2026

Ms. STEVENS (for herself and Mr. FITZPATRICK) introduced the following bill; which was referred to the Committee on Transportation and Infrastructure

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A BILL

To establish a grant program for advanced wastewater treatment projects, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the ''Advanced Wastewater Treatment Assistance Act of 2026''.

SEC. 2. ADVANCED WASTEWATER TREATMENT PROJECTS.

(a) IN GENERAL.—The Administrator of the Environmental Protection Agency shall establish a program to provide a grant to each State in accordance with the for-

mula established pursuant to subsection (b) for advanced wastewater treatment projects.

(b) GRANT ALLOTMENT.—The Administrator shall establish a formula to determine the amount allotted to each State under this section.

(c) ADMINISTRATIVE COSTS.—

(1) ADMINISTRATOR.—The Administrator may use not more than 1 percent of the amounts made available to carry out this section to administer the grant program established under this section.

(2) STATE.—Each State may use not more than 1 percent of a grant provided under this section for administrative costs.

(d) COST SHARING.—

(1) IN GENERAL.—Subject to paragraph (2), the non-Federal share of the cost of an advanced wastewater treatment project carried out under this section shall be at least 50 percent.

(2) DISADVANTAGED COMMUNITIES.—The non-Federal share required under paragraph (1) shall not apply to an advanced wastewater treatment project that serves a qualified disadvantaged community.

(e) SET ASIDE.—Of the amounts made available to carry out this section, not less than 49 percent shall be used for advanced wastewater treatment projects that—

(1) serve qualified disadvantaged communities;

(2) are operated by a rural, small, or tribal publicly owned treatment works and provide either a direct or indirect benefit to a qualified disadvantaged community; and

(3) are operated by a public regional water provider that serves 2 or more qualified disadvantaged communities with a combined population of more than 100,000.

(f) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated to carry out this section $1,000,000,000 for fiscal years 2026 through 2030, to remain available until expended.

(g) DEFINITIONS.—In this section:

(1) ADVANCED WASTEWATER TREATMENT PROJECT.—The term ''advanced wastewater treatment project'' means a project or activity for advanced wastewater treatment (as defined by the Administrator) that is eligible for assistance under section 603(c) of the Federal Water Pollution Control Act (33 U.S.C. 1383(c)).

(2) QUALIFIED DISADVANTAGED COMMUNITY.—The term ''qualified disadvantaged community'' means a municipality or intermunicipal, interstate, or State agency described in section 603(i)(1)(A) of the Federal Water Pollution Control Act (33 U.S.C. 1383(i)(1)(A)).

(3) STATE.—The term ''State'' has the meaning given such term in section 502(3) of the Federal Water Pollution Control Act (33 U.S.C. 1362).

SEC. 3. STUDY ON EFFICACY OF ADVANCED WASTEWATER TREATMENT TECHNOLOGIES.

(a) IN GENERAL.—The Administrator of the Environmental Protection Agency, in consultation with the Director of the National Institute of Standards and Technology, shall seek to enter into an agreement with the National Academies of Sciences, Engineering, and Medicine to conduct a comprehensive study on the efficacy of advanced wastewater treatment technologies in capturing emerging contaminants, including nanomaterials and perfluoroalkyl and polyfluoroalkyl substances.

(b) REPORTS.—

(1) INTERIM REPORT.—Not later than 3 years after the date of enactment of this Act, the National Academies shall make publicly available an interim report on the study conducted under subsection (a).

(2) FINAL REPORT.—Not later than 5 years after the date of enactment of this Act, the National Academies shall make publicly available a final report the study conducted under subsection (a).

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SDA

Government Relations

To:	Las Virgenes-Triunfo JPA
From:	Syrus Devers
Date:	May 4th, 2026
Re:	State Legislative Report

Legislative Report

The "final weeks of April" rush that have been referenced many times in this report are finally in the past. April 24th was the deadline for the majority of all bills to be passed out of any assigned policy committees. Next comes the Appropriations Committees, and bills have until May 15th to be passed to the respective floors of each house. Bills that make it to the other house then have to repeat the entire process on an even more compressed schedule.

As a reminder, as we go into the fiscal committee process you will frequently hear the term "Suspense File". This is the entirely undemocratic process where the fate of bills that incur any significant state costs is decided in secret. Both houses have their own Suspense File, so most bills have to survive both lists. The results of the Star Chamber will be announced either on or the day before the May 15th deadline.

Here are the outcomes from last week:

AB 2013 (Bennett–oppose unless amended): This bill required (Wait! Is that in the past tense?! Oh, yes it is!) water agencies to prepare plans explaining how they would meet the imaginary benchmarks that Assm. Bennett made up, that would have water agencies somehow maintain normal operations during a wildfire. When Bennett figured out the lobbying efforts against the bill were getting traction, he floated a new version one week before the hearing, on the day opposition letters were due. But the opposition coalition quickly pivoted and attacked that version as well, which led to Bennett floating *another* version four calendar days (which included the weekend) before the hearing on Monday, April 20th…and he still lost! (It is humiliating for a democrat to lose a bill in the first hearing.)

Because it was not possible to get another hearing before the deadline on the 24th, the bill is completely dead. Bennett was so enraged that he castigated the ACWA and CMUA lobbyists the following day during the hearing of an unrelated bill, in a different committee. He then took his grievances to the Chair of Sen. Natural Resources and Water (NR&W) and begged to have his language put into the ACWA sponsored bill on wildfire liability, SB 1153.

SB 1153 (Caballero–support): This is the ACWA sponsored bill to address wildfire readiness and liability. Our own GM Dave Pedersen was again the lead witness in support when the bill was heard in committee on the 21st, the day after Bennett lost AB 2013. To everyone's surprise, the Sen. NR&W Chair indicated a willingness to cooperate with Bennett. Although Senator Caballero rightly complained, and could have refused, the group decision was that it was better to deal with Bennett now instead of

when SB 1153 was in the Assembly. The ACWA group quickly offered an alternate set of amendments that addressed Bennett's core issues, minus the terms rooted in abject ignorance, which were then accepted by the committee. The bill passed out of committee unanimously, and just in time for Dave to catch a 9pm flight home after arriving at the Capitol at 9am.

SB 872 (McNerney–support): This bill is supported by water agencies connected to the State Water Project (SWP) in any way. It would fund capital improvements on the SWP, most notably subsidence remediation, as well as improvements within the Delta. On Monday the 27th, SB 872 was sent to the Suspense File (see above) to await its fate.

AB 2180 (Ward–support): This is the other ACWA sponsored bill to provide a legal foundation for tiered rates when attacked by Prop 218 lawsuits. Despite the covert opposition from the Howard Jarvis folks, covert because they acted through others, the bill passed the Assembly Floor and awaits assignment to policy committee(s) in the Senate.

AB 1893 (Gallager–support): Local assistance grants for wildfire preparednesses. Unanimous support…in a policy committee with no jurisdiction over spending. The bill now faces its first real challenge in the Appropriations Committee, hearing date to come soon.

AB 2215 (Calderon–support): Extends the Department of Water Resources water permits for the SWP until 2085, but excludes any benefit to the Delta Conveyance Project (DCP). Despite two abstentions, the bill enjoyed bipartisan support and now awaits a hearing in the Appropriations Committee.

SB 1085 (Durazo–support): This bill would close a loophole in the requirement to prove up a water supply for a residential development over 500 units. After some last minute negotiations, the bill got the nod from the Chair and the committee sent it on to the Appropriations Committee.

In case you were not keeping score, that was 100% success on every position we took.

Political Report

From Laura's desk—The California governor's race has been reshaped after Eric Swalwell suspended his campaign amid misconduct allegations, blowing open the Democratic field and creating an unusually fluid contest. With no dominant frontrunner, fragmented Democratic support, and heavy outside spending shaping the field, previously lower-tier candidates find themselves with a real opportunity. The race is now defined by fragmentation among Democrats and real (and unusual) possibility of a Republican vs. Republican general election under California's top-two primary system.

While Porter (D) remains competitive, Becerra (D) and Steyer (D) appear to be gaining the most from Swalwell's collapse. Becerra has risen from well below 5% of voters to now between 10% and 14% in a matter of weeks; Steyer and Bianco (R) are both at 14%, with Hilton (R) leading at 17% and undecided

voters hover around 20% of the vote. The debate earlier this month showed no knockout moment, reinforcing volatility and if Democrats remain divided, *two Republicans advancing is plausible***.**

Swalwell's collapse created a vacuum for donors, unions, and IE groups**,** now rapidly reallocating money. Steyer dominates financially, already spending $100M+, largely self-funded which guarantees visibility statewide, but can also make him a target for attack ads. While Matt Mahan (D) has significant backing from tech/business donors**,** he needs to escalate quickly if he has any chance to pick up voters.

We should expect to see more independent expenditure spending likely against Steyer and/or Porter, and potentially a pro-Becerra or Mahan push. With Labor being historically decisive in California elections, which candidate will win their support?

Las Virgenes - Triunfo JPA

Bill Matrix

Monday, 04/27/2026

High

AB 1873 (Bennett, D) County of Ventura: fire suppression: backup energy source.

Current Text: 03/26/2026 - Amended HTML PDF

Status: 04/23/2026 - Read second time. Ordered to Consent Calendar.

Location: 04/22/2026 - Assembly CONSENT CALENDAR

Summary: Existing law requires, by July 1, 2030, a water supplier, as defined, to have access to sufficient backup energy sources to operate critical fire suppression infrastructure, as defined, needed to supply water for at least 24 hours for the purpose of fire suppression in high or very high fire hazard severity zones in the County of Ventura, or to have access to alternative sources of water supplied by a different water supplier or agency that can serve this same purpose of supplying backup water to critical wells and water pumps for 24 hours, as provided. Existing law authorizes a water supplier that uses a backup energy source that is not permanent and stationary to use mobile backup energy sources or procure an energy source via an established mutual aid agreement provided that the backup energy source can provide power within 12 hours of the National Weather Service alerting the County of Ventura of a red flag warning and provide power for at least 24 hours after a loss of power and within 60 minutes of a loss of power. Existing law requires, if any fire damages and makes uninhabitable more than 10 residential dwellings within the service area of a water supplier, a report be made by the Ventura County Fire Department in cooperation with the water supplier, as specified. This bill would authorize a water supplier to use a backup energy source that is not permanent or stationary, provided that the backup energy source can, among other things, provide power within 90 minutes of a loss of power, or as soon as practically possible after deenergization. The bill would require a water supplier that uses a backup energy source that is not permanent and stationary to notify the Ventura County Office of Emergency Services as soon as practically possible, but no later than 72 hours after a loss of power, if that backup energy source does not provide power within 90 minutes of a loss of power. (Based on 03/26/2026 text)

Position	Priority
Watch	High

AB 1893 (Gallagher, R) Wildfire prevention: local assistance grant program: eligible activities.

Current Text: 02/12/2026 - Introduced HTML PDF

Status: 04/14/2026 - From committee: Do pass and re-refer to Com. on APPR. with recommendation: To Consent Calendar. (Ayes 6. Noes 0.) (April 13). Re-referred to Com. on APPR.

Location: 04/14/2026 - Assembly Appropriations

Summary: Existing law requires the Department of Forestry and Fire Protection to establish a local assistance grant program for fire prevention and home hardening education activities in California and extends eligibility for grants to specified entities, including local agencies. Existing law provides that eligible activities under the local assistance grant program include, among other things, technical assistance to local agencies to improve fire prevention and reduce fire hazards and projects to improve public safety, including, but not limited to, access to emergency equipment and improvements to public evacuation routes. Existing law makes funding for this program subject to an appropriation by the Legislature. This bill would expand eligible activities under the local assistance grant program to include projects undertaken by a local governmental entity involving the acquisition or installation of mobile rigid

dip tanks or similar mobile and permanent infrastructure that is capable of providing helicopter-accessible water supplies for firefighting response or suppression purposes in very high fire and high fire hazard severity zones, as provided. (Based on 02/12/2026 text)

Position	Priority
Support	High

AB 2013 (Bennett, D) High and very high fire risk areas: community water systems: preparedness and resiliency.

Current Text: 04/06/2026 - Amended HTML PDF

Status: 04/13/2026 - In committee: Set, first hearing. Failed passage.

Location: 04/07/2026 - Assembly Emergency Management

Summary: Existing law requires the State Fire Marshal to identify areas in the state as moderate, high, and very high fire hazard severity zones based on consistent statewide criteria and based on the severity of fire hazard that is expected to prevail in those areas. This bill would require a community water system that services more than 100 customers that are located in a high or very high fire risk area, as defined, to include an annex to its disaster preparedness plans, as provided, that includes information regarding system preparedness and resiliency during a wildfire. The bill would require the annex to contain several things, including, among others, an assessment that identifies the minimum number of and type of water pumps that are necessary to maintain average daily capacity, including, but not limited to, the operation of fire hydrant systems at the rated capacity. (Based on 04/06/2026 text)

Position	Priority
Oppose Unless Amended	High

AB 2180 (Ward, D) Local government: Proposition 218 Omnibus Implementation Act: proportional cost of service.

Current Text: 03/11/2026 - Amended HTML PDF

Status: 04/09/2026 - Read third time. Passed. Ordered to the Senate. (Ayes 46. Noes 18.) In Senate. Read first time. To Com. on RLS. for assignment.

Location: 04/09/2026 - Senate Rules

Summary: The California Constitution specifies various requirements with respect to the levying of assessments and property-related fees and charges by a local agency. As part of those requirements, the California Constitution mandates that such fees or charges that are extended, imposed, or increased satisfy certain requirements, including, but not limited to, that the amount of the fee or charge imposed upon any parcel or person as an incident of property ownership not exceed the proportional cost of the service attributable to the parcel. Existing law, known as the Proposition 218 Omnibus Implementation Act (act), prescribes specific procedures and parameters for local jurisdictions to comply with these requirements and, among other things, authorizes an agency providing water, wastewater, sewer, or refuse collection services to adopt a schedule of fees or charges authorizing automatic adjustments that pass through increases in wholesale charges for water, sewage treatment, or wastewater treatment or adjustments for inflation under certain circumstances. This bill would authorize a local government to demonstrate the proportional cost of the service attributable to the parcel by any method that reasonably allocates the ascertainable cost of providing service to all parcels, if substantiated as provided. The bill would, however, provide that for water or sewer service fee or charge impositions, a local government is not required to provide an exact measure of the cost of the service at each parcel and may instead impose uniform or tiered rates to parcel or customer classes that are defined based on common characteristics indicative of likely water or sewer use. (Based on 03/11/2026 text)

Position	Priority
Support	High

AB 2215 (Calderon, D) Water rights: permits: State Water Project.

Current Text: 04/16/2026 - Amended HTML PDF

Status: 04/20/2026 - Re-referred to Com. on APPR.

Location: 04/15/2026 - Assembly Appropriations

Summary: The Department of Water Resources operates the State Water Resources Development System, commonly referred to as the State Water Project.
Existing law requires that construction work for a project that will put appropriated water to beneficial use be commenced, prosecuted with due diligence, and completed within the time period specified in the water right permit. Existing law authorizes the State Water Resources Control Board to extend the deadline specified in the permit to commence or complete construction work and to put appropriated water to beneficial use for good cause shown. This bill would require that the time periods for the application of water to beneficial use and for the completion of construction work for specific water right permits held by the Department of Water Resources for the operation of the State Water Project be December 31, 2046. (Based on 04/16/2026 text)

Position	Priority
Support	High

SB 872 (McNerney, D) Delta Levees and Canal Subsidence Fund.

Current Text: 04/14/2026 - Amended HTML PDF

Status: 04/17/2026 - Set for hearing April 27.

Location: 04/07/2026 - Senate Appropriations

Summary: The Sacramento-San Joaquin Delta Reform Act of 2009 declares that the Sacramento-San Joaquin Delta (Delta) is a critically important natural resource for California and the nation and it serves as both the hub of the California water system and the most valuable estuary and wetland ecosystem on the west coast of North and South America. Existing law establishes in the Natural Resources Agency the Department of Water Resources. Existing law requires the department and the Department of Fish and Wildlife to determine the principal options for the Delta and requires the department to evaluate and comparatively rate each option for its ability to do specified things, including, among others, to maintain Delta water quality for Delta users, and to preserve, protect, and improve Delta levees. Existing law establishes in the agency the Sacramento-San Joaquin Delta Conservancy. Existing law requires the conservancy to act as a primary state agency to implement ecosystem restoration in the Delta and to support efforts that advance environmental protection and the economic well-being of Delta residents. Existing law provides for the preservation of specified management areas of the Suisun Marsh, pursuant to a protection plan prepared and adopted by the San Francisco Bay Conservation and Development Commission, as provided. This bill would establish the Delta Levees and Canal Subsidence Fund in the State Treasury and, upon appropriation, would make the moneys in the fund available to the Secretary of the Natural Resources Agency for expenditure consistent with the allocations described below. The bill would authorize the secretary to seek out, and the fund to accept, state moneys from, among other sources, any bond funds, the General Fund, or the Greenhouse Gas Reduction Fund. The bill would authorize the fund to accept moneys from nonstate sources, including federal and private moneys, and would continuously appropriate those moneys without regard to fiscal year, for allocation as described below, thereby making an appropriation. The bill would require the secretary to allocate moneys in the fund, through the 2046–47 fiscal year, subject to funding availability, as follows: (1) in the amount of $150,000,000, annually, to the Department of Water Resources for the purposes of supporting capital improvements to restore the original design water conveyance capacity for state water conveyance systems, as defined, impacted operationally by land subsidence, and (2) in the amount of $150,000,000, annually, to the conservancy for projects in the Delta or Suisun Marsh to improve existing levees, as specified. (Based on 04/14/2026 text)

Position	Priority

Support	High

SB 1001 (Archuleta, D) Local agency, public utility, or mutual water company: personnel access: Personal Identity Verification-Interoperable.

Current Text: 04/21/2026 - Amended HTML PDF

Status: 04/21/2026 - From committee with author's amendments. Read second time and amended. Re-referred to Com. on APPR.

Location: 04/14/2026 - Senate Appropriations

Summary: Existing law authorizes officers of the Department of the California Highway Patrol, police departments, marshal's office or sheriff's office, and officers or employees of the Department of Forestry and Fire Protection or the Department of Fish and Wildlife designated as peace officers to close to all unauthorized persons an area where a menace to the public health or safety created by a calamity exists for the duration of the menace and the immediate area surrounding any emergency field command post or any other command post activated for the purpose of abating a calamity, riot, or other civil disturbance, as specified. Under existing law, an unauthorized person who enters or remains in a closed area, as prescribed, is guilty of a misdemeanor. This bill would, beginning on July 1, 2028, require the Office of Emergency Services, upon request, to issue a local agency, public utility, or mutual water company responsible for public works and critical infrastructure with specified credentialing to facilitate personnel access to an area during or following a natural disaster, act of terrorism, or other man-made disaster. The bill would specify that the credentialing, a Personal Identity Verification-Interoperable (PIV-I), would conform with the federal Personal Identity Verification standards pursuant to federal National Incident Management System guidelines. (Based on 04/21/2026 text)

Position	Priority
Support	High

SB 1085 (Durazo, D) Water supply planning: housing developments.

Current Text: 04/23/2026 - Amended HTML PDF

Status: 04/23/2026 - Read second time and amended. Re-referred to Com. on APPR.

Location: 04/22/2026 - Senate Appropriations

Summary: The California Environmental Quality Act (CEQA) requires a lead agency, as defined, to be responsible for determining whether a project is exempt from CEQA and whether an environmental impact report, a negative declaration, or a mitigated negative declaration is required. Existing law requires a city or county that determines a certain type of project is subject to the requirements of CEQA to identify any public water system that may supply water for the project and to request those public water systems to prepare a specified water supply assessment, as provided. This bill, among other things, would instead require a city or county, upon receipt of a preliminary application for a housing development project that meets certain conditions, or upon a development application for certain projects being determined as complete or deemed complete, to make that identification of public water systems. The bill would require a city or county, within 15 days of receiving an application that meets either of the above-mentioned criteria, to request each identified public water system to determine whether the projected water demand associated with the proposed project was included in the most recently adopted urban water management plan. (Based on 04/23/2026 text)

Position	Priority
Support	High

SB 1153 (Caballero, D) Disaster preparedness: urban retail water suppliers and public water systems: wildfire.

Current Text: 04/06/2026 - Amended HTML PDF

Status: 04/21/2026 - VOTE: Do pass as amended, but first amend, and re-refer to the Committee on [Appropriations] (PASS)

Location: 04/21/2026 - Senate Appropriations

Summary: The California Emergency Services Act requires all public water systems, as defined, with 10,000 or more service connections to review and revise their disaster preparedness plans in conjunction with related agencies, including, but not limited to, local fire departments and the Office of Emergency Services, to ensure that the plans are sufficient to address possible disaster scenarios. A person, as defined, who violates the provisions of this act is guilty of a misdemeanor. This bill, beginning January 1, 2028, would require all urban retail water suppliers, as defined, serving a high or very high fire hazard severity zone to include incident-specific response procedures for wildfires as part of their disaster preparedness plans, including any applicable emergency response plan as required by federal law. The bill would require these plans to include, among other things, mitigation actions, including actions, procedures, and equipment, that can obviate or significantly lessen the impact of a wildfire on the water system and the supply of drinking water provided by the water supplier. (Based on 04/06/2026 text)

Position	Priority
Support	High

Low

AB 1895 (Hadwick, R) Surplus Land Act: exemptions: land unsuitable for housing.

Current Text: 02/12/2026 - Introduced HTML PDF

Status: 03/02/2026 - Referred to Coms. on L. GOV. and H. & C.D.

Location: 03/02/2026 - Assembly Local Government

Summary: Current law requires land to be declared either surplus land or exempt surplus land, as supported by written findings, before a local agency may take any action to dispose of it consistent with an agency's policies or procedures. Current law establishes procedures for the disposal of surplus land. These procedures do not apply to the disposal of exempt surplus land. Current law establishes various categories of exempt surplus land, including surplus land that is a former street, right-of-way, or easement, and is conveyed to an owner of an adjacent property. This bill would broaden the definition of exempt surplus land to include land that is unsuitable for housing development due to the presence of one or more specified characteristics, including land with slope instability that increases risk of mudslides, landslides, subsidence, liquefaction, and other seismic hazards. (Based on 02/12/2026 text)

Position	Priority
Watch	Low

AB 2322 (Papan, D) Water discharge: commercial, industrial, or institutional sites.

Current Text: 04/06/2026 - Amended HTML PDF

Status: 04/15/2026 - From committee: Do pass and re-refer to Com. on APPR. (Ayes 5. Noes 2.) (April 14). Re-referred to Com. on APPR.

Location: 04/15/2026 - Assembly Appropriations

Summary: The State Water Resources Control Board and the 9 California regional water quality control boards prescribe waste discharge requirements for the discharge of stormwater by municipalities and industries in accordance with the federal national pollutant discharge elimination system (NPDES) permit program, established by the federal Clean Water Act and the Porter-Cologne Water Quality Control Act. Under existing law, the state board and the 9 regional water quality control boards issue permits for the discharge of stormwater from municipal separate storm sewer systems (MS4s). For purposes of issuing permits for the discharge of stormwater from MS4s, this bill define "commercial, industrial, or institutional site" or "CII site" as a privately owned parcel or contiguous parcels of land that are commercial, industrial,

or institutional based on the appropriate county tax assessor land use codes, as specified. (Based on 04/06/2026 text)

Position	Priority
SPOT BILL	Low

AB 2568 (Johnson, R) Water district directors: compensation.

Current Text: 04/27/2026 - Amended HTML PDF

Status: 04/23/2026 - From committee: Amend, and do pass as amended and re-refer to Com. on APPR. (Ayes 10. Noes 0.) (April 22). (Amended text released 4/27/2026)

Location: 04/23/2026 - Assembly Appropriations

Summary: Existing law authorizes a water district, as defined, to adopt an ordinance that provides compensation to members of the governing board, as specified. Existing law prohibits a water district from adopting an ordinance that compensates members of the governing board for more than a total of 10 days in any calendar month. This bill would, until January 1, 2032, authorize a water district that has at least 90,000 residents within its jurisdiction to adopt an ordinance that compensates members of the governing board for up to a total of 15 days in any calendar month, but would require the members of the governing board of a water district that compensates its members for more than 10 days in a calendar month to annually adopt a written policy describing, based on a finding supported by substantial evidence, why providing compensation for more than 10 days per calendar month is necessary for the effective operation of the water district. This bill contains other related provisions and other existing laws. (Based on 04/27/2026 text)

Position	Priority
Watch	Low

AB 2728 (Soria, D) Open and Transparent Water Data Act.

Current Text: 03/19/2026 - Amended HTML PDF

Status: 04/15/2026 - From committee: Do pass and re-refer to Com. on APPR. with recommendation: To Consent Calendar. (Ayes 13. Noes 0.) (April 14). Re-referred to Com. on APPR.

Location: 04/15/2026 - Assembly Appropriations

Summary: Existing law, the Open and Transparent Water Data Act, requires the Department of Water Resources, the State Water Resources Control Board, and the Department of Fish and Wildlife to coordinate and integrate existing water and ecological data from local, state, and federal agencies for specified purposes, including, among others, improving the management of the state's water resources. This bill would specify for purposes of that provision that improving the management of the state's water resources includes improving the efficacy of management actions. This bill contains other related provisions and other existing laws. (Based on 03/19/2026 text)

Position	Priority
SPOT BILL	Low

SB 1313 (McNerney, D) Drinking water: perfluoroalkyl and polyfluoroalkyl substances.

Current Text: 04/27/2026 - Amended HTML PDF

Status: 04/23/2026 - From committee: Do pass as amended and re-refer to Com. on APPR. with recommendation: To consent calendar. (Ayes 7. Noes 0.) (April 22). (Amended text released 4/27/2026)

Location: 04/22/2026 - Senate Appropriations

Summary: Existing law establishes the Safe Drinking Water State Revolving Fund, and moneys in the fund are continuously appropriated to the State Water Resources Control Board for the provision of grants and revolving fund loans to provide for the design and construction of projects for public water

systems that will enable suppliers to meet safe drinking water standards. Existing law provides that moneys in the fund and its special accounts may be expended for additional purposes provided in the federal Safe Drinking Water Act. This bill would provide that moneys in the fund and its special accounts may be considered eligible and expended for projects that address perfluoroalkyl and polyfluoroalkyl substances in drinking water. By expanding the purposes for which a continuously appropriated fund may be expended, the bill would make an appropriation. (Based on 04/27/2026 text)

Position	Priority
Watch	Low

SB 1417 (Pérez, D) Mutual water companies: assessments and water charges: notice.

Current Text: 04/23/2026 - Amended **HTML** **PDF**

Status: 04/23/2026 - Read second time and amended. Ordered to third reading.

Location: 04/23/2026 - Senate THIRD READING

Summary: Existing law authorizes any corporation organized for or engaged in the business of selling, distributing, supplying, or delivering water for irrigation purposes, and requires any corporation organized for or engaged in the business of selling, distributing, supplying, or delivering water for domestic use, to provide in its articles or bylaws that water shall be sold, distributed, supplied, or delivered only to owners of its shares and that those shares are appurtenant to certain lands, as specified. Under existing law, these corporations are known as mutual water companies. This bill would prohibit a mutual water company from charging, issuing a bill, or otherwise seeking to hold tenants of shareholders responsible for the costs of water or its delivery, except for specified tenants, and would require all notices of charges for water to be sent to the last known address of the shareholder or tenant, as applicable. This bill contains other related provisions and other existing laws. (Based on 04/23/2026 text)

Position	Priority
Watch	Low

Total Measures: 15
Total Tracking Forms: 15

AGENDA ITEM NO. 5.B

DATE: May 4, 2026

TO: JPA Board of Directors

FROM: 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 (PWP). 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 (PWP) 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 were completion of the preliminary design and environmental documentation, procurement of a progressive design-build (PDB) firm, and regulatory support.

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 PWP.

On March 4, 2024, the JPA authorized Amendment No. 2 for Jacobs to provide Owner's Advisor/Program Manager services, which defined the next phase of their support for the program during the 60 percent design of the Advanced Water Purification Facility. Additionally, on December 8, 2025, the JPA authorized the award of a progressive design-build contract, in the amount of $303,733,342, for the Phase 2 final design and construction of an Advanced Water Purification Facility and Reverse Osmosis Concentrate Pipeline for the project, together with a JPA-controlled allowance reserve, in the amount of $12,720,542

These important steps bring the PWP program into the construction phase of work following a groundbreaking event on April 10, 2026.

This report serves to provide a summary of the progress to-date on the work performed, including major monthly milestones, key program accomplishments, key considerations and a look-ahead of upcoming activities.

GOALS:

Lead in Sanitation and Recycled Water Services Focusing on Maximum Reuse

Prepared by: Oliver Slosser, PE, Engineering Program Manager

ATTACHMENTS:
Monthly Update on Pure Water Project Las Virgenes-Triunfo

To: Las Virgenes-Triunfo JPA Board of Directors

From: Oliver Slosser, Las Virgenes Municipal Water District

Date: May 4, 2026

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 reservoir water augmentation requirements.

By 2030, the 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 of Southern California (Metropolitan) supply.

Monthly Major Milestones

The PWP achieved the following in April:

- The project received its United Stated Army Corps of Engineers Section 404 Permit. This authorization permits the construction of the facilities as designed and for the mitigation of wetlands at the AWPF site.
- Construction management staff from Jacobs Engineer has been onboarded and began ongoing inspection of the site and construction progress in April.
- Continued review and collaboration on the 95% design of the AWPF and 30% design of the Ancillary line submittals.
- Negotiated a Memorandum of Agreement with the City of Thousand Oaks for installation of the Reverse Osmosis Concentrate (ROC) pipeline through the City. Planning and item was approved by City of Thousand Oaks City Council on April 14.

- Advanced coordination with Callegus, City of Thousand Oaks, and private parties regarding upsizing the ROC line to allow for future connections by industrial users in Thousand Oaks.
- Continued planning for ongoing encroachment permits and easement modifications with the City of Agoura Hills.
- Met with the City of Westlake Village and local business representatives to continue development of traffic control through the City during ROC installation.
- Met with the City of Westlake Village Environmental Committee on April 20 and discussed the pipe bridge and ancillary pipeline alignments
- Ongoing coordination with Cal Lutheran University regarding temporary construction easements across their parking lot.
- Groundbreaking event was held April 10, and was well received by the project partners and stakeholders.
- Continued coordination with TreePeople for the Sweetwater Canyon mitigation site.
- Made payment for the Petersen Ranch mnitigation site
- Coordination with State Revolving Fund staff for completion of the SRF loan and Water Recycling Grant.
- Submitted Encroachment Permit Application and restriping plan parking for the AWPF along Agoura Rd.
- Completed Local Resource Program agreement with Metropolitan Water District.
- Approved the Phase 2 Baseline Schedule for billing with Walsh.
- Completed utility research along the ancillary pipeline alignments.
- Procurement of a Builder's Risk policy for savings to the JPA of roughly $1.6M.
- Began researching project specific BABA waiver with Bureau of Reclamation for construction award
- Discussed options for retaining wall at AWPF site.
- Finalized interior finished for the AWPF
- Developed RFP for construction management support for pipeline work.

Look Ahead

The PWP is focused on the following activities for April 2026:

- The PWP and the Walsh team will continue to coordinate with other agencies on the project, including City of Agoura Hills, City of Thousand Oaks, City of Westlake Village, and Calleguas MWD.
- Site work at AWPF including mass excavation and grading

AGENDA ITEM NO. 6.A

DATE: May 4, 2026

TO: JPA Board of Directors

FROM: Engineering and Facilities

SUBJECT: Pure Water Project Las Virgenes-Triunfo: Authorization of Memorandum of Agreement with City of Thousand Oaks

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SUMMARY:

The proposed Memorandum of Agreement (MOA) between the Las Virgenes-Triunfo Joint Powers Authority (JPA) and the City of Thousand Oaks (City) is intended to facilitate the installation of the reverse osmosis concentrate (ROC) pipeline, a critical component of the Pure Water Project Las Virgenes-Triunfo (PWP). The ROC pipeline will enable the conveyance of brine concentrate generated by advanced water purification processes, supporting the region's long-term water reliability and regulatory compliance objectives.

The MOA outlines the roles, responsibilities and coordination necessary for the successful installation of the ROC pipeline within the City's jurisdiction, including provisions for permitting, construction access and associated cost-sharing items. The pipeline alignment traverses almost 12 miles of City-owned property and right-of-way, and the MOA is structured to ensure that both agencies' requirements are met as the PWP moves toward full-scale construction.

On April 14, 2026, the Thousand Oaks City Council unanimously approved the MOA that includes the optional installation of a fiber optic conduit at the City's sole expense. Staff recommends authorization to execute the MOA with the City of Thousand Oaks, in the total net amount of $3,618,726, for the installation of the ROC pipeline and fiber optic conduit.

RECOMMENDATION(S):

Authorize the Administering Agent/General Manager to execute the Memorandum of Agreement with the City of Thousand Oaks, in the total net amount of $3,618,726, for the installation of a reverse osmosis concentrate pipeline and fiber optic conduit.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

The total net cost of this action to the JPA is $3,618,726, which would be paid to the City of Thousand Oaks through two installments.

The total next cost reflects the sum of the following items: (1) the JPA cost for the use of an existing City-owned casing pipe and crossing beneath the Conejo Canyons Bridge, in the amount of $45,600; (2) the JPA cost to fund an in-lieu pavement restoration fee, in the amount of $3,884,230, for the City's use to repave the affected roadways; and (3) the City's cost to fund the design and installation of a fiber optic conduit by Walsh Construction as part of the PWP, applied in the deductive amount of $311,104 including contingency.

Sufficient funding for the MOA is available in the adopted Fiscal Year 2025-26 JPA Budget. Additionally, the overall PWP budget of $466,324,745 would remain the same. No additional appropriation is required at this time. The work is funded from CIP Job No. 10635, which is allocated 70.6 percent to LVMWD and 29.4 percent to Triunfo Water and Sanitation District (TWSD).

DISCUSSION:

The planned installation of the ROC pipeline within the City of Thousand Oaks represents a significant milestone in the implementation of the Pure Water Project Las Virgenes-Triunfo. The need for a dedicated ROC pipeline was identified during early project planning and regulatory consultations as advanced water purification processes generate a concentrated brine waste stream that must be managed in compliance with state and federal water quality regulations.

The ROC pipeline is designed to convey the concentrate to the Calleguas Municipal Water District's (CMWD's) Salinity Management Pipeline, which would transport the concentrate to CMWD's existing ocean outfall. The alignment of the ROC pipeline was developed through a collaborative process involving the JPA, City of Thousand Oaks, CMWD and other regional stakeholders with careful consideration given to minimizing community impacts and optimizing constructability within existing public rights-of-way.

Looking ahead, approval of the MOA with the City of Thousand Oaks would enable the project to advance through the construction phase with future milestones including final permitting, easement acquisition and initiation of construction activities. The MOA specifically includes provisions for the following items:

- The JPA's use of an existing City-owned casing pipe and crossing beneath the Conejo Canyons Bridge, which was constructed between 2023 and 2024. The negotiated cost for use of the casing for the ROC crossing at the bridge in perpetuity is based on the bid amount paid by the City of Thousand Oaks to its contractor in 2023 for the casing installation, in the amount of $45,600.

- The JPA will construct the ROC pipeline across almost 12 miles of City-owned property, including open space. Of the total distance, approximately 9.5 miles will traverse City-owned and paved streets. The MOA would establish a negotiated encroachment permit fee associated with the work. The City's typical encroachment permit fee is set at 5% of the project's construction contract. In the case of the ROC elements of the PWP being approximately $53 million, the resulting encroachment permit fee would be $2,650,000. However, in negotiations between the City and JPA staff, it was determined that the City

would defer all inspections of the pipeline, chemical injection vaults and backfill to the JPA, enabling them to establish a substantially lower fee of $269,889 for their inspections and plan reviews specific to traffic control and surface restoration of the pipeline trench. The negotiated fee represents a significant cost-savings for the project, in the amount of $2,380,111.

- The City of Thousand Oaks requirements establish for a single lane-width of the paved streets to be disturbed and receive an asphalt overlay upon completion of trenching, as the heavy truck traffic and the duration of the construction are likely to cause degradation along the ROC pipeline alignment. The JPA would be responsible for the cost of pavement restoration associated with the project, in the amount of $3,884,230. The payment would be considered complete reimbursement for pavement restoration including all costs for design, planning, construction, inspection and construction management of such improvements. Recent bids received by the City reflect costs of up to $55 per square yard of grind and overlay work. Considering the length of the ROC trench and an average 12-foot lane width, the project would require grinding and repaving approximately 67,000 square yards of roadbed, which corresponds to a construction estimate of $3.7 million. Based on these values and factoring in the need for design, inspection and construction management of the paving project, the negotiated cost was deemed to be reasonable for the City to perform this work. In lieu of constructing these improvements as part of the PWP contract, the MOA would provide for the JPA to pay a fixed amount of $3,884,230 to the City for a future pavement restoration project along the ROC pipeline corridor. The approach would benefit the City as they maintain local control over the paving operations and can include the paving of additional traffic lanes along the corridor at the same time to reduce public inconvenience and provide a more consistent surface across the roadbed. The agreement would benefit the JPA by giving certainty to the cost of paving restoration, recognizing current construction market volatility.

- The City of Thousand Oaks seeks the installation of a fiber optic conduit along a portion of the ROC alignment. The cost of the work was quoted by Walsh Construction, in the amount of $311,104, consisting of the contractor's base cost of $282,822 plus a 10% contingency. Any costs incurred by the JPA for the fiber conduit in excess of this amount would be reviewed by the JPA and City and paid by the City if such excess costs either: (i) resulted from an emergency change order; or (ii) resulted from a discretionary change order for which the City gave prior written approval.

- The City will waive any valuation requirements for the establishment of a non-exclusive utility easement over an access road that shall be constructed through City-owned open space for installation of the ROC pipeline. The City will further waive fees for the establishment and filing of the easement. Establishment of the easement will preserve future rights for City-owned utility installations, as well as a joint utility easement for the City and JPA for the portion of the pipeline passing through the open space between Rancho Conejo Boulevard and City-owned open space.

The MOA further establishes a framework for on-going interagency coordination to address unforeseen issues and ensure timely resolution of any challenges that may arise during implementation. The approval of the MOA with the City will enable the project to advance through the construction phase of work with an element of cost certainty and future milestones for final permitting, easement acquisition and initiation of construction activities.

GOALS:

Lead in Sanitation and Recycled Water Services Focusing on Maximum Reuse

Prepared by: Jessica Forte, PE, Principal Engineer

ATTACHMENTS:
Proposed Memorandum of Agreement with City of Thousand Oaks

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

MEMORANDUM OF AGREEMENT
FOR THE PURE WATER PROJECT BETWEEN
LAS VIRGENES - TRIUNFO JOINT POWERS AUTHORITY AND
THE CITY OF THOUSAND OAKS

This Memorandum of Agreement (“MOA”) is entered into by and among the Las Virgenes – Triunfo Joint Powers Authority (“JPA”) and the City of Thousand Oaks ("City"), collectively referred to herein as the "Parties." The MOA is effective as of the date of execution by the last party to execute the MOA.

RECITALS

A. WHEREAS, on December 8, 2025, the JPA awarded Amendment 8 to The Walsh Group, Ltd. ("Contractor") for Progressive Design Build Contracting Services associated with the Pure Water Project (“Project”) Las Virgenes-Triunfo, a public works project;

B. WHEREAS, the Project includes installation of a Reverse Osmosis Concentrate Pipeline (ROC)which passes through the City of Thousand Oaks to help produce a new regional supply of local water resources; and

C. WHEREAS, the ROC pipeline presents a potential future opportunity for management of brine waste from the City of Thousand Oaks and presents an economic development opportunity for the Newbury Park Rancho Conejo Corridor, given the desirable access to a property- adjacent brine line disposal facility for multiple sectors of the City’s industrial and manufacturing community; and

D. WHEREAS, the JPA and the City desire to complete the Project in the most cost-effective manner with the least amount of disruption to the City’s residents; and

E. WHEREAS, the City has agreed to establish a not to exceed amount of $269,889 for the encroachment into Public Right of Way necessitated by the construction of the ROC pipeline and it’s appurtenances, this permit shall be pulled at a later date by the Contractor; and

F. WHEREAS, the JPA desires to acquire the use of an existing, City owned sleeve/casing pipe across the Conejo Canyons Bridge for the ROC alignment; and

G. WHEREAS, the City wishes to retain an option to have the Contractor install fiber conduit infrastructure (“Fiber Conduit”) between the City’s Municipal

Service Center and Hill Canyon Treatment Plant during the JPA's construction activities to minimize future disruption to the City's streets and access road, at the City's cost; and

H. WHEREAS, the JPA desires to pay an in-lieu fee for pavement impact/restoration associated with construction of the Project, and to have the responsibility for pavement restoration fall to the City; and

I. WHEREAS, the City desires to complete pavement restoration upon completion of the Project with its own forces or contractors at a future date, to reduce impacts to residents and businesses and avoid trenching of recently paved streets; and

J. WHEREAS, the JPA desires to establish an access road through open space owned by the City for installation of the ROC and future maintenance of the ROC; and

K. WHEREAS, the JPA and City desire to establish a non-exclusive utility easement over such access road for installation of the ROC line by the JPA and to preserve future rights for City owned utility installation, as well as a joint utility easement for the City and LVMWD for the portion of the pipeline passing through private property between Rancho Conejo Blvd. and the City-owned open space; and

L. WHEREAS the Parties desire to divide responsibilities under this MOA, as described in Exhibit "A", with the City paying for Contractor's charges associated with the Fiber Conduit should that option be executed, and the JPA paying for the use of an existing sleeve/casing pipe, street restoration, and administrative costs to establish a utility easement; and

M. WHEREAS, the JPA will serve as the lead agency for the administration of the construction of the Project (including the optional Conduit) on behalf of the Parties; and

N. WHEREAS, the Parties desire to enter into this MOA voluntarily to, among other things, act in a cooperative manner to complete the Project, set forth the Parties' intent to have the Project administered and coordinated by the JPA, establish the roles of the Parties relative to each other; and establish the terms of payment between the JPA and the City.

AGREEMENT

NOW, THEREFORE, in consideration of the mutual benefits and representations made herein, the Parties hereby agree as follows:

1. Purpose – This MOA is entered into by the Parties to provide for the construction and installation of the Project improvements within the City of

Thousand Oaks, to establish a shared easement for future utility installations, to establish an in-lieu fee for pavement restoration associated with the Project, to transfer the responsibility for future pavement restoration to the City, and to allow for the incorporation of fiber conduit should the City opt to have it included. The location of the work is identified and described in Exhibit "B" hereto and incorporated herein by this reference as though set forth in full.

2. Incorporation of Recitals — The recitals above are incorporated by reference and hereby made a part of this MOA.

3. Term of MOA — This MOA shall continue in effect until all of the Project improvements referenced herein within the City's boundaries are fully completed, and all associated payments are made, unless earlier terminated or extended by written agreement of the Parties.

4. Information Sharing — The Parties mutually agree to share, to the extent not otherwise prohibited by law or by legal or trade secret privilege, all information required to develop, prepare, and submit documents required for the portion of the Project located within City's geographical boundary.

5. Contractor Payment — The JPA shall direct the funds from this MOA to pay Contractor for the Conduit installation should the City execute the option in accordance with the terms outlined in the Contract.

6. Easement – The Parties agree to establish a shared easement as follows:

   i. The JPA and the City shall establish a joint utility easement over an access road as shown in Exhibit "B".

   ii. The JPA shall bear all costs associated with the development of easement instruments, surveys, and related documentation.

   iii. The City shall waive all costs for approving and recording such easement.

   iv. The Parties recognize that this easement arrangement requires final approval by the Thousand Oaks City Council prior to execution of the easement documents.

   v. Parties shall cooperate in good faith to complete the easement documentation within a reasonable time following City Council approval.

7. City Cost Share - The City will retain the option to have Fiber Conduit installed as part of the ROC installation at a cost of Three Hundred and Eleven Thousand, One Hundred and Four dollars ($311,104), consisting

of the Contractors base cost of $282,822 plus a contingency of 10% ($28,282) for exclusions encountered during construction. All other costs incurred by the JPA in connection with the other components of the Project shall be paid by the JPA, and all costs incurred by the City for the Conduit shall be paid by the City. All costs incurred by the JPA for the Fiber Conduit in excess of the amounts listed above will be reviewed by the JPA and the City and will paid by the City if such excess costs either (i) result from an emergency change order; or (ii) result from a discretionary change order for which the City gave prior written approval. Execution of this option must be made no later than April 30, 2026 to keep the existing pricing as identified. After that date the project is anticipated to incur additional design or construction costs. If a determination to include Fiber Conduit is made after that date, the City may, at its sole discretion and cost, bear the cost of the Change as negotiated with the Contractor, under an amendment to this agreement.

8. JPA Cost Share - The JPA shall be responsible to compensate the City the amount of $45,600 for use in perpetuity of an existing sleeve/casing (casing) pipe as shown in the attached Exhibit “A” across the Conejo Canyons Bridge (Bridge). This casing shall be used by the JPA for the purposes of conveying the ROC line across the Bridge, and the project’s contractor shall install the main within the sleeve. The amount being paid to the City is related to the City’s costs incurred during the construction of the Bridge to install the referenced casing. The JPA shall additionally be responsible for the cost of the pavement restoration associated with the Project, in the amount of $3,884,230. This payment will be considered complete payment for pavement impact and restoration including all costs incurred by the City for the design, planning, construction, inspection, and construction management of such improvements.

9. Payment to the City – The JPA shall pay to the City the total sum of $3,618,726. This sum includes the JPA Cost share items above and deducts the City Cost Share item. This amount shall be paid in two parts, with 50% ($1,809,363) coming due upon execution of this MOA, and the other 50% ($1,809,363) plus any remaining contingency funds associated with the fiber line becoming due at completion of the work. Should the City decline to exercise the option to install conduit, an additive adjustment of $311,104, to the second payment shall be made. The revised second payment, without execution of the Fiber Conduit option, shall be $2,120,467.

10. Contracting — The Parties agree that the JPA shall be considered the contracting agency and the administrator of the Project including the Fiber Conduit if exercised. It is the intent of the Parties that Contractor shall look solely to the JPA for payment and to resolve any issues with the Contract.

11. Supervision of Contractor — The JPA shall act as the lead agency in the construction and management of the Project. The City shall have the opportunity to approve or deny discretionary change orders related to the Fiber Conduit. The City will inspect the installation of the Fiber Conduit at its own cost. Except for change orders issued on an emergency basis, the JPA shall notify the City regarding all proposed change orders related to the Fiber Conduit, including cost and scope changes, and shall offer the City reasonable time for approval or denial of such change orders.

12. Indemnification

    i. The City shall indemnify and defend the JPA and the JPA's officers, agents, and employees from and against any and all liabilities, actions, suits, proceedings, claims, demands, losses, costs, and expenses, including legal costs and attorney's fees, for injury to or death of person(s), for damage to property (including property owned by the JPA) resulting from acts or omissions of the City or any of the City's officers, employees, or agents in connection with the Fiber Conduit.

    ii. The JPA shall indemnify and defend the City and the City's officers, agents, and employees from and against any and all liabilities, actions, suits, proceedings, claims, demands, losses, costs, and expenses, including legal costs and attorney's fees, for injury to or death of person(s), for damage to property (including property owned by the City) resulting from acts or omissions of the JPA or any of the JPA's officers, employees or agents in connection with the Project (including the Fiber Conduit).

    iii. This Section 12 shall survive the termination or expiration of this MOA.

13. Representation — The representative of the JPA shall be the Principal Engineer. The representative of the City shall be the Public Works Director. These individuals shall be the primary contact persons for the Parties regarding the performance of this MOA unless otherwise designated by a Party's representative.

14. Notices — Any notices, bills, invoices, or reports relating to this MOA and any request, demand, statement or other communication required or permitted hereunder shall be in writing and shall be delivered to the representatives of the Parties at the addresses set forth below:

    To JPA: Las Virgenes Municipal Water JPA
    Attn: Jessica Forte, P.E., Principal Engineer
    4232 Las Virgenes Road
    Calabasas, CA 91302-1994

To City: City of Thousand Oaks
Attn: Nader Heydari, P.E., Public Works Director
2100 E. Thousand Oaks Blvd
Thousand Oaks, CA 91362

Written notice shall include notice delivered via email. A notice shall be deemed to have been received on (a) the day of delivery, if delivered by hand during regular business hours or by confirmed facsimile or by confirmed email; or (b) on the third business day following deposit in the United States mail, postage prepaid to the addresses set forth herein.

15. Relationship of the Parties - The Parties are, and shall at all times remain as to each other, wholly independent entities. Neither Party to this MOA shall have power to incur any debt, obligation, or liability on behalf of any other Party or otherwise act on behalf of any other Party as an agent except as expressly provided by this MOA. No official, employee, agent, or officer of a Party shall represent that he, she or anyone else from that Party is in any manner an official, agent, employee or officer of the other Party.

16. Governing Law — This MOA shall be governed, interpreted, construed and enforced in accordance with the law of the State of California, excluding California's choice of law rules. Venue for any legal action or other proceeding relating to this MOA shall be in the Ventura County Superior Court.

17. Severability — If any provision of this MOA shall be determined by any court to be invalid, illegal or unenforceable to any extent, the remainder of this MOA shall not be affected and this MOA shall be construed as if the invalid, illegal or unenforceable provision had never been contained in this MOA.

18. Amendment — This MOA may be modified or amended, or provisions or breach may be waived, only by subsequent written agreement signed by duly authorized agents of the Parties.

19. Authority — The persons executing this MOA on behalf of each Party represents and warrants that he or she has the authority to execute this MOA on behalf of such Party and has the authority to bind the Party to the performance of its obligations hereunder.

20. Entire Agreement — This MOA, including any other documents incorporated herein by specific reference, represents the entire and integrated agreement between the Parties regarding the Project and supersedes all prior negotiations, representations or agreements, either written or oral, regarding such subject.

21. Counterparts — This MOA may be executed in counterparts; all such executed counterparts shall constitute the same MOA, and the signature of any party to any counterpart shall be deemed a signature, and may be appended to, any other counterpart. In the event that any signature is submitted electronically as a scanned image, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such scanned signature page were an original thereof. This Agreement may also be executed through the use of digital or electronic signatures provided they meet the requirements of the Electronic Signatures in Global and National Commerce (ESIGN) Act and the California Uniform Electronic Transactions Act (UETA). The presence of an electronic signature on this document shall be construed as the parties' consent to do business electronically.

IN WITNESS WHEREOF, the parties have caused their duly authorized representatives to sign below.

LAS VIRGENES MUNICIPAL WATER DISTRICT
as Administering Agent on behalf of the LVMWD and TWSD for the
LAS VIRGENES-TRIUNFO JOINT POWERS AUTHORITY

_____ _____
David W. Pedersen, General Manager Date

Attest:

_____ _____
Nancy Lawrence Date
Clerk of the Board of Directors

Approved as to Form:

_____ _____
Wayne K. Lemieux Date

District Counsel

CITY OF THOUSAND OAKS

_____ _____
Mikey Taylor, Mayor Date

ATTEST:

_____ _____
Laura B. Maguire, City Clerk Date

APPROVED AS TO ADMINISTRATION:

Andrew P. Powers, City Manager	Date

APPROVED BY DEPARTMENT HEAD:

Nader Heydari, PE, Public Works Director	Date

APPROVED AS TO FORM:
Office of the City Attorney

Tracy Friedl, Assistant City Attorney	Date

EXHIBIT "A"
Contractor Cost Proposal

Reach 3 Conejo Trail Surfacing Improvements and Fiber Raceway

PURE WATER PROJECT
LAS VIRGENES-TRIUNFO
Bringing Our Water Full Circle

Table A10-1: Attachment 10 - Pricing Information Form

Reach 3 Conejo Trail Surfacing Improvements and Fiber Raceway

Proposer: Walsh Construction Company II, LLC
Date: 11/3/2025

Key Personnel/Additional Staff Role	Project Manager	General Superintendent	Assistant Project Manager	LABOR	SUBCONTRACTOR	SUBCONTRACTOR	EXPENSES	
Name	Jeremy Stockschlaeder	Mike Reed	Vaughn Thomas		Brown and Caldwell	Blois Construction		
Billing Rate ($)	$ 221.34	$ 221.34	$ 156.71					
Project Tasks	Hours			Subtotal - Labor	Sub A	Sub B	Expense	Total
Task 1.45 - PM - Pipelines	10	40	20	$ 14,201	$ 11,048	$ -	$ -	$ 25,249
Task 5.85 - Open Space Unpaved Road Design (STA 3595+20 to 3623+60)	0	0	0	$ -	$ 88,472	$ 394,050	$ -	$ 482,522
Task 5.86 - Open Space FO Conduit Design (STA 3600+50 to 3628+30)	0	0	0	$ -	$ 14,096	$ 236,189	$ -	$ 250,285
City of Thousand Oaks Permitting Assistance	0	0	0	$ -	$ 6,266	$ -	$ -	$ 6,266
Total Hours	10	40	20					$ 70.00
Subtotal Fee (A)				$ 14,201	$ 119,882	$ 630,239	$ -	$ 764,322
10% Subcontractor Markup (B) (10% of A)					$ 11,988	$ 50,419	$ -	$ 62,407
3% Insurance and Bond © (3% of A)				$ 426	$ 3,596	$ 18,907		$ 22,930
Total Fee (A+B+C)	$ 2,213	$ 8,854	$ 3,134	$ 14,627	$ 135,467	$ 699,565	$ -	$ 849,659
								$ 849,659

Fiber Raceway Task 5.86 : Cost = $250,285 + $25,029 (10% Subcontractor Markup) + $7,509 (3% Insurance and Bond) = $282,822

PURE WATER PROJECT
LAS VIRGENES-TRIUNFO
Bringing Our Water Full Circle

Table A10-1: Attachment 10 - Pricing Information Form

Proposer: PCO-XX - Open Space Unpaved Road
Carollo

Key Personnel/Additional Staff Role	Pipeline PM	Pipeline Technical Advisor	Civil	Pipeline Design Manager	Pipeline	Pipeline	Project Controls	Subtotal - Labor	SUBCONTRACTOR	SUBCONTRACTOR	SUBCONTRACTOR	SUBCONTRACTOR	SUBCONTRACTOR	SUBCONTRACTOR	EXPENSES	Subtotal - Expenses	Total
Name	Tim Taylor	Miko Alvazian	Various QA/QC	Matt Huckaby	Senior Designer	Designer/CAD Technician	Admin/Clerical										
Billing Rate ($)	$ 371.00	$ 371.00	$ 371.00	$ 340.00	$ 269.00	$ 245.00	$ 165.00										
Project Tasks	Hours							Subtotal - Labor	Sub A	Sub B	Sub C	Sub D	Sub E	Sub F			
Task 1.45 - PM - Pipelines	16	8	4				4	$ 11,048							$ -	$ -	$ 11,048
AWPF and ROC Pipeline Base Contract Project Management Subtotal	16	8	4	0	0	0	4	$ 11,048	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 11,048
Task 5.85 - Open Space Unpaved Road Design	8	16	8	40	120	120	8	$ 88,472							$ -	$ -	$ 88,472
Task 5.86 - Open Space FO Conduit Design	4	4	4	8	16	8	4	$ 14,096							$ -	$ -	$ 14,096
AWPF and ROC Pipeline Base Contract Subtotal	12	20	12	48	136	128	12	$ 102,568	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 102,568
															$ -	$ -	$ -
Task X.XX - City of Thousand Oaks Permitting Assistance	4	4	8				2	$ 6,266							$ -	$ -	$ 6,266
Permitting Allowance Submittal	4	4	8	0	0	0	2	$ 6,266	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 6,266
Total Hours	32	32	24	48	136	128	18										418
Total Fee	$ 11,872	$ 11,872	$ 8,904	$ 16,320	$ 36,584	$ 31,360	$ 2,970	$ 119,882	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 119,882

QUOTATION BREAKDOWN

Date: 10/24/25
Project: PUREWATER REACH 3

Location: THOUSAND OAKS

GENERAL ENGINEERING
CONTRACTORS
CA License No 256065 A C-16 HAZ
CA DIR # 1001141549
3201 Sturgis Road • Oxnard, CA 93030
(805) 656-1432 • FAX (805) 485-0338

Bid Item	Description	Quantity	UM	Unit Price	TotalPrice
2	CONEJO OPEN SPACE TRAIL ALL WEATHER SURFACE IMPROVEMENTS STA 3595+20 TO 3623+60	2840	SF	$ 138.75	$ 394,050.00
3	FIBER OPTIC RACEWAY FROM STA 3600+50 TO STA 3628+30	2780	LF	$ 84.96	$ 236,189.00

Exclusions: Fees, permits, survey & engineering, ~~hauloff~~, dewatering, traffic control, rock excavation & handling, hazardous waste removal, cost of soils testing, construction water, repaving in excess of trench width, extra mobilizations, special erosion control measures, foundation and/or wall drains, construction fencing & cost of bond, mandreling of line.

Outlook

Scope Assumptions Email

Re: [EXTERNAL] SURFACE IMPROVEMENTS REVISED.pdf

From Stockschlaeder, Jeremy <jstockschlaeder@walshgroup.com>
Date Tue 10/21/2025 7:52 AM
To Thomas Walls <thomaswalls@bloisconstruction.com>
Cc Harel, Arie <aharel@walshgroup.com>; Thomas, Vaughn <vthomas@walshgroup.com>; McCoy, Collin <comccoy@walshgroup.com>

3 attachments (3 MB)

Water Bar Detail - Pages from Att-5-USFS-details-and-specifications.pdf; PWP LV-T - ROCP Reach 3 - Conejo Canyon Open Space Trail Widening Markups.pdf; Shelved Trench Detail - Pages from LVMWD WLV MOA_ Attachment 8_City Work Site Full Plan Set.pdf;

Hi Tom,

The JPA has formally requested that we move forward with including the surface improvements and fiber optic raceway as part of our GMP package.

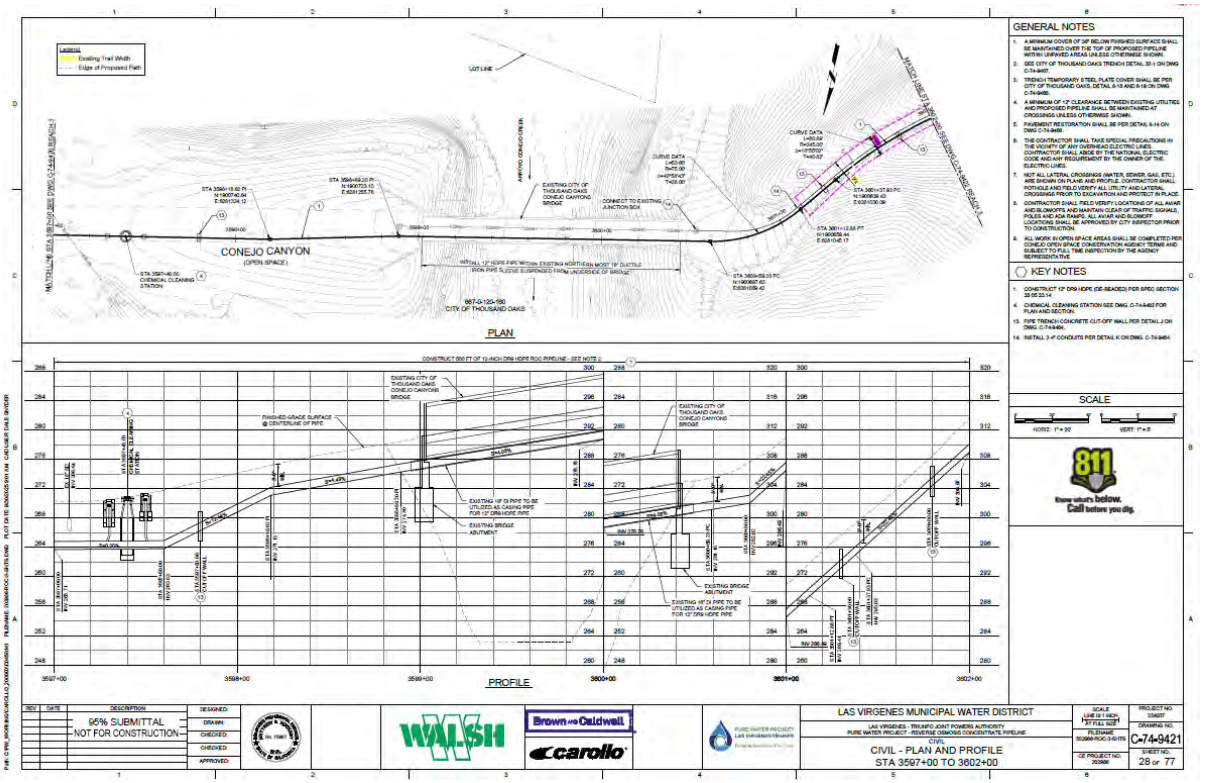
Could you please provide firm / GMP pricing for this scope as provided below? Note that the scope has been modified since the initial request for budgetary pricing:

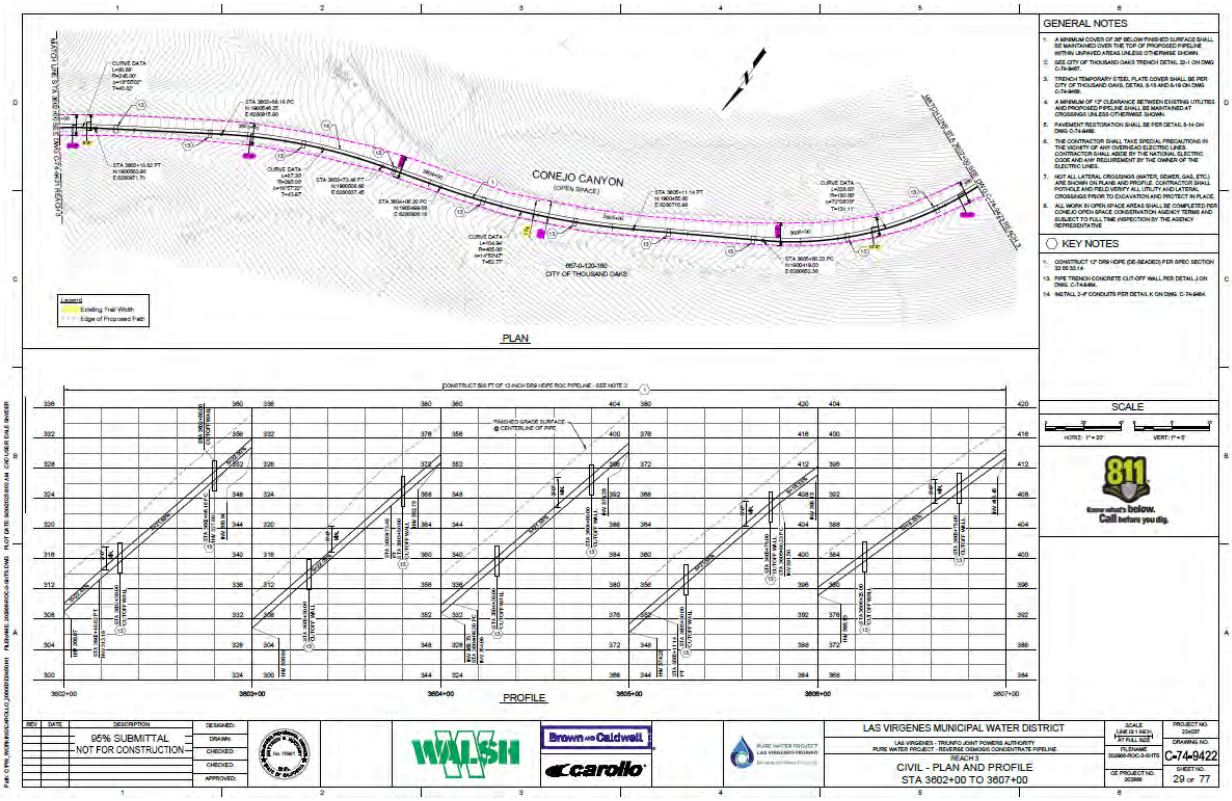
- *Conejo Canyon Open Space Trail All-Weather Surface Improvements (STA 3595+20 to 3623+60)*
  - *From top of the CLSM pipe zone backfill to existing grade the trench can be backfilled with native material. Existing access road surface to be bladed to level existing ruts/erosions/berms and achieve width shown attached markups with maximum 4% cross slope. Once bladed, access road to be overlaid with a 4-inch thick base layer of Class 2 Base and 2-inch thick surface layer of recycled asphalt grindings for the entire road width (**road width per markups, width varies from 8 to 12 feet depending on location**). Erosion control measures will need to be implemented as well. All material to be compacted to 95% compaction.*
    - *Assume erosion control consists of waterbars (see attached detail) constructed every 50' where grade exceed 8%.*
- *Fiber Optic Raceway from Conejo Canyons Bridge (STA ~3600+50) to Rancho Conejo Blvd (STA ~3628+30)*
  - *Install (2) 4" Sch40 PVC conduits in shelved trench similar to attached detail*
  - *Install Caltrans No. 6(T) Pull box every ~1000'*
    - *STA ~3628+30 (end point)*
    - *STA ~3618+30*
    - *STA ~3608+30*
  - *Connect to existing Pull Box at west end of Conejo Canyons Bridge (STA ~3600+50)*

Could you please have this quote completed by COB 10/24?

Thank you,

Jeremy Stockschlaeder, P.E.
Walsh Construction
mobile 310.418.0532
jstockschlaeder@walshgroup.com


GENERAL NOTES
KEY NOTES
SCALE
CONEJO CANYON
(OPEN SPACE)
PLAN
PROFILE
95% SUBMITTAL
NOT FOR CONSTRUCTION
LAS VIRGENES MUNICIPAL WATER DISTRICT
CIVIL - PLAN AND PROFILE
STA 3597+00 TO 3602+00
C-74-9421
28 of 77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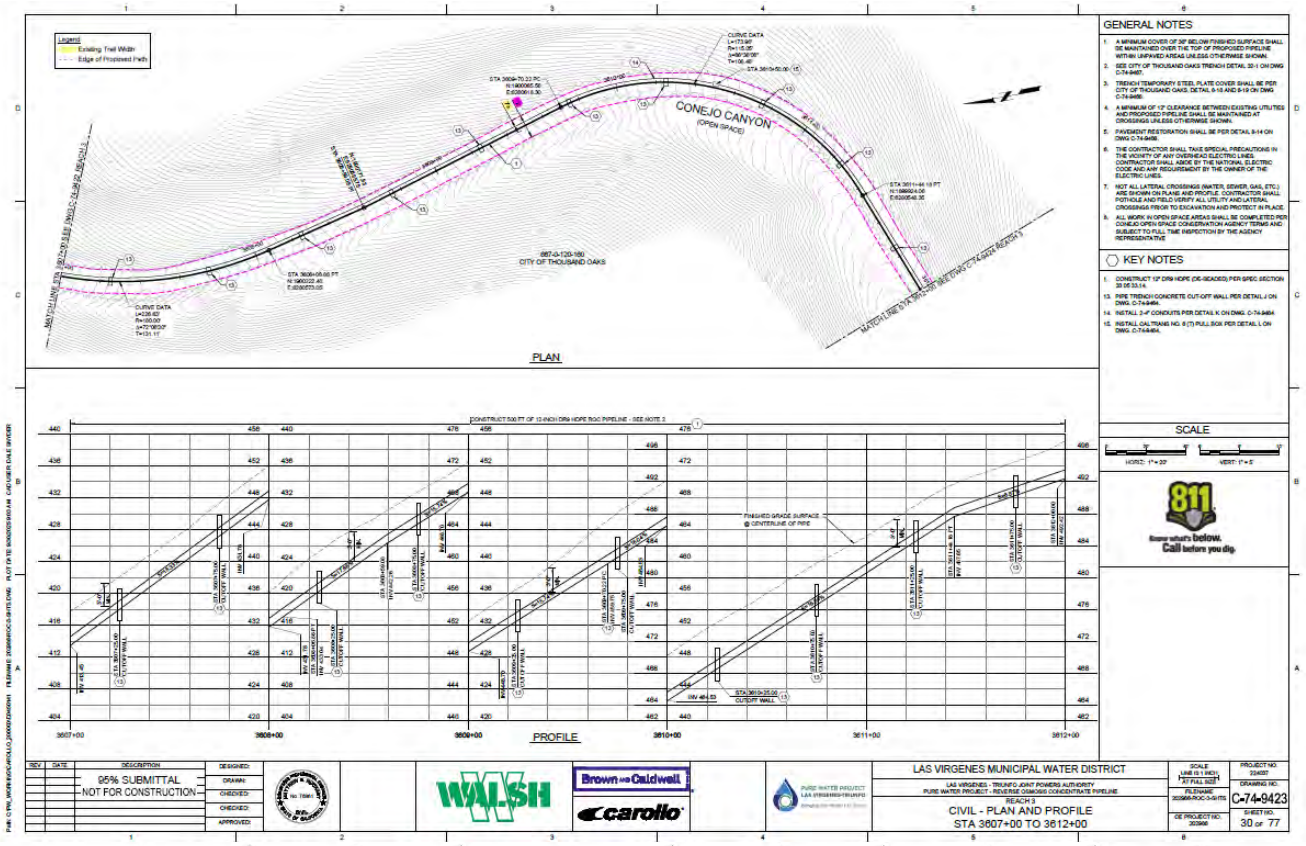
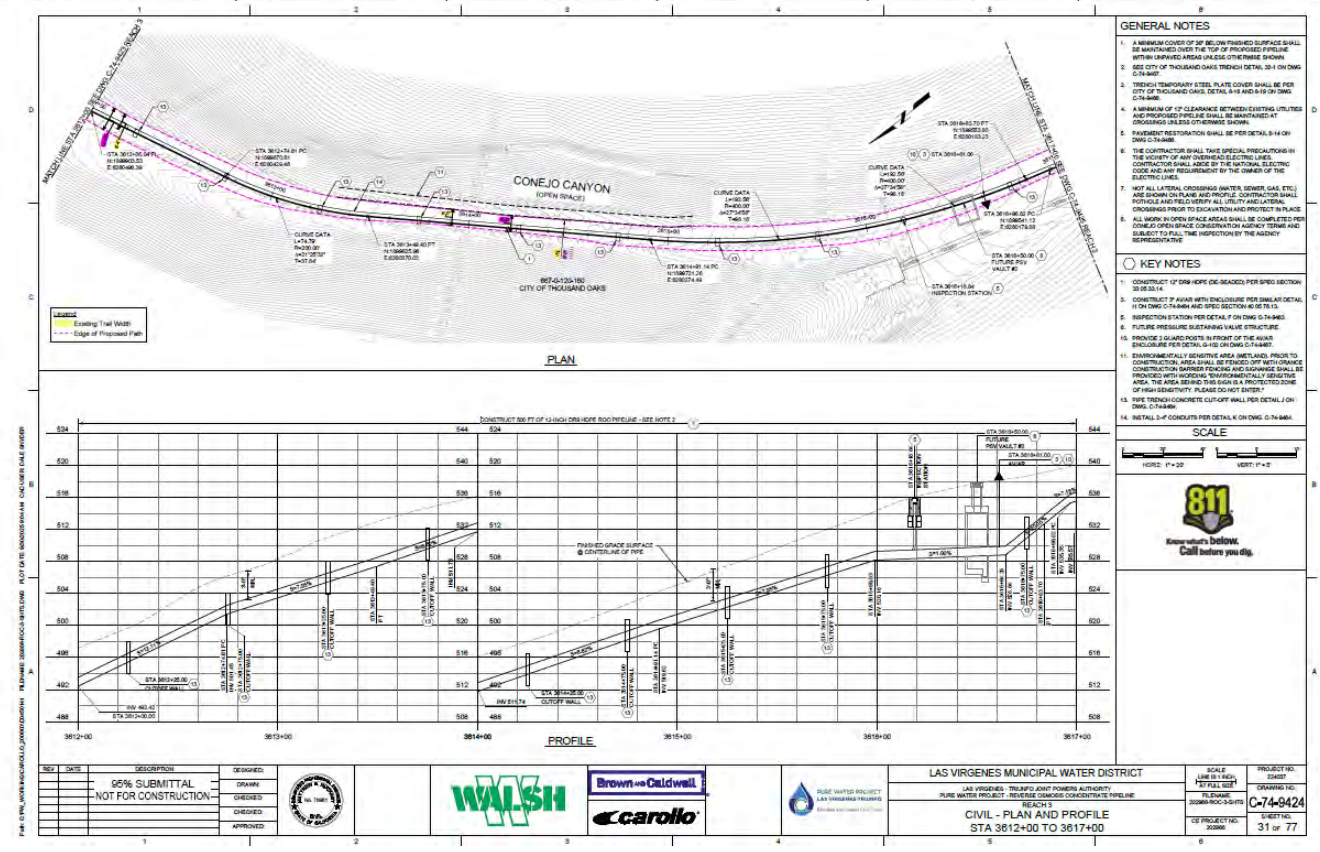
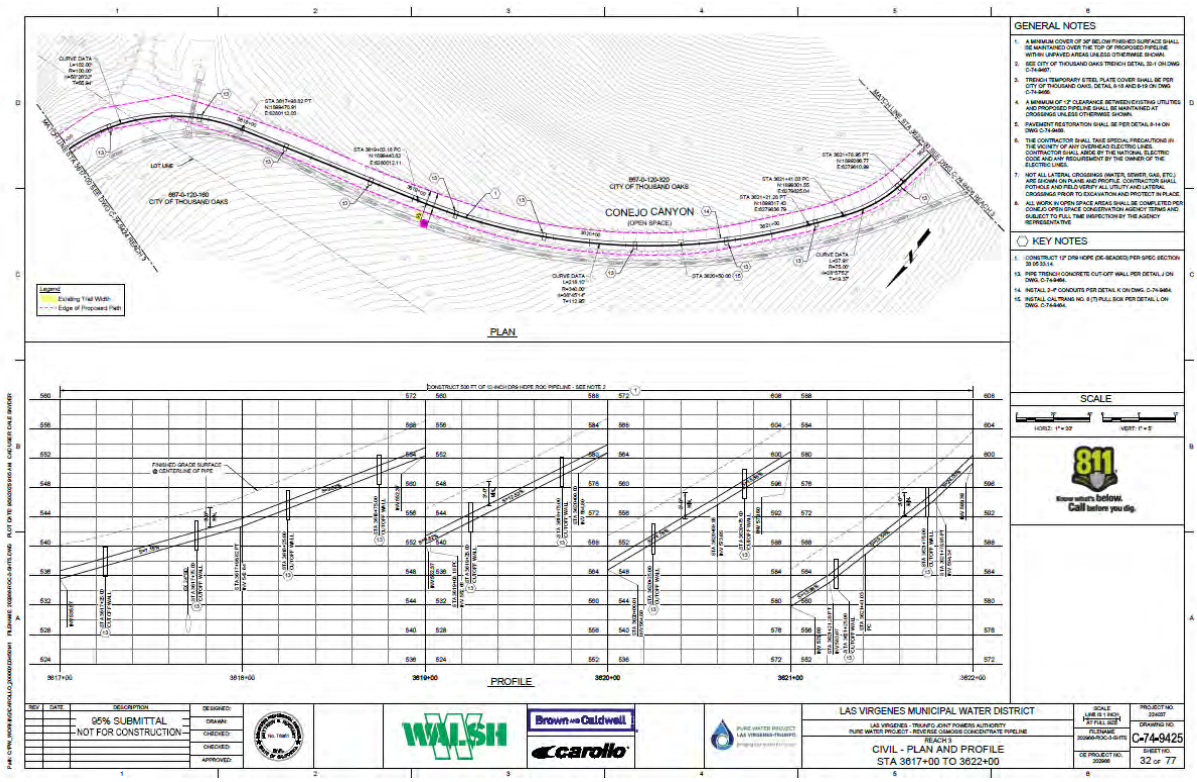
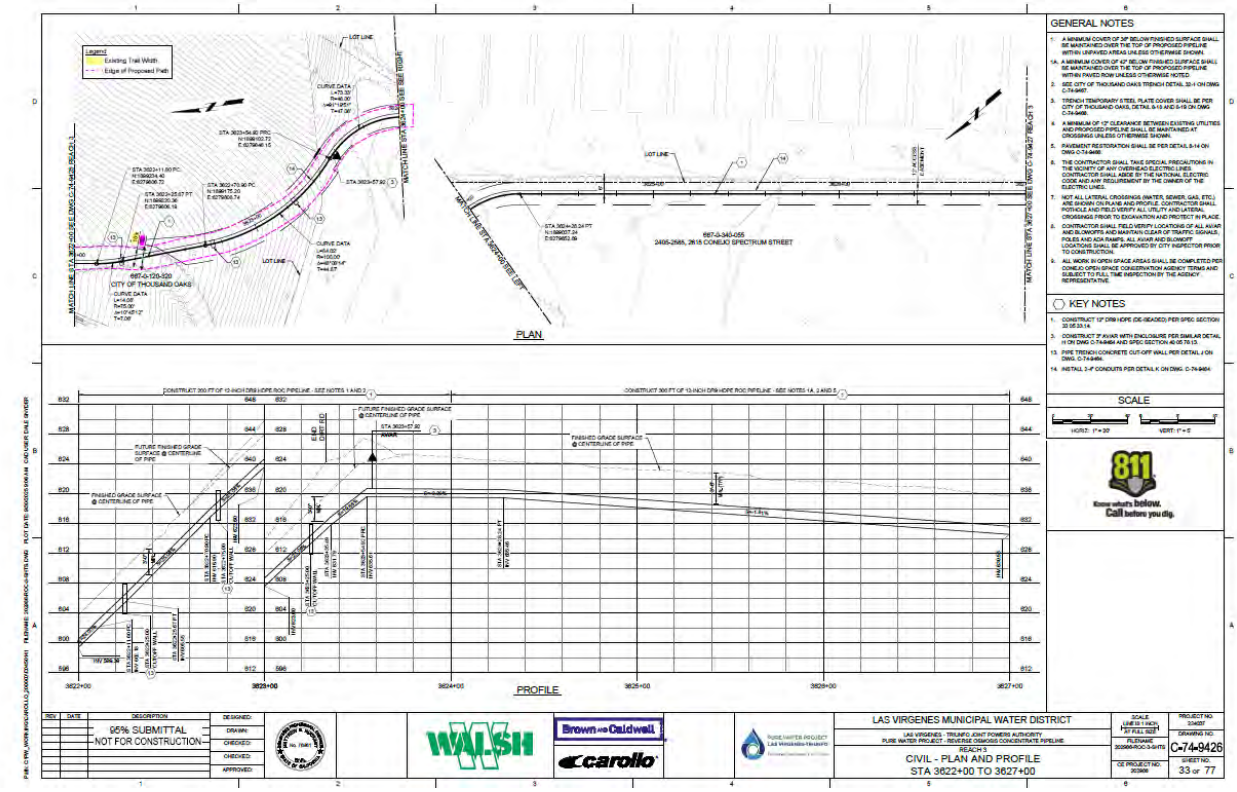
KEY NOTES
SCALE
CONEJO CANYON
(OPEN SPACE)
PLAN
PROFILE
95% SUBMITTAL
NOT FOR CONSTRUCTION
LAS VIRGENES MUNICIPAL WATER DISTRICT
CIVIL - PLAN AND PROFILE
STA 3602+00 TO 3607+00
C-74-9422
29 of 77


GENERAL NOTES
KEY NOTES
SCALE
CONEJO CANYON
(OPEN SPACE)
PLAN
PROFILE
95% SUBMITTAL
NOT FOR CONSTRUCTION
LAS VIRGENES MUNICIPAL WATER DISTRICT
CIVIL - PLAN AND PROFILE
STA 3607+00 TO 3612+00
C-74-9423
30 of 77


GENERAL NOTES
KEY NOTES
SCALE
CONEJO CANYON
(OPEN SPACE)
PLAN
PROFILE
95% SUBMITTAL
NOT FOR CONSTRUCTION
LAS VIRGENES MUNICIPAL WATER DISTRICT
CIVIL - PLAN AND PROFILE
STA 3612+00 TO 3617+00
C-74-9424
31 of 77


GENERAL NOTES
KEY NOTES
PLAN
PROFILE
SCALE
95% SUBMITTAL
NOT FOR CONSTRUCTION
LAS VIRGENES MUNICIPAL WATER DISTRICT
CIVIL - PLAN AND PROFILE
STA 3617+00 TO 3622+00
C-74+9425
32 OF 77


GENERAL NOTES
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PLAN
PROFILE
SCALE
95% SUBMITTAL
NOT FOR CONSTRUCTION
LAS VIRGENES MUNICIPAL WATER DISTRICT
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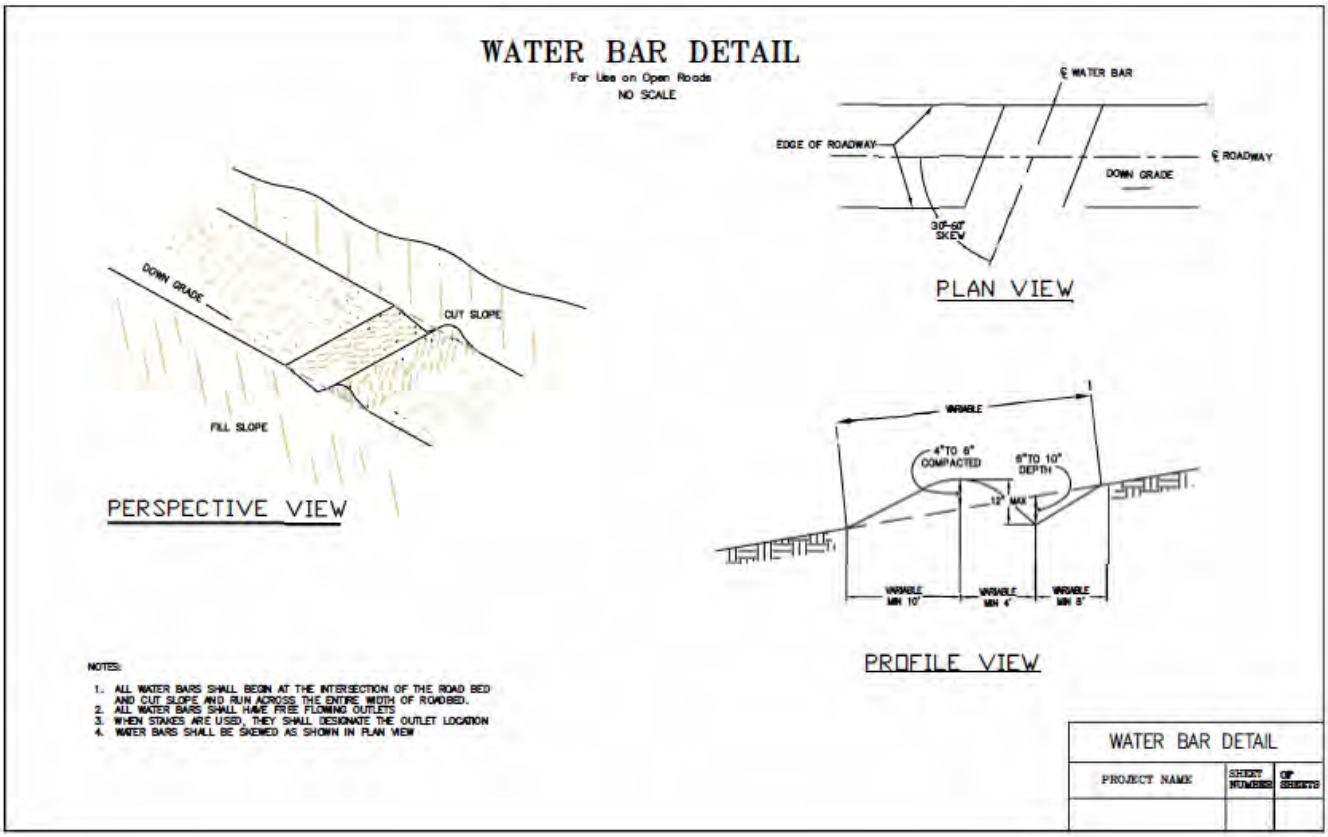
STA 3622+00 TO 3627+00
C-74+9426
33 OF 77


WATER BAR DETAIL
For Use on Open Roads
NO SCALE
℄ WATER BAR
EDGE OF ROADWAY
℄ ROADWAY
DOWN GRADE
30°-60° SKEW
PLAN VIEW
DOWN GRADE
CUT SLOPE
FILL SLOPE
PERSPECTIVE VIEW
VARIABLE
4"TO 6" COMPACTED
6"TO 10" DEPTH
12" MAX
VARIABLE MIN 10'
VARIABLE MIN 4'
VARIABLE MIN 5'
PROFILE VIEW
NOTES:
1. ALL WATER BARS SHALL BEGIN AT THE INTERSECTION OF THE ROAD BED AND CUT SLOPE AND RUN ACROSS THE ENTIRE WIDTH OF ROADBED.
2. ALL WATER BARS SHALL HAVE FREE FLOWING OUTLETS
3. WHEN STAKES ARE USED, THEY SHALL DESIGNATE THE OUTLET LOCATION
4. WATER BARS SHALL BE SKEWED AS SHOWN IN PLAN VIEW
WATER BAR DETAIL
PROJECT NAME
SHEET NUMBER
OF SHEETS

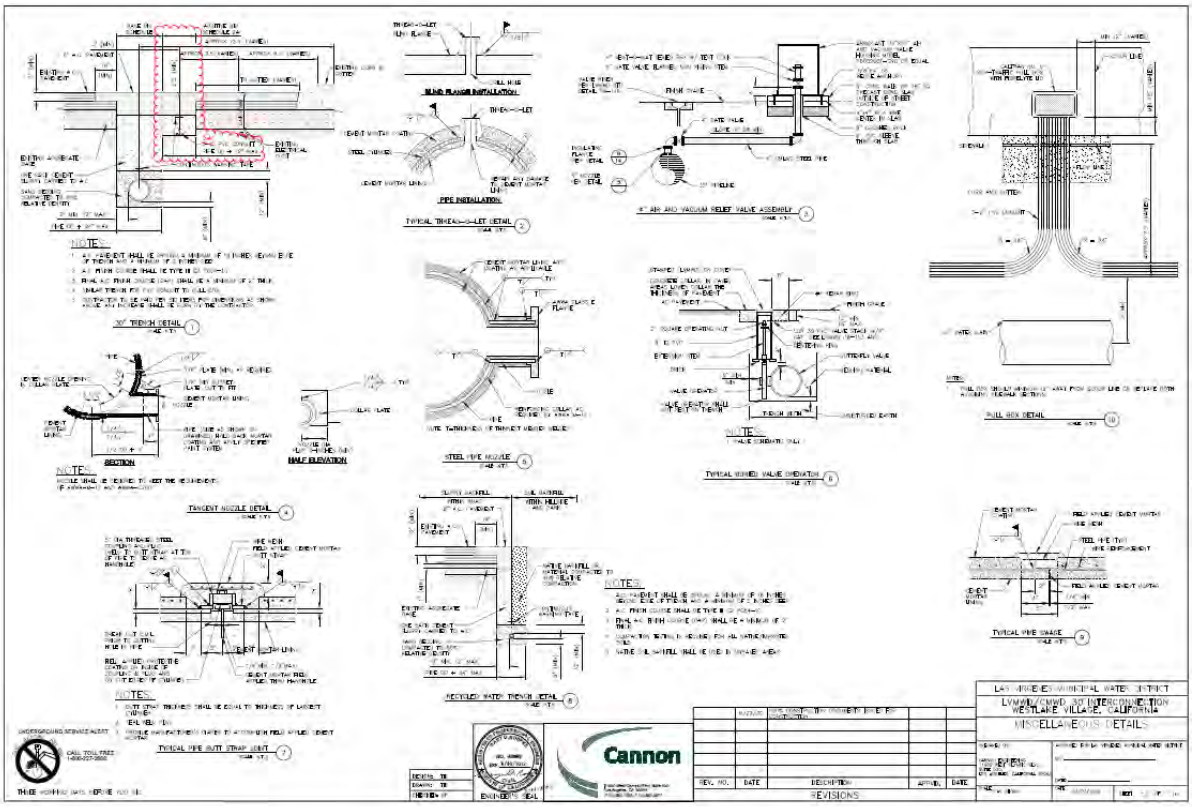
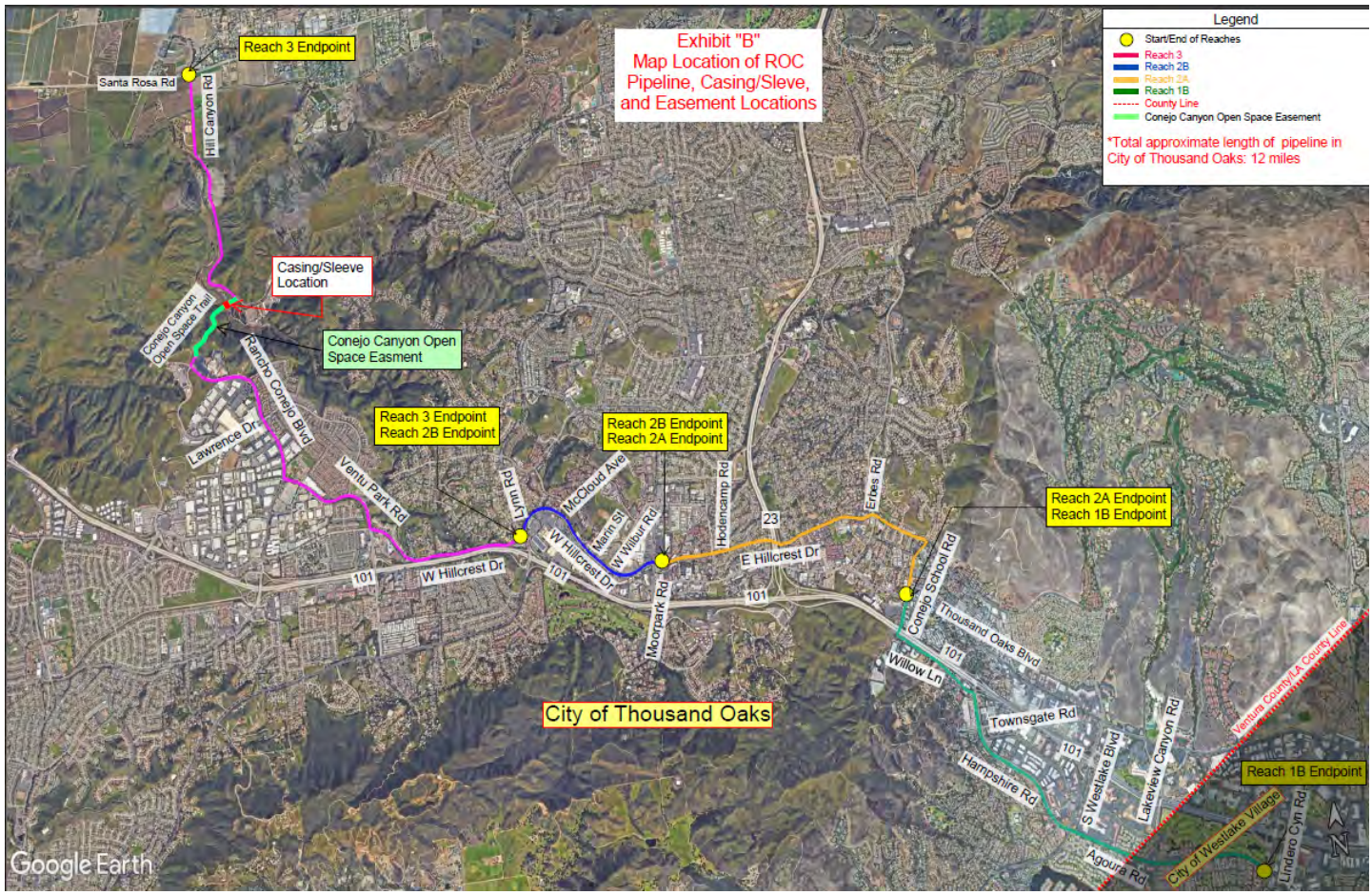

Cannon
REVISIONS
MISCELLANEOUS DETAILS

EXHIBIT “B”

Map Location of ROC Pipeline, Casing/Sleeve, and Easement Locations



AGENDA ITEM NO. 6.B

DATE: May 4, 2026

FROM: General Manager

SUBJECT: Rancho Las Virgenes Farm Sprayfields Repurposing Study: Authorization

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SUMMARY:

Staff proposes a $307,458 agreement with Woodard & Curran to study repurposing the 70-acre Rancho Las Virgenes Farm Sprayfields that have historically been used to dispose of excess recycled water from the Tapia Water Reclamation Facility. Current operations are costly (~$300,000 annually, plus $124,000 for an unused sludge permit), labor-intensive and limited during wet conditions. A key driver for change is a regulatory requirement prohibiting discharge to Malibu Creek after November 16, 2030. Although the upcoming Pure Water Project Las Virgenes-Triunfo will reuse much of the recycled water, backup disposal will still be needed during outages or peak flows.

The study will evaluate converting the sprayfields into detention ponds or reservoirs capable of storing 16 to 25 million gallons (about three days of flow) to provide emergency backup storage and operational flexibility. The scope of work will include assessing design alternatives, costs, permitting, environmental impacts, and potential benefits such as habitat support, and the final report will recommend a preferred concept at a preliminary design level. Completion of the study is expected by March 2027.

RECOMMENDATION(S):

Authorize the Administering Agent/General Manager to execute a professional services agreement with Woodard and Curran, in the amount of $307,458, to complete the Rancho Las Virgenes Farm Sprayfields Repurposing Study.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

The cost of the study is $307,458. Sufficient funds are available in the adopted Fiscal Year 2025-26 JPA Budget for this purpose.

DISCUSSION:

For the past several decades, the Rancho Las Virgenes Farm Sprayfields have been and continue to be an important component of the Joint Power Authority's (JPA) wastewater system. The Rancho Las Virgenes Farm Sprayfields is comprised of approximately 70-acres of generally flat fields, falling off slightly to the west towards Las Virgenes Road in Calabasas. The attached map depicts the relative size and location of the different fields. The acreage is divided into 16 separate fields. Fields Nos. 1 to 4, 15 and 16 are not shown on the map as they have been repurposed and are currently used for a large solar array or other purposes that support the JPA's wastewater operation. The Rancho Las Virgenes Composting Facility, located just north of Field No. 6, built in the 1990s, receives sludge that is pumped up from the JPA's Tapia Water Reclamation Facility and converts it into Class A compost for residential and commercial use.

The JPA acquired the land, which was originally part of the Hope (Bob Hope) Ranch in the 1980s for the purpose of biosolids disposal. The acquisition was achieved through a grant from the U.S. EPA and State Water Resources Control Board (SWRCB). As part of the acquisition, the land must remain open space and can only be used for wastewater operational purposes. Commercial development of the land is not allowed as part of the grant agreement. The sprayfields could also be perceived as a de facto wildlife corridor through the Santa Monica Mountains for bobcat, mountain lion, deer, racoon, coyote and other animal species.

Currently, the JPA's Tapia Water Reclamation Facility (TWRF) treats wastewater to Title 22 standards for non-potable reuse. Much of this water is for irrigation purposes as part of the recycled water systems of Las Virgenes Municipal Water District (LVMWD) and Triunfo Water and Sanitation District (TWSD). Historically and at present, the sprayfields are used every year, during the late spring, summer and the early fall months to dispose of excess tertiary treated Title 22 water from the TWRF. In the winter and shoulder months, when irrigation demands are typically low, excess recycled water that is not needed by the irrigation demands is discharged to Malibu Creek via Discharge Point 001. However, disposal into the creek is prohibited between April 15th and November 15th each year.

The sprayfields currently utilize an above-ground irrigation system consisting of aluminum pipes and sprayers that need to be disassembled and reassembled every year so that the soil can be tilled to remove excess vegetation/grass and for aeration purposes to improve the permeability of the soil. The JPA utilizes a contractor to maintain and operate the sprayfields at an annual cost of approximately $300,000. A Sludge Injection Permit is maintained at an additional cost of $124,000 annually based on the original use of the sprayfields and as a backup if composting operations are interrupted; however, sludge injection has not occurred since the early 2000s. Staff questions the need to retain the permit given other alternatives for the backup disposal of sludge.

A mixture of grasses and legumes, historically fescue, rye, orchard grass, clover and alfalfa, are grown as a means of nutrient and moisture uptake and erosion control. The vegetative growth is currently managed by a variety of methods, including green chopping, moving and the use of string trimmers. Fields are periodically disced and reseeded. Approximately two acres of hillside has been developed into an area used for spray application of recycled water. This area is covered with native vegetation. Soils vary from clay loam to sandy loam.

The historical means of disposing of excess recycled water is changing due to permitting and regulatory restrictions. Beginning November 16, 2030, the discharge of tertiary treated water

to Malibu Creek will no longer be allowed as part of a legal settlement with the U.S. EPA. Due to the new restriction, the JPA has been planning and will soon be constructing the Pure Water Project Las Virgenes-Triunfo (PWP). The project will take up to 7.5 million gallons per day of tertiary water and run it through an advanced treatment process that will supplement the drinking water systems for LVMWD and TWSD. However, there may be times when the Advanced Water Purification Facility (AWPF) is either offline (e.g., power outage) or cannot keep up with tertiary treated water flowrates (high inflows from a storm event). While there may be other means to temporarily dispose of excess tertiary treated water (e.g., Discharge Point 005 to the Los Angeles River), there are capacity limitations. Therefore, the sprayfields may still be needed to help dispose of excess tertiary treated water.

Use of the Sprayfields is very limited when the ground is saturated during and after rain events. The focus of the proposed study is to develop conceptual plans and analyze the feasibility of constructing, maintaining and operating an additional recycled water reservoir and/or detention ponds instead. The current criteria would be to detain at least three days' worth of tertiary treated water in the event the AWPF is offline. Depending on the status of other detention and disposal options, this would equate to an estimated 16 to 25 million gallons of detention at the Sprayfields. Maximizing utilization of other detention and disposal options (e.g., available storage in Reservoir No. 2) could further reduce this volume or could increase storage that would in turn provide more operational flexibility for operating the recycled water system and the AWPF.

Ultimately, the proposed Study will help to answer the following questions:

- How should the sprayfields be repurposed to provide emergency backup disposal and/or seasonal balancing of recycled water (e.g., construction of detention ponds)?
- Can the sprayfields be repurposed to an extent that annual operations and maintenance costs can be significantly reduced compared to current practices?
- What would be the optimal means to construct retention ponds (i.e., single large reservoir or multiple, shallow," terraced" ponds, or a hybrid combination)?
- What would be the design concept and how much volume of water should and could a reservoir or ponds store – particularly to avoid any significant environmental impacts or permitting with the California Division of Safety of Dams or Los Angeles County Flood Control?
- What would be the operational parameters, permitting requirements and other requirements?
- To what extent does the current WDR Permit for use of the sprayfields need to be modified?
- Are there any permitting obstacles to stopping current operations that provide for nutrient uptake from the soil and converting to detention ponds?
- How could retention ponds best be operated to accommodate the Pure Water Project Las Virgenes-Triunfo (e.g., store excess tertiary treated water temporarily that can be reintroduced into the wastewater/recycled water system for later use)?
- Should a covered reservoir be considered so that tertiary treated water can be introduced directly into the recycled water system as opposed to reintroducing into the sewer system and what would be the cost?
- Could and should seasonal retention ponds be considered for other environmental or community benefits such as facilitating migratory birds, supporting local wildlife (maintaining a small watering hole that can grow seasonally based on the needs of the recycled water system)?

- What would be the associated benefits (i.e., eligibility for grants), challenges, risks, and costs for modifying the sprayfields to provide additional environmental or community benefits?

The Study will evaluate four options that will be narrowed down to a preferred alternative to provide emergency disposal and/or seasonal retention ponds that could provide flow balancing for the recycled water system. For each alternative, the consultant will investigate challenges, opportunities, benefits and life-cycle costs. Alternatives could be shallow uncovered and unlined retention ponds, a single large reservoir (uncovered), and/or single large reservoir (covered) or a combination. The preferred alternative will be designed to only a 10 percent level and will be presented to the JPA Board for consideration before proceeding further. Detailed design, environmental review for CEQA compliance, permitting and bidding documents are not part of this study and would be pursued later, should the JPA authorize future work.

Staff originally issued a Request for Proposals (RFP) to acquire fee proposals for the study from consulting firms during the summer of 2024; however, no proposals were submitted. Since that time and because no proposals were submitted, staff-initiated discussions with Woodard and Curran, a sub-consultant on the Pure Water Project Las Virgenes-Triunfo. Staff did consider reissuing an RFP; however, it was determined that Woodard and Curran's experience on the Pure Water Project Las Virgenes-Triunfo provided efficiencies that would benefit the study. For example, Woodard and Curran staff is familiar with the JPA's recycled water system and has a computer model that they have been using to identify deficiencies and optimize performance of the system in relation to operations of the Advanced Water Purification Facility.

Woodard and Curran subsequently submitted a fee proposal, in the amount of $280,875, plus fees associated with optional work. At this time, staff is recommending that Optional Task Item No. 5.1 for surveying of the southerly sprayfields be included for an additional $26,583, bringing the total cost to $307,458. Attached is a copy of the proposal by Woodard and Curran. Staff reviewed the proposal and has determined that the fee is reasonable for performing this type of work. The hourly rates and estimated hours for the discrete tasks that need to be performed are comparable and competitive when compared to similar studies performed for the JPA. Woodard and Curran's performance as a sub-consultant for the Pure Water Project Las Virgenes-Triunfo has also been exceptional.

The work for the study would be initiated after a professional services agreement is executed, and the study is scheduled to be completed by March of 2027. At that time, the JPA Board will be presented with a preferred design and a recommendation on how best to proceed with repurposing the sprayfields.

GOALS:

Lead in Sanitation and Recycled Water Services Focusing on Maximum Reuse

Prepared by: Joe McDermott, PE, Assistant General Manager

ATTACHMENTS:
Map of Rancho Las Virgenes Farm Sprayfields
Sprayfields Repurposing Proposal

0 375 750
Feet

Rancho Sprayfields

N
W E
S

98

515 S. Flower Street
18th Floor
Los Angeles, California 90071
www.woodardcurran.com

T 800.426.4262

Via Electronic Mail

March 16, 2026

Las Virgenes Municipal Water District
Joe McDermott
Assistant General Manager
4232 Las Virgenes Rd.
Calabasas, CA 91302

Re: Rancho Las Virgenes Farm Sprayfields Repurposing Study

Dear Mr. McDermott:

The Woodard & Curran team has prepared this proposal to illustrate our understanding and approach for the Rancho Las Virgenes Farm Sprayfields Repurposing Study (Study). This proposal also includes a description of the scope of work, the estimated budget, and a project schedule to complete the Study.

1. UNDERSTANDING

Las Virgenes Municipal Water District (LVMWD, District), a long-time partner with Triunfo Water and Sanitation District, and as Administering Agent for the Las Virgenes – Triunfo Joint Powers Authority (JPA), is requesting a feasibility analysis for a potential new recycled water reservoir(s) and or detention ponds at their Sprayfields site, located adjacent to the Rancho Las Virgenes Composting Facility in Calabasas. The existing recycled water system has a complex array of effluent discharge options to help manage supply and demand. There are currently five discharge locations, plus short-term storage, that provide ways to manage recycled water that is not delivered to customers. Some of these options vary seasonally, such as the ability to discharge to Malibu Creek, which is prohibited from April 15 to November 15 every year.

Due to upcoming changes in LVMWD's NPDES/WRR permit, the ability to discharge will become more challenging year-round after November 2030. Compliance with the time schedule order for nutrients in Malibu Creek becomes a full requirement in late 2030 which will limit use of discharge points 001 and 003 from regular operation, which are the Malibu Creek connections. Discharge location 005, which connects to the Los Angeles River, can still be used, but hydraulic limitations apply during wet weather. These changes drive the need for new, more innovative solutions for effluent management.

One strategy being implemented is the Pure Water Project Las Virgenes, which accepts tertiary-treated recycled water as feed and produces purified water to supplement the Las Virgenes Reservoir (a potable water facility). The Pure Water project will provide considerable new flexibility in how the JPA manages recycled water supplies throughout the year. However, there will be times during the year when the Advanced Water Purification Facility (AWPF) could be inoperable due to power outages or other situations outside the JPA's control.

The existing Sprayfields site is another effluent management option, but it comes with excessive permit and maintenance costs and does not provide capacity on a consistent basis. The JPA would like to explore repurposing the site for a more reliable and useful tool, such as a reservoir and/or detention ponds. A reservoir could provide emergency storage for recycled water during times when the AWPF is not operating, and it could provide additional flexibility for operators during normal operating periods.

2. APPROACH

Our team's overall approach is to develop a reservoir concept for emergency storage and for improving operational flexibility. The approach includes preliminary investigations, an alternatives analysis, and a preliminary design (10 percent) as outlined below and in the Scope of Work section that follows. It begins by establishing appropriate constraints for the system, many of which are listed below:

- Malibu Creek – discharge location of "last resort"; targeting zero discharge unless large wet weather events occur
- Raw Sewage Diversion to Los Angeles sewer – assume limited to 0.7 MGD capacity
- Planned Pure Water RO Concentrate Line – assume limited to 1.2 MGD capacity
- Reservoir 2 – existing capacity is 8.3 to 11.5 million gallons
- Los Angeles River connection (005) – limited by hydraulic capacity of pipeline

Next, the appropriate volume for a reservoir will be determined. A previous analysis, performed by Woodard & Curran in 2024, indicated that a "worst-case" scenario would mean a maximum effluent flow rate of approximately 8 MGD could be experienced over a three-day period during a 12-year storm event. Thus, approximately 24 to 25 million gallons of storage volume could be needed. This analysis will be revisited for the current Study, and the impact of volume on operational flexibility will be added as a consideration for optimal storage. Additional operational flexibility could include storage requirements to shut-down the AWPF during summer months for annual maintenance purposes and to have more recycled water in storage that could extend the runtime for the AWPF during the "shoulder" months. This will entail analyzing recycled water system operational scenarios that may occur during different times of the year that account for different weather conditions (e.g., storm events), the available capacity of discharge locations, demand on the recycled water system, and AWPF status (offline or online).

Once volume is confirmed, our team will develop three concepts for emergency backup storage and operational flexibility at the site, including the following configurations:

- Multiple Earthen Berm Reservoirs / ponds (terraced) – lined or unlined
- Single Uncovered Earthen Berm Reservoir – lined or unlined
- Single Covered Reservoir – lined or unlined (structural cover is assumed)
- A combination of types and sizes of reservoirs to achieve optimal storage and the potential for added environmental benefit (e.g., open ponds for wildlife or community benefits).

We will analyze the site characteristics (survey, geotechnical, environmental, habitat, cultural)

and existing infrastructure to determine the best location on the Sprayfields site to build a reservoir(s). Then the configurations will be evaluated and compared, using criteria developed in collaboration with JPA staff. These criteria will include operational advantages, habitat/wildlife impacts and benefits, community impacts and benefits, visual impacts, and long-term operation and maintenance (O&M) requirements, as well as construction costs, O&M costs, and lifecycle costs. The evaluation will also consider whether flows should be reintroduced to the tertiary system, either with or without treatment, or directed to the sewer for retreatment at Tapia Water Reclamation Facility or a hybrid/combination. This evaluation will produce a recommended option that will be carried to preliminary design.

As our final step in the process, design will be conducted to a 10 percent level. Considerations for our design will include site access and visual impact, whether to cover an open reservoir, Division of Dam Safety thresholds for dam height (i.e., 25' if impounds > 15 AF; 6' if impounds > 50 AF), and constructability of the various project elements. It is our intent to include community and habitat amenities in the design, when feasible, to improve the appeal of the project and to leverage as many benefits and funding opportunities as possible. The final product of the Study will be a preliminary design report (PDR), with the background and alternatives analysis included, and with accompanying design drawings, detail drawings, and a list of technical specifications. A detailed scope of work can be found in the following section.

3. SCOPE OF WORK

The following scope of work will be included in Woodard & Curran's contract upon approval.

Task 1 - Project Management

Project management activities include administration, meetings, and a one-time site visit.

- **Project Administration –** This subtask includes project setup, monthly invoicing, monthly progress reports, schedule development/updates, and a quality control (QC) review for each of the draft and final deliverables. The progress reports will contain an updated schedule each month.
- **Meetings**. This includes a Kickoff Meeting and monthly Progress Meetings throughout the duration of the project, assumed to be 12 months. Each meeting will have an agenda submitted in advance, presentation materials, and succinct notes.
- **Site Visit**. This site visit will include up to three (3) hours at the Rancho Las Virgenes Sprayfields site location for the purpose of assessing site access, topography, utilities, surface features, clearances, and other features.

Assumptions:

- MS Project will be used to develop the schedule.
- A detailed Project Schedule will be developed for the Kickoff meeting.
- Kickoff meeting will be one (1) hour in duration and will be held virtually; an agenda, presentation materials, and meeting notes will be provided in Word/PPT format within 3 days.
- Site Visit will be three (3) hours in duration and additional time is included for travel to

the location from the Woodard & Curran downtown Los Angeles office. An agenda and site visit notes will be provided in Word format.

- Monthly Progress Meetings will be one (1) hour in duration and will be held virtually; 11 meetings will be held after the Kickoff, for a total of 12. An agenda and notes for each meeting will be provided in email format. Typically, only the project manager and one support staff person will attend, but for some meetings other senior team members will attend (e.g., cultural, biological, design leads, etc.).
- All draft and final deliverables will receive a QC review (10 total).
- QC reviews for predesign materials under Task 4 are included under Task 4.

Task 1 Deliverables:

- Monthly invoices, progress reports, and schedule updates
- Kickoff meeting agenda, presentation materials, and notes
- Monthly meeting agendas, presentation materials, and notes
- Site Visit agenda and summary notes

Task 2 - Data Collection and Investigations

This task includes our request for existing documentation and data. It also includes some of the key preliminary studies such as survey, geotechnical, cultural/biological investigations, utility research, and an evaluation of existing permits. These preliminary studies will be used to establish background conditions and constraints for a new project at the Sprayfields site.

- **Data Collection** – Our team will gather, review, and analyze previous reports relevant to the proposed project. Leveraging our experience with LVMWD and the JPA, we will focus on filling in knowledge gaps that will help establish priorities and select a preferred alternative. Then that alternative will advance to more detailed technical, environmental, and predesign work. A preliminary list is provided below:
    - Existing survey data for the Sprayfields site
    - Existing geotechnical data for the Sprayfields site
    - Existing cultural resources information for areas near the Sprayfields site
    - Existing biological resources survey for areas near the Sprayfields site
    - Copies of permits: NPDES (obtained), WRR (obtained), and Sludge Injection Permit
    - "Tapia WRF and Pure Water AWPF Flow Management" Draft Technical Memorandum ™ (obtained)

  A list of requested data/documents will be provided to LVWMD prior to the Kickoff.

- **Survey** – Our team includes Calvada Surveying, Inc. (Calvada) to provide survey services. A design level Topographic Survey (aerial mapping and conventional field survey) will be provided for the area as outlined in the attached Calvada proposal (Attachment A). The proposed work includes separate tasks for the North Areas and South Areas at the Sprayfields site. We have included the topographic survey for the South Areas as an optional task, and the Record of Survey (e.g., the boundary

component) as another optional task. Easements will be plotted based on a current title report to be provided by the client.

The work includes survey control for vertical and horizontal data/benchmarks, survey features using aerial photography, and location of above-ground utilities. Additional details about the scope of work may be found in the attached proposal by Calvada (Attachment A).

Assumptions: see Calvada proposal (Attachment A)

- **Geotechnical Services** – We have also added Yeh and Associates, Inc. to our team to provide geotechnical services. The work is organized into two phases, and the second phase is presented as optional for this proposal. Main tasks are summarized below. Additional details about the scope of work may be found in the attached proposal by Yeh and Associates, Inc. (Attachment B). Note that Phase 2 work can be separated into North and South Areas (in the same manner as the survey work) if desired.
    - Phase 1: Desktop Study – Initial Geologic and Geotechnical Site Assessment
        - Project Initiation and Existing Data Review
        - Site Mapping and Reconnaissance
        - Draft and Final TM
    - Phase 2: Preliminary Geotechnical Design Review (Optional)
        - Phase Initiation
        - Coordination, Health and Safety, and Permits
        - Subsurface Exploration – Hollow Stem Auger Borings
        - Laboratory Testing
        - Draft Preliminary Geotechnical Report
        - Final Preliminary Geotechnical Report

  Assumptions: see Yeh and Associates, Inc. proposal (Attachment B)

- **Environmental / Cultural Resources Investigation –** Our team will review the proposed project concept(s) and identify potential environmental concerns based on location and preliminary concept information. Environmental resources topics considered would include those in Appendix G of the CEQA Guidelines, with a focus on those resource topics that generally have the highest risk of potential impacts or community concerns when completing a water infrastructure project similar to what the JPA proposes. The areas expected to require more consideration include biological resources, cultural, archaeological and paleontological resources, noise, transportation, hazards and hazardous materials, and wildfire. Based on this research, we will draft a brief TM that describes the potential areas of environmental concern and recommend appropriate next steps, which may include additional biological and cultural/archaeological investigations such as record searches or site visits, geotechnical investigations, noise studies, or other detailed investigations as needed. The TM will include a recommendation for the expected level of CEQA documentation (e.g., exemption, MND, EIR, etc.).

Assumptions:

- This is a desktop analysis; no site visit by the environmental planning team will occur.
- No air quality modeling or other special investigations will be completed as part of this analysis.
- The work proposed does not include preparation of a CEQA Initial Study or completion of the CEQA Appendix G Checklist. The CEQA Initial Study is assumed to be part of future CEQA documentation.
- Environmental planning team will attend two (2) calls with LVMWD to discuss environmental concerns. These hours are captured under Task 1.

- **Biodiversity and Migratory Bird Assessment** – Our team will perform the following work for this subtask:
  - Preliminary Biodiversity Site Assessment – This work includes a desktop GIS and literature review of existing publicly available data. It also includes a site visit by the senior biologist (included under Task 1) to collect data and better understand current vegetative conditions, surrounding habitat, local wildlife use, and potential for ecological enhancement.
  - Habitat Conservation Project Planning – This involves working in conjunction with the JPA and the design team to review up to four design alternatives (i.e., construction of multiple earthen berm reservoirs / detention ponds (terraced), a single uncovered earthen berm reservoir, a single covered reservoir, or a combination of types and sizes of reservoirs and determine wildlife conservation and potential outdoor recreation options that are generally compatible with the potential project design and other site constraints. This may include but not be limited to seasonal or permanent "ponds" that could be used by migratory birds / bird watching but could also entail identifying areas at the site to plant oak or other native trees in connection with LVMWD's Climate Action and Adaptation Plan for carbon sequestration. Our team will develop a brief TM to document findings from the desktop studies, site visit, and analysis of conservation options including site photos and figures depicting onsite habitat(s). Budget for the site visit is included under Task 1.

Assumptions:

- Up to two (2) meetings with JPA in support of the above work are included. The project manager and senior biologist will attend, and these hours are captured in Task 1.
- JPA will provide physical access and right-of-access to the subject properties for Woodard & Curran and its representatives.
- The site visit (Task 1) can be completed in one day.
- Woodard & Curran is not responsible for delays due to weather, site conditions (e.g., prohibited access, fire, health, and safety, etc.), or other conditions out of Woodard & Curran's control.
- Our team will rely on the documents and information provided by the JPA; we assume no responsibility or liability for their accuracy or completeness.

- Detailed biological species surveys are not included in this scope and budget.
- Wetland and waterbody delineations are not included.
- Preparation of any environmental permit is not included in this proposal.
- Detailed planning and/or design of parks and recreational features is not included in this proposal.

- **Utility Research** – To build upon the above-ground utility location provided by Calvada, additional research will be conducted by our team using available public tools. Findings from this research will be utilized in the predesign work under Task 4.
- **Evaluation of Existing Permits and Identification of Potential New Permits** – Our team will review existing permits that are relevant to a reservoir project at the Sprayfields site. The purpose is to identify any requirements and/or constraints that must be considered in developing a conceptual alternative and predesign. The permits include the NPDES permit, WRR permit, and the Sludge Injection Permit for the site. A list of potential new permits will also be developed. Findings from this evaluation will be included in the deliverables under Task 3.

Task 2 Deliverables:

- Data Collection - List of requested information/documents
- Survey - AutoCAD (Civil 3D) drawing, version 2024 or lower, including 3D surface file(s)
- Survey – North Areas Draft/Final TM; Signed and stamped PDF file
- Geotechnical – Initial Geologic and Geotechnical Site Assessment Draft/Final
- Cultural Resources Investigation – Draft and Final TM
- Biodiversity and Migratory Bird Assessment – Draft and Final TM

Optional:

- Survey – South Areas Draft/Final TM; Signed and stamped PDF file
- Survey - Signed and stamped Record of Survey PDF file
- Geotechnical – Preliminary Geotechnical Report Draft/Final

Task 3 - Concept Development and Evaluation

This task includes the development of initial storage concepts for the Sprayfields site, refinement of those concepts, evaluation of advantages and disadvantages, cost estimating, and a Comprehensive Report for District staff review. The concepts will include up to four different options for storage at the Sprayfields site:

1. Multiple Earthen Berm Reservoirs / ponds (terraced) – lined or unlined
2. Single Uncovered Earthen Berm Reservoir – lined or unlined
3. Single Covered Reservoir – lined or unlined
4. A preferred combination of the above to achieve optimal storage and the potential for added environmental benefit (e.g., open ponds for wildlife or community benefit).

- **Concept Development** – Our team will use the information obtained for the Sprayfields site from background research, environmental and cultural investigations, biological investigations, survey work, and geotechnical work (i.e., Task 2) to recommend a suitable location for potential reservoirs and/or ponds. Proximity to other JPA facilities, utilities, environmentally sensitive areas and habitats, and geologic hazards

  will inform the recommendation, as well as other relevant feasibility factors. It may be possible that siting recommendations will differ for the concepts.

  The concepts will then be developed by identifying site grading, storage facilities, and conveyance facilities that would be needed to build and operate a reservoir. The appropriate volume for three days of emergency storage will be confirmed; and other considerations, including added operational flexibility that a storage facility would enable, will be described. Detailed descriptions for each of the concepts will be provided.

- **Concept Refinement** – The concepts will be refined after presenting the initial ideas at the appropriate Monthly Meeting with JPA staff. The refinement will include detailed costs (see below), and further articulation of advantages and disadvantages for each concept. Evaluation criteria used to compare the concepts could include added operational flexibility, habitat/wildlife impacts and benefits, community impacts and benefits, visual impacts, and long-term operation and maintenance requirements, as well as construction costs, O&M costs, and lifecycle costs. Other variations on the original concepts could be considered at this time, such as whether to cover and/or line an open reservoir. The refined concepts will be presented to JPA staff in another Monthly Meeting at the appropriate time.

- **Cost Estimates** – Cost estimates will be prepared using Level 5 Association for the Advancement of Cost Engineering (AACE) methodology. These estimates are typically used for initial project screening and are characterized by an accuracy range of -50% to + 100% of actual costs. The cost estimates will include construction, O&M, and lifecycle costs.

- **Comprehensive Report** – Our team will prepare a Comprehensive Report that includes an executive summary, background information, scope of the study, the full concept development and refinement, cost estimates, and narrative to explain all advantages and disadvantages of the concepts. It will also recommend a preferred option that will then be carried forward to the preliminary design in Task 4. When Task 4 work is complete, the design materials will be included/compiled with the Comprehensive Report to create the Preliminary Design Report (PDR) for submittal to the JPA.

Assumptions:

- Four concepts will be developed and refined.
- One refined concept will be recommended and put forth for predesign.
- Level 5 AACE cost estimating will be used.

Task 3 Deliverables:

- Draft Comprehensive Report (final to be developed with PDR in Task 4)

Task 4 - Preliminary Design (10 Percent)

Using findings and information from Tasks 2 and 3, our team will prepare the 10 percent design for the preferred reservoir option at the Rancho Las Virgenes Sprayfields site, including necessary pump station and pipeline facilities. The 10 percent design will consist of a PDR that includes drawings, details, and a list of technical specifications based on the approach captured in the PDR.

Our team will work closely with LVMWD's engineering and operations staff to develop a 10 percent design that clearly demonstrates the necessary elements to comply with applicable regulatory requirements and to incorporate staff preferences. The design deliverables will focus on cost-effective solutions while advancing the goal of positioning the project for a final design phase. The design will address the following project components:

- Reservoir siting and layout/configuration
- Yard piping and off-site piping
- Retaining walls, fencing, and gates
- Pump station siting and layout/configuration
- Pipeline alignment on site, with connections and valving
- Preliminary electrical load schedule

CAD drawings will be set up using JPA standards along with detailed documentation for layer names, line weights, shapes, line types, fonts, etc.

Assumptions:

- The draft PDR will include drawings, details, and list of technical specifications. It will be developed from the Task 3 Comprehensive Report
- The final PDR will include drawings, details, and list of technical specifications.

Task 4 Deliverables:

- Draft PDR (build off of Task 3 Report)
- Final PDR

4. BUDGET

The proposed budget for this work is $280,875 and is shown in detail in Attachment C. The budget includes several optional tasks, totaling an additional $157,295, for your consideration. We propose to use the Woodard & Curran standard 2026 rates for this project. Resumes for each of the team members in Attachment C will be provided upon request.

5. SCHEDULE

The table below includes the major tasks for the Study and summarizes the anticipated project schedule. The work in this proposal is expected to require approximately 12 months. The table

assumes Notice to Proceed in March of 2026, but the start and end dates can be adjusted to accommodate the actual start time of the project.

Tasks	Start	End
1 - Project Management	April 2026	March 2027
Kickoff Meeting	April or May	
2 - Data Collection	May 2026	May 2026
2 – Investigations (including Geotech Ph. 1)	May 2026	June 2026
Geotech Phase 2 (optional)	June 2026	Oct. 2026
3 - Concept Development and Evaluation	July 2026	Sept 2026
4 – Preliminary Design	Oct 2026	March 2027

The Phase 1 geotechnical work can be completed within a month of receiving the data collection request (assumed in May). The optional Phase 2 work, if authorized, will require field work, and the Preliminary Geotechnical Report can be submitted approximately 8 weeks after this field work occurs. If a decision is made about the Phase 2 work in June, after reviewing the Phase 1 work, the field work could commence in July, and the draft Preliminary Geotechnical Report would be ready by September. The schedule will call for the final Geotechnical Report to be ready by October, in time for Preliminary Design to begin.

The topographic survey for the North Areas would be ready approximately 1.5 months from when field work occurs. Assuming the field work happens in April, we would expect to have the findings for the North Areas by late June. Again, this timeline may be adjusted to accommodate the JPA's needs.

We are committed to providing you with the resources your project requires for success and will make sure you receive high quality, responsive service. Please feel free to contact me at bdietrick@woodardcurran.com or 213-223-9479, if you need additional information.

Sincerely,

Brian N. Dietrick, PE
Vice President / Project Manager

Brenda Ponton, ENV SP
Client Manager / Principal-In-Charge

Enclosure:

- Attachment A – Survey Proposal
- Attachment B – Geotechnical Investigations Proposal
- Attachment C – Proposed Fee Estimate

PROPOSAL FOR PROFESSIONAL SURVEYING SERVICES

TOPOGRAPHIC SURVEY & RECORD OF SURVEY

Rancho Sprayfields
3700 Las Virgenes Rd, Calabasas, CA 91302
March 10, 2026 (P260046-R1)

PREPARED BY

Ramon Gonzalez, LSIT

CAL VADA SURVEYING, INC.

Quality • Experience • Trust

PREPARED FOR

Brian Dietrick, P.E.
Senior Environmental Engineer | Senior Principal
Woodard & Curran
515 S. Flower Street, 18th Street
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INTRODUCTION

Dear Brian,

Calvada Surveying, Inc. (Calvada) is a Disabled Veteran and Minority Disadvantaged-Owned land surveying firm serving the Western U.S., offering professional surveying services across various industries. We pride ourselves on delivering superb customer service, advanced technology, and consistent professionalism.

Our management team excels in communication and coordination, working closely with clients to ensure efficient project execution and timely delivery. The firm's experienced team includes licensed surveyors, field personnel, and support staff, all committed to maintaining the highest standards of quality and expertise.

We are well-versed in California's land surveying needs, our integration of Civil 3D technology and ability to mobilize field personnel swiftly has enabled us to meet tight deadlines, ensuring projects stay on schedule and within budget.

Thanks again for your consideration and I look forward to the opportunity of working with you on this project.

I SCOPE OF SERVICES

Task 1: Topographic Survey of either Site 1 or Site 2

A design level Topographic Survey (aerial mapping and conventional field survey) will be provided for the area as outlined in the aerial picture shown on Exhibit "A" (the Site). The boundary component of the survey will be included in Task 2. Easements will be plotted based on a current title report to be provided by the client. The items to be included are as follows:

Survey Control

1. The vertical control will be based on the North American Vertical Datum of 1988 (NAVD 88). A local municipal benchmark will be used, if available. Confirmation of the vertical datum will be required before field mobilization.
2. The horizontal control will be based on the California State Plane Coordinate System of 1983 (NAD 83). Confirmation of the horizontal datum/EPOCH will be required before field mobilization.

Survey Features

3. The majority of the survey will be prepared using aerial photography. Spot elevations will be at back of walk/sidewalks, top of curbs, flow lines, gutter edges, street crowns, driveway aprons, local depressions, and handicap ramps. The survey will be prepared to provide 1-foot contour intervals.
4. Spot elevations to determine the water flow within the Site.
5. Location of trees over 6 feet in height, regardless of caliper, within the Site.

Utilities

6. Location, elevation, size, and type of visible above ground utilities within the Site that are visible in the aerial survey data.
7. The research and plotting of record subsurface utilities and hiring a utility locating subcontractor are not included in this proposal.

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Task 2: Record of Survey

As required by Section 8762(b)(4)(5) of the Professional Land Surveyors' Act (state law), a Record of Survey will require to be prepared and filed at the office of the County Surveyor (permanent monuments at property corners will be set).

§8762(b)(4): The location, relocation, establishment, reestablishment, or retracement of one or more points or lines not shown on any subdivision map, official map, or record of survey, the positions of which are not ascertainable from an inspection of the subdivision map, official map, or record of survey.

§8762(b)(5): The points or lines set during the performance of a field survey of any parcel described in any deed or other instrument of title recorded in the county recorder's office are not shown on any subdivision map, official map, or record of survey.

EXHIBIT "A"

TASK 1 (OPTION 1): AREA 1 (68 ACRES)

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TASK 1 (OPTION 2): AREA 2 (32 ACRES)

II DELIVERABLES

1. Topographic Survey
   - AutoCAD (Civil 3D) drawing, version 2025 or lower, including 3D surface file(s).
   - Signed and stamped PDF file.

2. Record of Survey
   - Signed and stamped Record of Survey in PDF format.

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III FEE

Pricing includes all labor (both field and office), materials, equipment, research & deliverables.

Tasks	Amount
Task 1 (Option 1): Topographic Survey - Area 1 - North Areas	$29,750.00
Task 1 (Option 2): Topographic Survey - Area 2 - South Areas	$22,130.00
Task 2: Record of Survey (For either option) • This task includes the county's plan-checking and recording fees.	$68,630.00
Total	**Up to $98,380.00**

The above fee is based on prevailing wage rates. If the client requires Calvada to work overtime on this project to meet a required deadline or comply with non-standard working hours, Calvada will bill the client any overtime or double time that our field crews incur based on prevailing wage rates calculated for each individual crew. This will represent an additional charge beyond the fixed fee pricing above. Calvada will obtain permission from the client before working any overtime in the field.

IV SCHEDULE

A field crew can mobilize no sooner than 72 hours after submitting the Division Apprenticeship Standards (DAS) forms. The delivery of the Topographic Survey will be 25-30 business days after the final survey day, following receipt of written notice to proceed and receipt of a current title report, and the project DIR number; subject to weather or other factors beyond our control; the delivery of the Record of Survey is dependent on the county's review and workload.

V ADDITIONAL SERVICES AND ASSUMPTIONS

Should changes to the Scope of Services or any additional services be required after commencement of the project work, an Agreement for changes in pricing, if any, will be reached for the additional services. The project assumptions are as follows:

1. A current title report of the subject property is required and it will be provided by the client.
2. Hiring a subsurface utility locating company is excluded from this quote.
3. The site will be accessible and clear of obstructions at the requested time of survey. If coordination of site access is required prior to the survey being performed, the client will provide the necessary information. The survey will take place during normal business hours.
4. Lot Tie Agreement and Lot Line Adjustment efforts are excluded from this quote.
5. Legal description(s) and exhibit(s) for dedications/easements are excluded from this quote.
6. Sufficient survey monumentation will exist at the controlling major intersections and key locations of the underlying record maps. In the event that monumentation is incomplete or

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deficient, an additional expanded scope may be required. If this should occur, we will discuss our findings in detail with the client and a fee adjustment to this agreement will be required.

VI TERMS AND CONDITIONS

It is understood and agreed between the parties that the total fee as described herein is for the scope of services as set forth herein. If unforeseen field conditions exist, assumptions of this proposal are not met or additional services are requested by **Woodard & Curran** (Client), the scope of the additional services and a lump sum fee will be determined and a change order will be prepared and sent to Client describing the scope and fees of the additional services requested. Work on the additional services will not commence until written authorization to proceed is received via standard mail, facsimile or e-mail.

The Client agrees to pay Cal Vada Surveying, Inc. (Consultant) compensation for services performed on a fixed fee basis, except as noted. The fees quoted herein will be used a guide in determining the percentage of work completed by the Consultant, where applicable. Progress billings will be made towards the end of each month for services performed during that period. All bills are due and payable within thirty (30) days of receipt of invoice.

Payment of invoice is not subject to nor can payment be withheld based upon the closing date of the sale or transaction of the land surveyed. If Client fails to pay Consultant within thirty (30) days after invoices are rendered, Consultant shall have the right, at its sole discretion, to consider such default of payment a material breach of this entire agreement and, upon written notice, Consultant's duties, obligations and responsibilities under this agreement may be suspended or terminated. In such event, Client shall promptly pay Consultant for all outstanding fees and charges due at the time of suspension or termination. If Consultant elects to suspend or terminate services pursuant to this provision, Consultant is entitled to reasonable suspension or termination costs or expenses.

Client may terminate this agreement at any time, understanding that billing may have been incurred and it will be invoiced hourly per our current schedule of rates, enclosed.

Client agrees that all billings from Consultant to Client are correct and binding on Client unless Client, within ten (10) days from the date of receipt of such billing, notifies Consultant in writing of alleged inaccuracies, discrepancies, or errors in billing.

Client agrees to pay a monthly late payment charge, which will be the lesser of one and one-half percent (1.5%) per month or a monthly charge not to exceed the maximum legal rate, which will be applied to any unpaid balance commencing thirty (30) days after date of the billing.

In the event of any litigation arising from or related to the services provided or Consultant institutes litigation to enforce non-payment under this agreement, the prevailing party will be entitled to recovery of all reasonable costs incurred, including staff time, court costs, attorneys' fees, experts' fees and other related expenses.

The scope of services noted in this proposal shall not be superseded by subsequent documents.

The forgoing proposal is valid for one (1) month from the date of this letter. We reserve the right to review costs at the end of one month and negotiate possible fee changes. Agreement is governed by the laws of the State of California.

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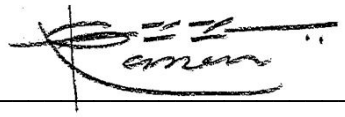
VII ACCEPTANCE

To start the process, you are required to sign in the provided space and/or provide a purchase order number. Once signed, this proposal will be set into motion by Calvada Surveying, Inc. It is advised to discuss with the appointed representative before this proposal is signed and made official.

Calvada Surveying, Inc:

Representative: Ramon Gonzalez, LSIT, Project Manager (rgonzalez@calvada.com)

Signature:  Date: March 10, 2026

Woodard & Curran:

Representative: Brian Dietrick, P.E., Senior Environmental Engineer | Senior Principal

Signature: _____ Date: _____

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Yeh and Associates, Inc.
Geotechnical • Geological • Construction Services

632 East Thompson Boulevard
Ventura, CA 93001
(805) 481-9590, ext. 271
www.yeh-eng.com

March 9, 2026 Proposal No. 226-022

Woodward & Curran
515 S. Flower Street, 18th Floor
Los Angeles, California 90071

Attn: Mr. Brian Dietrick

Subject: Proposal for Geotechnical Services, Las Virgenes Municipal Water District, Rancho Las Virgenes Farm Sprayfields Repurposing Study, Las Virgenes Road, Calabasas, California

Dear Mr. Dietrick:

Yeh and Associates, Inc. is pleased to submit this proposal to provide geotechnical services to support the feasibility level review and 10-percent design for project that will convert portions of the existing sprayfields at the compost facility to water storage reservoirs. This proposal was prepared in response to your email request of January 8, 2026 for Yeh to prepare a *Preliminary Geotechnical Report* for the project. Our understanding of the project is based on discussions with you and review of the Las Virgenes Municipal Water District Request for Proposals for the project, dated May 2024.

The sprayfields consist of 16 designated areas totaling about 70-acres on the east side of Las Virgenes Road, adjacent to and south of the Rancho Las Virgenes Compost Facility which is located at 3700 Las Virgenes Road. The sprayfields are used to spray (irrigate) the land with seasonal excess recycled water. The project will review the feasibility for design of a retention pond or reservoir system to store and manage up to 25 million gallons of recycled water.

The fields form a linear swath following the east side of Las Virgenes Road with some fields spreading further east than others and following the natural topography. The overall topography of the north-south swath of fields slope to the south following the grade of Las Virgenes Road. The fields also slope gently from east to west.

The fields are geologically located within alluvial fans formed from soil deposited from the foothills and drainages located east of the fields. The subsurface conditions below the sprayfields are anticipated to consist of tens of feet of potentially soft and loose soil underlain by local bedrock. The largest field areas may be underlain by 40 feet or more of soil prior to encountering bedrock. Groundwater may be on the order of 20 feet below the ground surface based on our limited public data review.

SCOPE OF SERVICES:

The project is separated into two phases. Yeh's scope of services for each phase will be finalized based on our discussions with Woodward & Curran and the District. It is anticipated that Yeh's scope of services, cost estimates and schedule may be revised and adjusted as the project progresses. Geotechnical services for future phases of design will be scoped separately and as the future design phases develop.

PHASE 1 – DESKTOP STUDY - INITIAL GEOLOGIC AND GEOTECHNICAL SITE ASSESSMENT

Yeh will provide preliminary geotechnical services during initial evaluation and site assessment of the facility. Our scope will include site reconnaissance and mapping, review of available subsurface data including well logs, boring logs, and published geologic maps provided by the District or by records request.

Yeh's scope of services will include the following for Phase 1:

1. **Project Initiation, Existing Data Review.** Consult with Woodward & Curran and District to initiate the project, collect background information that may be pertinent to the geotechnical evaluation, coordinate site access, and review the scope and schedule for geotechnical services. It is anticipated geotechnical data is available from the design of the Las Virgenes Composting Facility and other District infrastructure at and adjacent the sprayfields. Phase 2 should be initiated if little to no relevant geotechnical boring data is obtained.

2. **Site Mapping and Reconnaissance.** Visit the site, note, map and photograph relevant geologic features and bedrock outcrops and contacts along the edges of the existing fields. This work will take place over an approximately ½ day by Yeh staff. This proposal assumes that site access for the work will be provided to us.

3. **Technical Memorandum.** Prepare a *Technical Memorandum* summarizing our observations, available subsurface data and published geologic and geotechnical data mapped for the site area. The memorandum is intended to inform the design team of anticipated subsurface conditions, identify potential geotechnical geologic impacts on foundations and improvements, and assist with siting and the preliminary design schemes. Considerations for soft soil, liquefaction, lateral spreading, landsliding, faulting and other geologic hazards will be discussed. Recommendations for further study including subsurface exploration, laboratory testing, and analysis will be included. The memorandum will be provided in draft and then final format after review by the design team.

PHASE 2 –PRELIMINARY GEOTECHNICAL DESIGN REVIEW

Yeh will provide preliminary design review geotechnical support for the site evaluation as discussed in the Phase 1 Memorandum. We anticipate that geotechnical borings will be utilized to evaluate subsurface conditions in the sprayfield areas to define potential development sites for the proposed site improvements and evaluate the suitability of the soil for re-use as fill during construction. Our scope will include phase initiation, coordination for drilling permits and site access, limited subsurface exploration, laboratory testing, analyses and preparation of a Draft and Final *Preliminary Geotechnical Report* for the project.

Yeh's scope of services will include the following for Phase 2:

1. **Phase Initiation.** Consult Woodward & Curran and the District to initiate the project, collect proposed project layout maps, coordinate site access, and review the scope and schedule for geotechnical services.

2. **Coordination, Health and Safety, and Permits.** Prepare a health and safety plan for the proposed field work. Visit the site to identify and mark the boring locations for utility clearance. Contact Underground Service Alert (USA) to mark utilities within their purview. Procure drilling permits for borings from Los Angeles County Environmental Health. Yeh will not be responsible for damage to unmarked or mismarked utilities. Coordinate field exploration and access with the District and subcontractors. Access to the site may be delayed with drilling equipment if the field are saturated. Time may be needed to allow for drying of the surface soils following seasonal rains or spraying.

3. **Subsurface Exploration – Hollow Stem Auger Borings.** Perform a 2-day field exploration program to collect subsurface information needed for the preliminary design review. Four (4) borings will be drilled to depths of 50 feet deep, confirmation of bedrock, or auger refusal. Borings will be drilled using a track-mounted rig equipped for hollow stem auger and mod rotary drilling. The borings will be sampled at typical 5-foot intervals by driving 2-inch or 3-inch split barrel samplers using Standard Penetration Test protocols, pushing thin-walled tube samples and by taking cuttings from the auger flights. The borings will be filled with excavated cuttings/bentonite-cement grout in accordance with permit requirements after drilling. Excess cuttings will be spread out adjacent to the boring.

4. **Laboratory Testing**. Review samples and field data, schedule and conduct laboratory tests on selected samples recovered from the borings for compaction, unit weight, moisture content, soil classification, grain size, expansion, strength, and corrosivity. The types and numbers of tests will be assigned based on the subsurface conditions encountered.

5. **Draft –Preliminary Geotechnical Report.** Yeh will prepare a *Draft* Preliminary Geotechnical Report as input to 10-percent design based on existing available data and our limited exploration program. The report will summarize the data reviewed, describe the project understanding and existing site conditions, and describe the anticipated subsurface conditions that may be encountered in the project areas. The preliminary report will be prepared and issued in portable document file (PDF) format for review by the District and design team. The report will provide boring logs, lab data, description of subsurface conditions and conclusions and recommendations regarding:

    - Geologic setting;
    - Soil and groundwater conditions encountered;
    - Potential for the site to be impacted by geologic hazards, such as:
        - Fault rupture
        - Strong ground shaking
        - General liquefaction related hazards and screening analyses;
        - Landsliding or slope instability;
        - Erosion and need for surface drainage improvements;
        - Expansive soil conditions;
        - Corrosive soil;
        - Flooding;
        - Regional subsidence resulting from extraction of oil or groundwater; and
        - Hydroconsolidation or collapse.
    - Ground conditions relative to groundwater, hard rock, presence of cobbles or boulders, loose or caving ground;
    - Preliminary seismic data for use with the AWWA and California Building Code;
    - Discussion of geotechnical considerations for the proposed reservoir locations based on anticipated subsurface conditions, the existing terrain, slope stability, anticipated site grading, potential geologic hazards and foundation support; and
    - Preliminary construction considerations regarding excavation characteristics and suitability of materials encountered for fill, temporary slopes and shoring, and construction dewatering;

6. **Final – Preliminary Geotechnical Report.** Incorporate review comments from the draft report submittal and prepare the final Geotechnical Report for the project. The final report will be submitted in portable document file (pdf) format. It is not anticipated that the final report would incorporate evaluating additional field exploration, alternatives, information, or recommendations for improvements that are not described in this proposal.

Assumptions:

1. Site access and any environmental permits or monitoring will be provided for Yeh.
2. Subcontractor fees or any qualifying items in our proposal include Prevailing Wage rates. Yeh labor including professional engineering services, geologic field logging and sampling and laboratory testing is not subject to Prevailing Wage.
3. Scope and associated fees for Phase 2 and subsequent phases should be evaluated and revised based on the project design progress and findings of previous phases.
4. All field exploration and laboratory testing for the geotechnical analyses and recommendations will be performed under the assumed phase of work. Additional field investigations would be recommended for additional and expanded phases of work.
5. Delays or additional mobilization resulting from weather, site conditions, or other project delays beyond our control are not provided for in this proposal.
6. A site-specific ground motion analysis in accordance with Chapter 21 of ASCE 7 is not included in the scope of services as the need for such a study depends on detailed subsurface conditions at the proposed structures.
7. One round of review and comments on the draft *Preliminary Geotechnical Report*.
8. When preliminary development plans are provided, additional review and investigation will be necessary to provide a design level geotechnical engineering report. The scope of that investigation will be determined as the design develops.

Fee Estimate:

Yeh will provide the geotechnical services described in this proposal on a time and materials basis in accordance with the fee schedule in effect at the time of service. The basis for the fee is shown on the attached spreadsheet. These and additional services, if requested, will be provided according to the fee schedule at the time of work. Yeh will not exceed the estimated amount without prior authorization by the client.

Schedule:

Services will be coordinated with the Project Team. The *Technical Memorandum* can be submitted about 4 weeks after notice to proceed and receipt of previous geotechnical files from LVMWD and our records request.

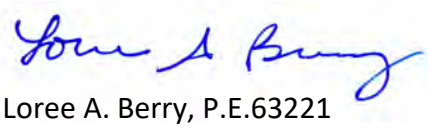
A schedule for Phase 2 will depend on results of earlier phases and can be refined at project milestones, as needed. Phase 2 should be initiated if little to no relevant geotechnical boring data is obtained for the project sites.

Scheduling Phase 2 field activities will depend on receiving timely access to the site, ground conditions at the site, weather conditions, and the availability of subcontractors. The fields will need approximately 2 weeks or more following spray activities or a rain event before mobilizing drilling equipment. Drilling will take 2 days to complete. A draft *Preliminary Geotechnical Report* can be submitted approximately 6 to 8 weeks after completing the field exploration for that phase. A final

report can be submitted within approximately 2 weeks of receiving team-compiled comments on the draft report.

We appreciate the opportunity to be of service. Please contact Loree Berry at (805) 440-0966 or LBerry@yeh-eng.com if you have questions or require additional information.

Sincerely,
YEH AND ASSOCIATES, INC.



Loree A. Berry, P.E.63221
Senior Project Manager

Attachments: Fee Schedule (Yeh 2026)
Estimate of Fees

Yeh and Associates, Inc.
Geotechnical • Geological • Construction Services

STANDARD FEE SCHEDULE
CALIFORNIA
EFFECTIVE JANUARY 2026

Professional Services:

Classification	Rate
Principal	$ 250/hr
Senior Project Manager, Engineer or Geologist	$ 235/hr
Senior Project Specialist	$ 220/hr
Project Manager, Associate Engineer or Geologist	$ 210/hr
Senior Project Engineer or Geologist	$ 175/hr
Project Engineer or Geologist	$ 150/hr
Senior Staff Engineer or Geologist	$ 140/hr
Staff Engineer or Geologist	$ 125/hr
Engineer or Geologist Intern	$ 90/hr
Resident Construction Engineer	$ 225/hr
Construction Manager	$ 205/hr
Construction Observer	$ 165/hr
Laboratory Supervisor	$ 155/hr
CAD Designer	$ 170/hr
Project Controller	$ 170/hr
Administrative Assistant	$ 105/hr

Overtime rates for Construction Observation and Office Staff are 1.5 x rates shown.

Laboratory tests are quoted on separate schedule or cost-plus 10 percent for outside laboratory testing when applicable.

Fees for expert witness preparation, testimony, court appearances, or depositions will be billed at the rate of $400 per hour.

Rates do not include prevailing wages for field services. Prevailing wages will be determined on a project-by-project basis.

Rate escalations are updates will be effective January 1 of each year.

Other Direct Charges:

Subcontracted services, copying and rented equipment	Cost Plus 10%
Travel, subsistence, and expenses	Cost Plus 10%
Field Vehicle, sampling gear and equipment	$ 200/day
Automobile Mileage	Current IRS Rate
Hand Auger Kit	$ 300/day
Slope Inclinometer and readout	$ 250/day

Yeh and Associates, Inc.
Geotechnical • Geological • Construction Services

FEE ESTIMATE WORKSHEET

Geotechnical Services

PROJECT No.: 226-022 | PREPARED BY: R. Wendt/ L. Berry | DATE: January 16, 2026

PROJECT NAME: RanchoLV Farm Sprayfields Repurposing | CLIENT: Woodward & Curran

PHASE 1	Principal Engineer or Geologist	Sr. Project Manager, Engineer or Geologist	Sr. Project Specialist	Project Manager-Associate Engineer or Geologist	Sr. Project Engineer or Geologist	Project Engineer or Geologist	Sr. Staff Engineer or Geologist	Staff Engineer or Geologist	CAD Designer	Engineer Intern	HOURS	COSTS
Geotechnical Services:												
1 Initiation/Data Review		6				8					14	
2 Site Mapping and Reconnaissance		2				4				4	10	
3a Draft - Technical Memo	2	4				8	4				18	
3b Final - Technical Memo		2				2					4	
SUBTOTAL	**2**	**14**	**0**	**0**	**0**	**22**	**4**	**0**	**0**	**4**	**46**	**$ 8,010**
RATE, PER HOUR (2026)	$ 250	$ 235	$ 220	$ 210	$ 175	$ 150	$ 140	$ 125	$ 170	$ 90		
Unit Charges and Direct Costs:												
mileage												$ 140
SUBTOTAL												**$ 140**
Subconsultant and Vendor Services:												$ -
SUBTOTAL												**$ -**
PHASE 1 ESTIMATED TOTAL FEE												**$ 8,150**

PHASE 2	Principal Engineer or Geologist	Sr. Project Manager, Engineer or Geologist	Sr. Project Specialist	Project Manager-Associate Engineer or Geologist	Sr. Project Engineer or Geologist	Project Engineer or Geologist	Sr. Staff Engineer or Geologist	Staff Engineer or Geologist	CAD Designer	Engineer Intern	HOURS	COSTS
Geotechnical Services:												
1 Phase Initiation		2				2					4	
2 Coordination, Safety, Permits		4				4		8			16	
3 Subsurface Exploration (Drilling)		2					20	4			26	
4 Laboratory Testing		4						8		40	52	
5 Draft - Preliminary Geotechnical Report	4	12				8	4	20			48	
6 Final - Preliminary Geotechnical Report	2	2				2		4			10	
SUBTOTAL	**6**	**26**	**0**	**0**	**0**	**16**	**24**	**44**	**0**	**40**	**156**	**$ 22,470**
RATE, PER HOUR (2026)	$ 250	$ 235	$ 220	$ 210	$ 175	$ 150	$ 140	$ 125	$ 170	$ 90		
Unit Charges and Direct Costs:												
Field Vehicle, Sampling Gear, Equipment												$ 400
SUBTOTAL												**$ 400**
Subconsultant and Vendor Services:												
Subcontract Drilling Services												$ 14,685
Well Permits												$ 946
Outside laboratory testing												$ 6,262
SUBTOTAL												**$ 21,893**
PHASE 2 ESTIMATED TOTAL FEE												**$ 44,763**
ESTIMATED TOTAL FEE (PHASE 1 AND 2)												**$ 52,913**

Woodard & Curran

Las Virgenes Municipal Water District
Rancho Las Virgenes Farm Sprayfields Repurposing Study

Attachment C - Fee Estimate
3/16/2026

Tasks	Labor												Outside Services				ODCs		Total
	Brenda Ponton	Brian Dietrick	Matt Elsner	Carrie Del Boccio	M. De La Maria Y Campos	Sally Johnson	Will Medlin	Alex Park	Engineer 1	Admin.	Total Hours	Total Labor Costs (1)	Calvada	Yeh & Associates	Subtotal	Sub Consultant Total Cost (2)	ODCs	Total ODCs (3)	Total Fee
	Principal-in-Charge	Project Manager	Design Lead	Technical Lead	Project Engineer	Environ. Lead	Biology Lead	Hydraulic Modeling	Technical Support	Admin.			Survey	Geotech					
	$350	$370	$375	$370	$300	$350	$300	$370	$225	$150			Lump sum	Lump sum					
Task 1: Project Management																			
1.1 Project Administration (setup, invoicing, schedule, QC)	6	32	8						12	16	74	$22,040			$0	$0		$0	$22,040
1.2 Meetings (12)	2	18	2	2	30	2	2				58	$19,150			$0	$0		$0	$19,150
1.3 Site Visit (1)		6			6		6				18	$5,820			$0	$0	$300	$330	$6,150
Subtotal Task 1:	8	56	10	2	36	2	8	0	12	16	150	$47,010	$0	$0	$0	$0	$300	$330	$47,340
Task 2: Data Collection and Investigations																			
2.1 Data Collection		1			2				4		7	$1,870			$0	$0		$0	$1,870
2.2 Survey - Topographic Survey North Areas (draft/final TM)		2	2								4	$1,490	$29,750		$29,750	$32,725		$0	$34,215
2.3 Geotechnical Services - Phase 1 (draft/final TM)		2	2								4	$1,490		$8,150	$8,150	$8,965		$0	$10,455
2.4 Environmental/Cultural Resources Investigation (draft/final TM)		2				20			62		84	$21,690			$0	$0		$0	$21,690
2.5 Biodiversity and Migratory Bird Assessment (draft/final TM)		2					44		70		116	$29,690			$0	$0		$0	$29,690
2.6 Utility Research			1		2				8		11	$2,775			$0	$0		$0	$2,775
2.7 Evaluation of Existing Permits				6							6	$2,220			$0	$0		$0	$2,220
Subtotal Task 2:	0	9	5	6	4	20	44	0	144	0	232	$61,225	$29,750	$8,150	$37,900	$41,690	$0	$0	$102,915
Task 3: Concept Development and Evaluation																			
3.1 Concept Development		6	6	4	6			8	48		78	$21,510			$0	$0		$0	$21,510
3.2 Concept Refinement		6	6	4	6			16	32		70	$20,870			$0	$0		$0	$20,870
3.3 Cost Estimates		6	6	2	6				30		50	$13,760			$0	$0		$0	$13,760
3.4 Draft/Final Comprehensive Report		20	6	2	10				48		86	$24,190			$0	$0		$0	$24,190
Subtotal Task 3:	0	38	24	12	28	0	0	24	158	0	284	$80,330	$0	$0	$0	$0	$0	$0	$80,330
Task 4: Preliminary Design (10%)																			
4.1 Draft PDR		8	12		24	2	2		80		128	$33,960			$0	$0		$0	$33,960
4.2 Final PDR		4	6		12				40		62	$16,330			$0	$0		$0	$16,330
Subtotal Task 4:	0	12	18	0	36	2	2	0	120	0	190	$50,290	$0	$0	$0	$0	$0	$0	$50,290
TOTAL	**8**	**115**	**57**	**20**	**104**	**24**	**54**	**24**	**434**	**16**	**856**	**$238,855**	**$29,750**	**$8,150**	**$37,900**	**$41,690**	**$300**	**$330**	**$280,875**
Task 5: Optional Tasks																			
5.1 Survey - Topographic Survey South Areas		2	4								6	$2,240	$22,130		$22,130	$24,343		$0	$26,583
5.2 Survey - Record of Survey		2	4								6	$2,240	$68,630		$68,630	$75,493		$0	$77,733
5.3 Geotechnical Services - Phase 2		2	8								10	$3,740		$44,763	$44,763	$49,239		$0	$52,979
Subtotal Task 5:	0	6	16	0	0	0	0	0	0	0	22	$8,220	$90,760	$44,763	$135,523	$149,075	$0	$0	$157,295

1. The individual hourly rates include salary, overhead and profit.
2. Subconsultants will be billed at actual cost plus 10%.
3. Other direct costs (ODCs) such as reproduction, delivery, mileage (rates will be those allowed by current IRS guidelines), and travel expenses, will be billed at actual cost plus 10%.
4. W&C reserves the right to adjust its hourly rate structure and ODC markup at the beginning of the calendar year for all ongoing contracts.
5. Additional Woodard & Curran staff may perform work on the project, based on our standard billing rate schedule currently in effect.

AGENDA ITEM NO. 10.A

DATE: May 4, 2026

TO: JPA Board of Directors

FROM: Engineering and Facilities

SUBJECT: Hydraulic Modeling for Sewer and Potable Water Systems

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The Las Virgenes-Triunfo Joint Powers Authority (JPA) approved funding for this matter in the JPA Budget. On April 7, 2026, the LVMWD Board, acting as the Administering Agent of the JPA, authorized execution of a professional services agreement with Kennedy/Jenks Consultants, Inc., in the amount of $385,817, to perform updates to the District's existing potable water system hydraulic model and creation of a sewer system hydraulic model.

SUMMARY:

On January 8, 2026, LVMWD staff issued a Request for Proposals (RFP) for professional services from qualified firms to provide hydraulic modeling services for updates to the existing LVMWD potable water hydraulic model and creation of a sewer hydraulic model for the JPA. The District received seven proposals and after thorough review, staff recommended that the LVMWD Board (acting as the Administering Agent of the JPA) accept the proposal from Kennedy/Jenks Consultants based on their approach being the most efficient and cost effective.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

The cost of the work is $385,817. Sufficient funds for the work are available in the adopted Fiscal Year 2025-26 Budget and additional funds will be recommended in the proposed Fiscal Year 2026-27 Budget for the continuation of the contract. Costs for the potable water system modeling portion of the contract, in the amount of $130,533, will be charged to the Potable Water Enterprise (100% LVMWD), and costs for the sewer modeling portion of the contract, in the amount of $255,284, will be charged to the JPA, which is allocated 70.6% to LVMWD and 29.4% to TWSD.

DISCUSSION:

Hydraulic models serve as critical tools for planning efforts, system evaluations, operational optimization and capital project development. LVMWD (District) currently utilizes a potable water system model that was last updated during the 2014 update to the Potable Water Master Plan prepared by Kennedy/Jenks Consultants. Since the 2014 updates, there have been modifications to the potable water system and its operation (including completion of numerous capital projects and pipeline replacements, new interconnections, and changing potable water demands), which are not captured within the current hydraulic model. Given the changes to the system and in anticipation of future operational changes due to the completion of the Pure Water Project Las Virgenes-Triunfo, an update to the existing model is necessary to maintain the model as a valuable planning and analysis tool. Additionally, this modeling effort will include fire flow analysis and development of fire flow asset tags that can be integrated into the District's Geographical Information System (GIS). This approach will provide cost savings to customers, efficiencies to staff and conserve potable water by mitigating the need to physically perform fire hydrant flow tests in the field.

The District/JPA's sewer system has not yet been modeled. Planning efforts for the Pure Water Project Las Virgenes-Triunfo will benefit from the development of a hydraulic model for the sewer trunk system. A hydraulic model for the sewer system would provide system-wide data on the available capacity of the sewer system to inform future planning efforts, including analysis for potential future implementation of stormwater diversion programs and planning for startup and testing of the Advanced Water Purification Facility (AWPF). During AWPF startup and testing large volumes of treated water will be discharged to the sewer system for a prolonged period of time; this model will help staff plan and prepare for these activities. Beyond the Pure Water Project Las Virgenes-Triunfo, the model will provide staff with a valuable planning tool that can be utilized in future capital project planning.

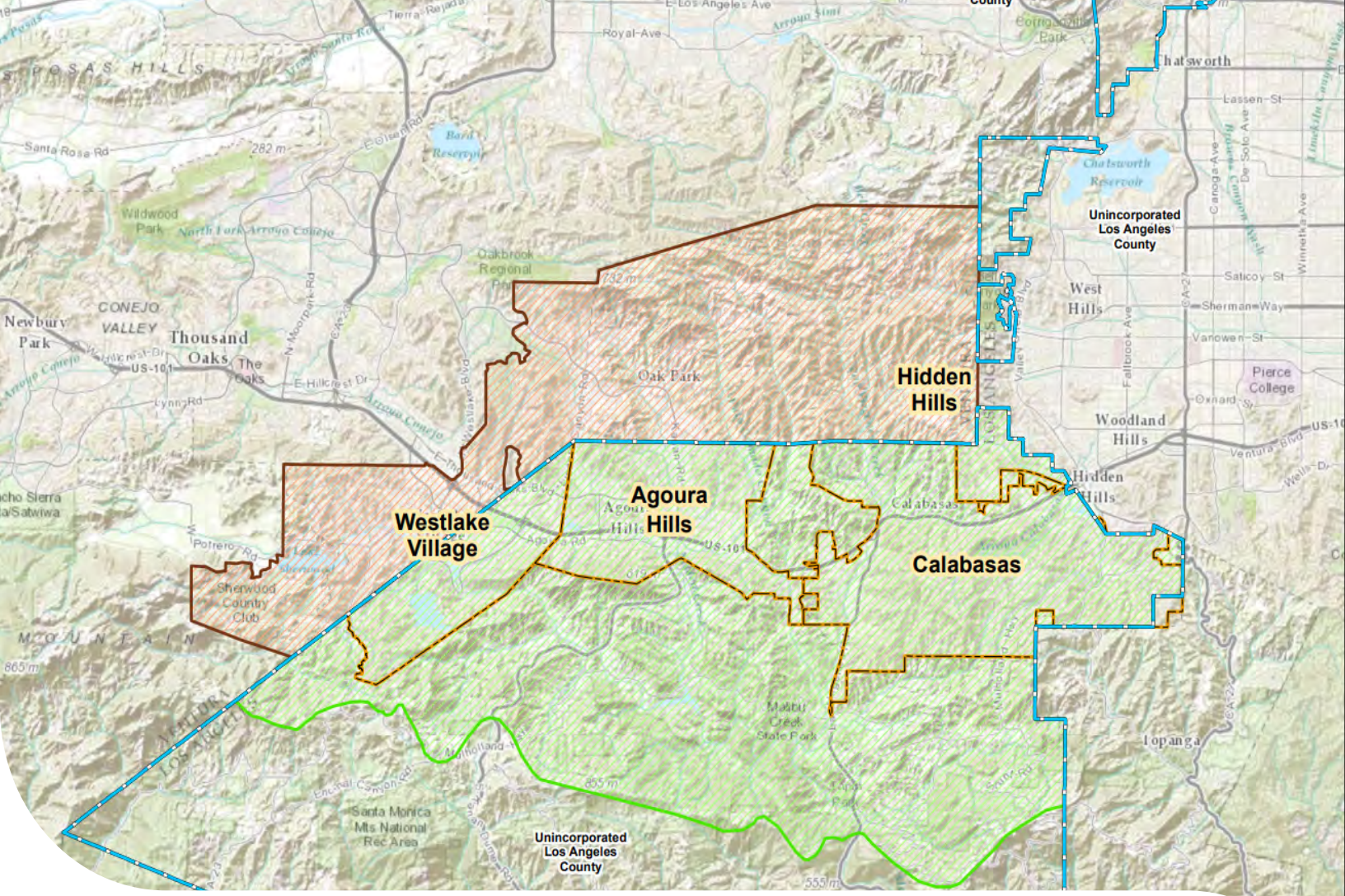
These efforts are strategically timed to align with the recent update to the District's recycled water model as part of the Pure Water Project Las Virgenes-Triunfo, meaning the three models will be relatively consistent in terms of their age and accuracy to current system conditions. There are also cost savings and staffing efficiencies realized by combining the potable water and sewer modeling efforts into a single effort. The District posted a request for proposals (RFP) on January 8, 2026. The scope of work includes project management and coordination, data collection and review, hydraulic model development, calibration (including flow monitoring as needed within the sewer system) and report preparation. Consultants were given the opportunity to propose on the two efforts (potable water and sewer) separately, and/or presenting cost savings that may be realized by awarding the two efforts. District staff held an optional pre-proposal meeting on January 21, 2026. Seven proposals were received. Staff determined KJ's approach to be the most efficient and cost effective.

GOALS:

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

Prepared by: Sarah Mathews, PE, Senior Engineer

ATTACHMENTS:
Proposal by Kennedy/Jenks Consultants



Las Virgenes Municipal Water District & Joint Powers Authority

Sewer System Hydraulic Model Creation and Potable Water Model Update

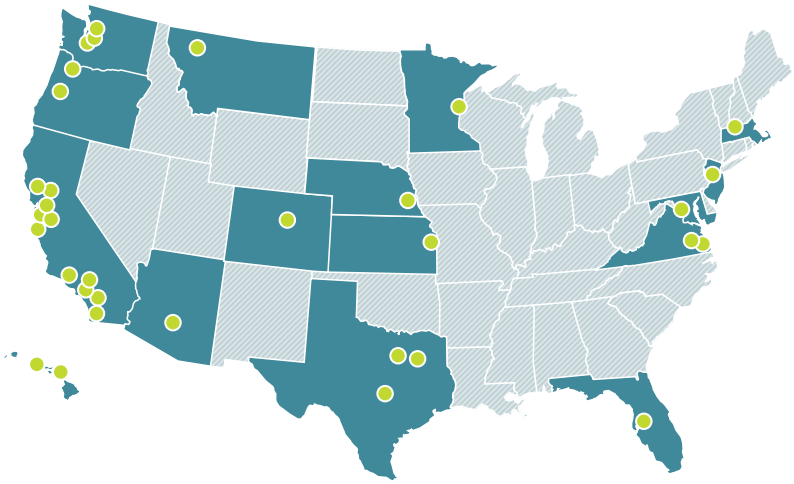
Kennedy Jenks

Original | February 6, 2026

National Firm with Responsive and Personalized Local Service

KJ is a full-service engineering firm that has earned a reputation for excellence and innovation nationwide. We deliver projects of all sizes and complexity while also providing personalized service. As an employee-owned firm, our primary focus is developing long-term relationships with our clients.

Founded initially as a sanitary engineering firm in 1919, KJ specializes in the planning, design, construction, condition assessment, and rehabilitation of water, wastewater, and stormwater infrastructure.



500+
Staff nationwide

34
Offices across 18 states

90%
Client retention rate

Name of Business/Company:
Kennedy/Jenks Consultants, Inc.

Date of the Proposal:
February 6, 2026

Proposals' Subject:
Sewer System Hydraulic Model Creation and Potable Water Model Update

Contact Person:
Adam Bugielski, PE

Address:
2775 North Ventura Rd, Suite 202
Oxnard, CA 93036

Telephone Number:
(661) 857 4745

E-Mail Address:
AdamBugielski@kennedyjenks.com

Table of Contents

February 6, 2026

Sarah Matthews | Sr. Engineer
Las Virgenes Municipal Water District
4232 Las Virgenes Road, Calabasas, CA 91302-1994

Subject: Sewer System Hydraulic Model Creation and Potable Water Model Update

Dear Sarah,

The Las Virgenes Municipal Water District (District) and Joint Powers Authority (JPA) provides reliable, high-quality water and sewer services in a cost-effective and environmentally sensitive manner. Kennedy/Jenks Consultants, Inc. (KJ) is eager to support this mission on the Sewer System Hydraulic Model Creation and Potable Water Model Update with a forward-thinking, responsive team who offer the following:

Collaborative History with the District Offers Peace of Mind:

> Since 1987, KJ has enjoyed a successful working history with the District on planning, infrastructure, and facilities projects. We will act as an extension of your staff, building on our relationships through transparency, collaboration, and engineering excellence. KJ previously completed the District's 2014 potable, sanitation, and recycled water master plans, giving us continuity with your data, planning assumptions, and decision context. **This familiarity shortens onboarding, maintains alignment with your existing documents, and directs our effort to the areas that deliver the most value.**

Proven Modeling Approach to Meet Your Budget and Schedule Goals:

> KJ has provided modeling and engineering services to California municipalities and water/sanitation districts for over 100 years. Our approach mirrors the District's scope: kickoff and regular progress updates; internal QA/QC; data review and gap tracking; delivery of validated, GIS based potable and sewer models; development of required scenarios; calibration consistent with AWWA M32 using SCADA verification; and clear modeling reports with electronic model files, updated data/GIS layers, and fire flow tags for GIS and your future asset management system. **This disciplined process supports on-time, on-budget delivery through thoughtful staffing, proactive scheduling, and prompt responsiveness.**

A team known for stellar communication, clarity, and follow-through:

> **Paul Chau,** Technical Advisor, is a systems thinker and trusted advisor who brings steady, standards based judgment to complex, multi utility modeling and planning**. Salma Taha,** Sewer Modeling Lead, is a calibration specialist known for building reliable, GIS-driven trunk system models and translating results into clear capacity and Inflow & Infiltration (I&I) analysis and identification of problem areas. **Masoom Desai,** Potable Water Modeling Lead, is a detail-oriented modeler focused on demand representation, peaking factors, and control logic, resulting in models that reflect real-world operations. Our team brings extensive experience with local hydraulic systems, including work for Ventura, Thousand Oaks, Ventura County, Calleguas Metropoloton Water District, Santa Barbara, Triunfo WSD, and Oxnard. **The combination of our team's institutional knowledge, coupled with our past expertise, promotes effective communication and execution through all phases of your project.**

Thank you for the opportunity to present our experience, abilities, commitment, and resources in this RFP response. Please contact me at **(661) 857-4745** or **AdamBugielski@kennedyjenks.com**, should you have any questions regarding our submittal. This proposal is a firm and irrevocable offer for 90 days.

Very truly yours,
Kennedy/Jenks Consultants, Inc.

Adam Bugielski, PE
Project Manager

Jeff Savard, PE
Principal-In-Charge

Experienced Team to Provide Results

We have assembled a highly qualified, multidisciplinary team specifically structured to deliver accurate, defensible hydraulic models and clear, actionable findings for the District. Our team combines hands-on hydraulic modeling specialists, senior-level technical and QA/QC oversight, GIS-based data and asset management expertise, and seasoned project management to support the District's operational, regulatory, and planning needs.

Project Manager You Can Trust

Adam knows the District's preferences and standards and will serve as Project Manager, providing project coordination, communication, and drawing on his experience managing complex water and wastewater modeling and planning projects for California agencies.

Quality from Day One

David and **Paul** will provide senior-level technical oversight and QA/QC, drawing on extensive experience in hydraulic modeling and master planning to apply lessons learned to provide technical guidance, mitigate potential roadblocks, and help identify a clear path forward that delivers best-value solutions for the District.

Modeling Expertise

Salma and **Masoom** will lead the development and calibration of sewer and potable water models, bringing extensive experience in GIS-based modeling, demand and flow analysis, scenario development, and system performance evaluation.

Las Virgenes Municipal Water District/Joint Powers Authority

Principal-In-Charge
Jeff Savard, PE

Project Manager
▶ Adam Bugeilski, PE

Technical Advisor
▶ Paul Chau, PE

QA/QC
▶ David Ferguson, PhD, PE, BCEE

Sewer Modeling Team	Potable Water Modeling Team
Modeling Lead ▶ Salma Taha	**Modeling Lead** ▶ Masoom Desai, EIT
Staff Engineer Joette Jackson, PE	**Staff Engineer** Marco Pardo Rojas, EIT

Technical Support

Asset Management	GIS Specialist	Flow Monitoring	Fire Flow Analysis
▶ Scott Lehman, IAM	▶ Jennifer O'Brien	[1] Kevin Krajewski, PE	[2] Davis Fire Protection

LEGEND ▶ Key Personnel [1] KFlow [2] Davis Fire Protection

Why This Team?

- **Collaborative & Communicative**
- **Technical Expertise & Proven Strategies**
- **Familiarity with the District**

Adam Bugielski, PE Project Manager

Adam, is a Project Manager with 14 years of experience delivering water and wastewater infrastructure projects. His work includes hydraulic modeling, program management, and inter-agency coordination. He has served as a program manager for multiple cities which gives him a strong understanding of agency needs, priorities, and operational perspectives. Adam has managed potable water and sewer projects involving pump stations, interconnections, treatment facility upgrades, and system analyses for agencies throughout Ventura County and California.

Relevant Experience

- **Casitas-Ventura-Calleguas Interconnect Hydraulic Analysis,** City of Ventura, CA | *Project Manager*
- **Regional State Water Interconnection,** Ventura Water, Ventura, CA | *Project Manager*
- **Hydraulic Model Management,** City of Ventura, CA | *Project Manager*

Years of Experience
14

Education

BS, Civil Engineering, California State University, Northridge, CA, 2013

Registration

Professional Engineer - Civil - California (89065)

WHY ADAM:
Adam brings extensive experience in water and wastewater system modeling, along with exceptional communication and project management capabilities that directly support the District's priorities.

Paul Chau, PE Technical Advisor

Paul is a Technical Advisor with 19 years of experience leading hydraulic modeling and master planning efforts for potable water, recycled water, and wastewater systems throughout California. He leads KJ's Master Planning Group and has directed numerous projects involving hydraulic model development, calibration, scenario evaluation, flow monitoring integration, and the creation of GIS-based planning tools. Paul has delivered sewer and potable water master plans, wastewater hydraulic models, recycled water system evaluations, groundwater recharge feasibility studies, and system-wide capacity analyses for agencies.

Relevant Experience

- **Hydraulic Model Update & Water Master Plan,** City of Thousand Oaks, CA | *Technical Advisor*
- **Wastewater Master Plan Update,** City of Thousand Oaks, CA | *Project Manager*
- **Sewer and Potable Water Master Plan,** City of Carlsbad, CA | *Project Director*

Years of Experience
19

Education

BS, Environmental Engineering and Science, University of California, Los Angeles, 2006

MS, Civil and Environmental Engineering, Stanford University, 2007

Registration

Professional Engineer - Civil - California (75784)

WHY PAUL:
Paul brings deep hydraulic modeling and master planning expertise. He has led potable water and sewer model development, calibration and system evaluations for the District and regional Ventura County agencies.

Years of Experience
46

Education

BS, Civil Engineering, University of Massachusetts, 1980

PHD, Executive Management, Claremont Graduate University, 1993

Registration

Professional Engineer - Civil - California (34626)

David Ferguson, PhD, PE, BCEE QA/QC

David provides QA/QC for water and wastewater planning and modeling projects, bringing 46 years of experience in water supply infrastructure, master planning, and system evaluations. His QA/QC role includes technical review of potable water, recycled water, and sewer master plans; evaluation of hydraulic analyses; and oversight of modeling-based planning efforts used to identify system deficiencies and support capital improvement programs.

Relevant Experience

- **Wastewater Master Plan,** Crescenta Valley Municipal Water District, La Crescenta, CA | *QA/QC Study Reviewer*
- **Focused Water System Master Plan,** City of Riverside, CA | *Technical/QA/QC*
- **Urban Water Master Plan Update,** City of Thousand Oaks, CA | *QA/QC*

WHY DAVID: David brings seasoned QA/QC judgment that strengthens modeling assumptions, clarifies complex analyses, and results in recommendations that hold up under agency review. His technical insight directly supports reliable, high-quality planning outcomes.

Years of Experience
14

Education
BS, Civil Engineering, American University of Sharjah, 2010

Salma Taha Sewer Modeling Lead

Salma serves as Sewer Modeling Lead with 14 years of experience providing hydraulic modeling for water and wastewater systems in support of master plans, capacity assessments, and long-range planning efforts. Her work focuses on development, calibration, and optimization of sewer and water distribution system models using platforms such as Aquatwin Sewer, PCSWMM, InfoSWMM, InfoWorks ICM, InfoWater Pro, WaterGEMS, and SewerGEMS. Salma's experience includes building models from GIS data, updating and calibrating existing hydraulic models, I&I evaluations, evaluating trunk and interceptor capacity, and performing fire flow and pressure analyses for potable water systems.

Relevant Experience

- **Hydraulic Model Update & Water Master Plan,** City of Thousand Oaks, CA | *Sewer Modeling Lead*
- **2023 Wastewater Master Plan,** Crescenta Valley Water District, La Crescenta, CA | *Hydraulic Modeler*
- **Sewer and Potable Water Master Plan,** City of Carlsbad, CA | *Sewer Modeling Lead*

WHY SALMA: Salma brings deep hands-on experience leading sewer hydraulic model development and calibration for master plans, including dry- and wet-weather simulations, I&I evaluations, and GIS-based capacity analyses, making her ideally suited to deliver the District's modeling objectives.

Masoom Desai, EIT Potable Water Modeling Lead

Years of Experience
5

Education
BS, Civil Engineering, Birla Institute of Technology and Science, Pilani, 2017

MS, Biological Sciences, Birla Institute of Technology and Science, Pilani, 2017

MS, Environmental Engineering, Stanford University, 2020

Registration
Engineer-in-Training (178394)

Masoom serves as Potable Water Modeling Lead with five years of experience specializing in hydraulic modeling, water system planning, and feasibility studies. Her work focuses on developing, updating, and calibrating hydraulic models to support master plans, system evaluations, and fire flow analyses. Masoom has led potable water model builds using GIS geodatabases, updated demand and supply projections, refined peaking factors, and incorporated pump and valve operational controls to represent system performance accurately.

Relevant Experience

- **Potable Water Hydraulic Model Update,** City of Thousand Oaks, CA | *Project Manager*
- **Sewer and Potable Water Master Plan,** City of Carlsbad, CA | *Water Master Plan Lead*
- **Potable Hydraulic Model Phase 1 and 2,** City of Lakewood, CA | *Project Manager*

WHY MASOOM: Masoom brings hands-on expertise leading hydraulic model development and calibration using GIS-based data, demand forecasting, operational controls, and fire-flow simulations to deliver practical, data-driven modeling results that directly support system planning and decision-making.

Scott Lehman, IAM Asset Management

Years of Experience
24

Education
BA, Geography & Anthropology, University of California, Santa Barbara, 1999

Certification
Institute of Asset Management Certificate, Institute of Asset Management (6120657)

Scott provides experienced, practical asset management guidance to support alignment between GIS data, hydraulic models, and future asset management system needs, helping reduce integration risk while keeping the focus on delivering reliable modeling outcomes. Scott will provide advisory support related to asset management considerations associated with updating the District's potable water hydraulic model and development of a new sewer hydraulic model.

Relevant Experience

- **Enterprise Asset Management Implementation,** City of San Diego, CA | *Asset Management*
- **CMMS Needs Assessment, Zone 7 Water Agency, Livermore, CA** | *CMMS Implementation Support/ QA/QC*
- **Asset Risk and Water Master Plan Development,** Newport Beach Utilities Department, Newport Beach, CA | *Asset Management*

WHY SCOTT: Scott provides experienced, practical asset management guidance to support alignment between GIS data, hydraulic models, and future asset management system needs that helps reduce integration risk while keeping the focus on delivering reliable modeling outcomes.

Years of Experience
13

Education

BA, Geography and Environmental Studies, University of Colorado Colorado Springs, 2011

MS, GIS, University of Denver, 2015

Jennifer O'Brien GIS Specialist

Jennifer serves as a GIS Specialist with 13 years of experience supporting water, wastewater, and infrastructure projects through enterprise GIS configuration, data integration, and advanced visualization. Her work focuses on developing and maintaining GIS environments that support planning, modeling, and asset-based decision-making, including the integration of GIS, CAD, and field-collected data.

Relevant Experience

- **Hydraulic Model Update & Water Master Plan,** City of Thousand Oaks, CA | *GIS Specialist*
- **Wastewater Master Plan Update,** City of Thousand Oaks, CA | *GIS Specialist*
- **Sewer and Potable Water Master Plan,** City of Carlsbad, CA | *GIS Specialist*

WHY JENNIFER:
Jennifer provides the GIS expertise needed to support reliable hydraulic modeling, asset data coordination, and future AMS compatibility by making sure network and asset datasets are accurate, well-structured, and GIS-based from the outset.

Strengthened by Proven Local Subconsultant Expertise

Our team is further strengthened by the support of our trusted subconsultants, KFlow and Davis Fire Protection, both of whom bring extensive local experience and proven technical expertise. Their deep understanding of the region's systems, standards, and project requirements enhances our ability to deliver responsive, well-coordinated, and high-quality solutions. **Figure 1** shows examples of K-Flow's experise and services.

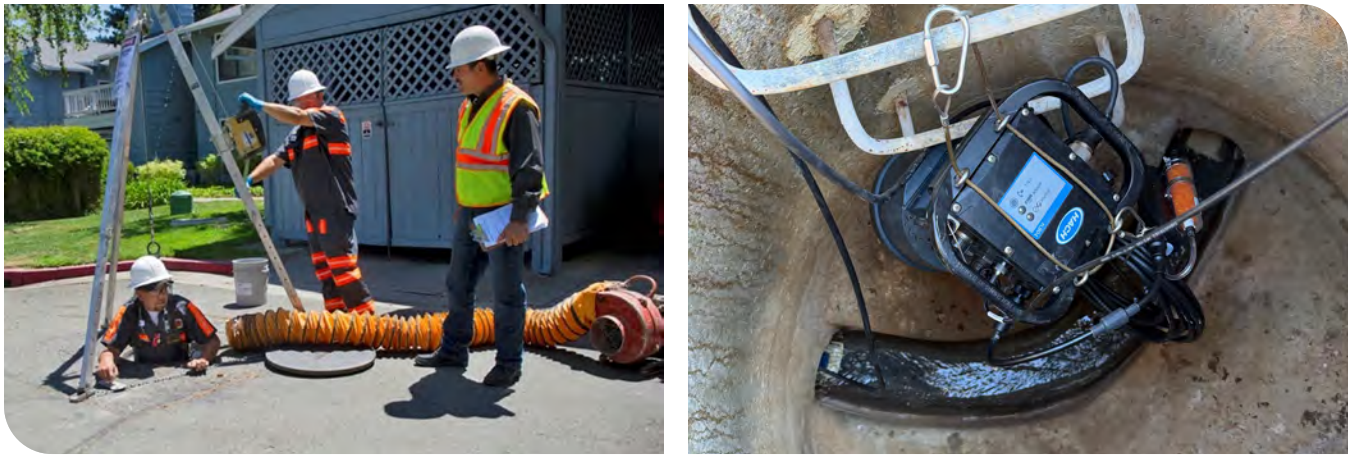
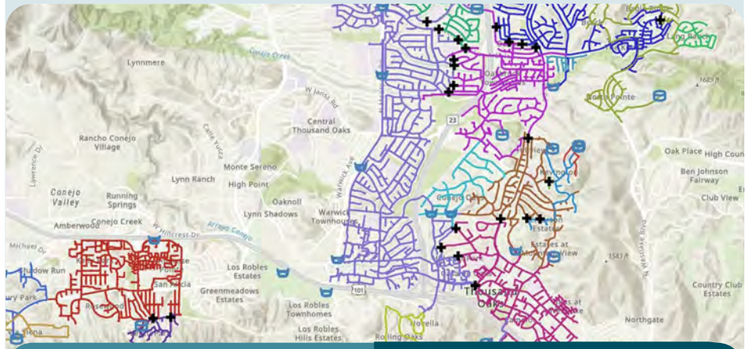


Figure 1. Photos provided by K-Flow. **LEFT:** Confined space entry for large diameter flow meter instillation. **RIGHT:** Example of flow meter installation for sewer monitoring.

Thousand Oaks Water/Wastewater Master Plan
City of Thousand Oaks, CA



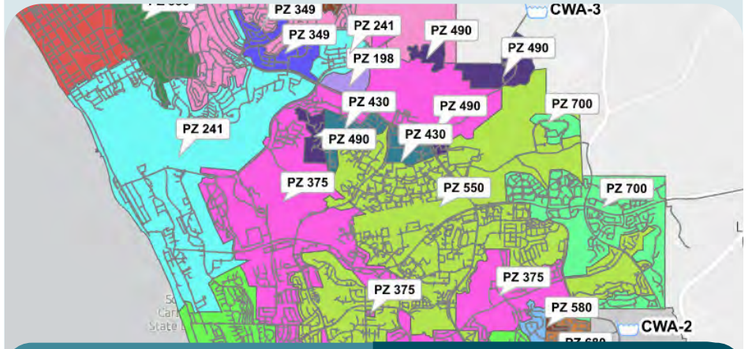
Summary of Project	Key Results Achieved
Developed an AquaTwin Sewer hydraulic model based on GIS data. Calibrated the sewer hydraulic model utilizing flow meter data.	Utilized hydraulic model to correct errors in City's GIS database.
Developed sewershed-specific diurnal patterns and RDII RTK hydrographs; assessed capacity constraints and performed I&I analysis with sewershed ranking.	Utilized recent flow meter data to calibrate model & historical flow data to define design storm scenario for model system analysis.
Created an AquaTwin Water hydraulic model based on GIS data.	Model identification system allows for easy transfer of data between GIS & hydraulic model.
Calibrated well & booster pump operations using pump curves & SCADA data.	Created a system-wide hourly diurnal demand pattern & successfully transitioned the model to EPS operation.

Client Reference
Shamir Shahamiri
2100 Thousand Oaks Blvd.
Thousand Oaks, CA 91362
(805) 449-2400
Sshahamiri@toaks.org

Cost: $980,000

Relevant Key Staff
David Ferguson, Paul Chau, Jeff Savard, Masoom Desai, Salma Taha, Jennifer O'Brien

Water and Sewer Master Plan
City of Carlsbad, CA



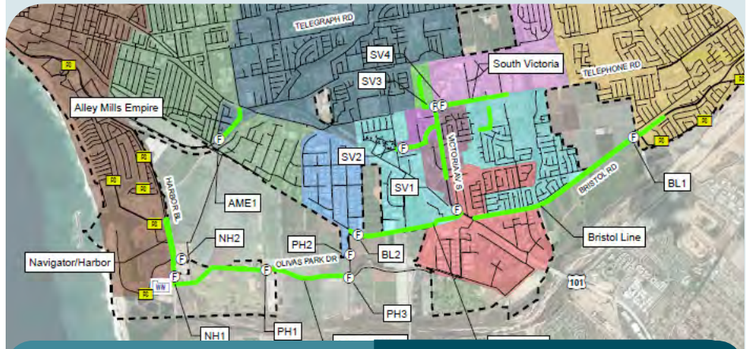
Summary of Project	Key Results Achieved
Updated InfoWater Pro water model & created AquaTwin sewer model. Calibrated both models utilizing SCADA data.	Successful calibration of models led to confidence in model accuracy.
Provides on-call hydraulic modeling & flow meter support for water & sewer systems, including model calibration.	Improves long-term planning accuracy by linking development projections with calibrated hydraulic models.
Utilized AMI billing data to allocate demands to water model & create pressure zone-specific diurnal curves.	Increased granularity of demand allocation promotes better system accuracy.
Supports the development of dynamic Capital Improvement Programs (CIPs) for a 25-year planning horizon.	Integrates operations & maintenance input to address known infrastructure & operational issues.

Client Reference
Sean Diaz
5950 El Camino Real
Carlsbad, CA 92008
(442) 200-7222
sean.diaz@carlsbadca.gov

Cost: $792,000

Relevant Key Staff
Paul Chau, Joette Jackson, Masoom Desai, Salma Taha, Jennifer O'Brien

Multiple Hydraulic Modeling Projects
City of Ventura, CA



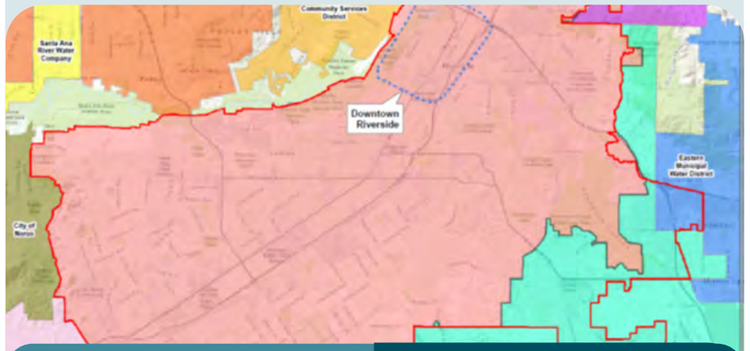
Summary of Project	Key Results Achieved
Maintained Ventura's water & sewer models for 10 years to assess development impacts & system deficiencies.	Clarified development impacts, enabling conditions that reduce financial burden on the water/ sewer department.
Conducted regional water modeling for Ventura, Casitas MWD, & Calleguas MWD, identifying limitations from diurnal demand and headloss during State Water delivery shifts.	Identified time-of-use limits for major water transfers to maintain customer pressures.
Modeled sewer collection systems for five CIP to define work limits, optimize budgets, & size pipeline replacements.	Reduced capital improvement costs by confirming that some previously identified improvements were unnecessary.
Modeled multiple water/sewer capital projects, including reversing the City's transmission flow path & rerouting sewershed flows.	Increased potable water & sewer system efficiency & resiliency by removing system bottlenecks.

Client Reference
Ron Herbst, PE
501 Poli Street,
Ventura, CA 93001
(805) 677-3942
rherbst@cityofventura.ca.gov

Cost: Est. $1 million

Relevant Key Staff
Adam Bugielski, Jeff Savard

Focused Water System Master Plan
City of Riverside, CA



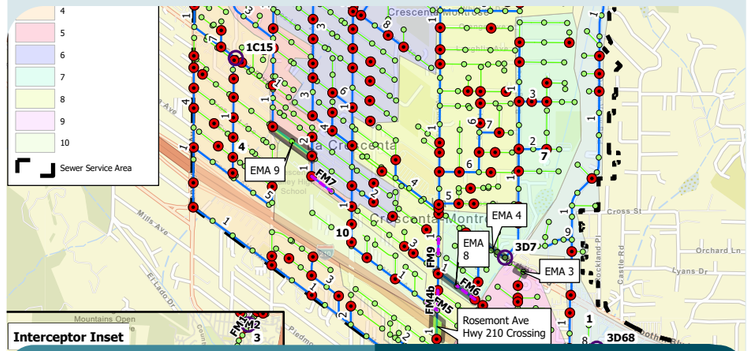
Summary of Project	Key Results Achieved
Developed an all-pipe InfoWater hydraulic model of RPU's potable water supply & distribution systems, including GIS-based model construction & SCADA-driven calibration.	Delivered a fully calibrated, system-wide hydraulic model enabling detailed transmission, distribution, & capacity evaluations.
Created separate model scenarios to analyze the utility's complex transmission & distribution systems.	Developed a targeted CIP supporting Downtown reliability, grade line improvements, & redevelopment needs.
Completed the Focused Water Master Plan (FWMP) to support Downtown Riverside redevelopment & wholesale water transfer planning.	Assessed wholesale water transfer opportunities, documenting system impacts & capital costs to support RPU's negotiations.
Applied a custom demand-development methodology to evaluate Downtown redevelopment needs.	Completed all work on schedule & under budget, enhancing RPU's long-term planning & decision-making capabilities.

Client Reference
Anthony Manzano
(Formerly worked for City of Riverside)
5812 Arbor Rd.,
Lakewood CA 90713
(949) 466-9598
amanzano@lakewoodca.gov

Cost: $322,000

Relevant Key Staff
Paul Chau, Masoom Desai, David Ferguson

Wastewater Master Plan
Crescenta Valley Water District, CA



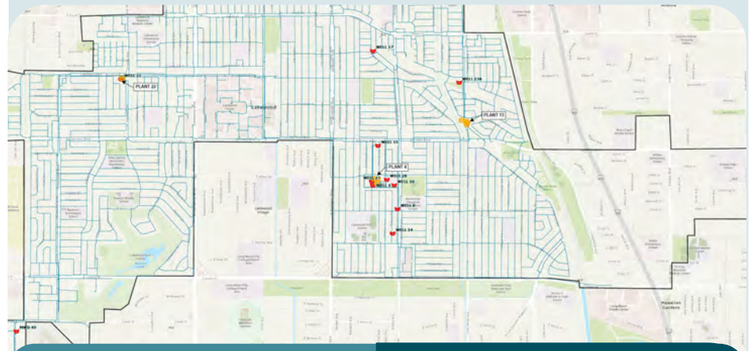
Summary of Project	Key Results Achieved
Prepared the Wastewater Master Plan for Crescenta Valley Water District, providing a comprehensive condition & capacity assessment.	Identified system deficiencies & capacity constraints through integrated field data, modeling, & projections.
Conducted field assessments, flow monitoring, & infiltration/ inflow analysis to evaluate system performance.	Delivered population- & flow-based projections to support long-term infrastructure planning.
Developed and calibrated an InfoSWMM wastewater model using GIS data & dry- & wet-weather flows.	Developed a risk-based, prioritized Capital Improvement Plan with cost estimates & implementation schedules.
Facilitated a Business Risk & Vulnerabilities Assessment (BRVA) to align stakeholders & inform planning.	Provided actionable deliverables, including final reports & a system model operating manual, to support ongoing system management.

Client Reference
James Lee
2700 Foothill Boulevard
La Crescenta, CA 91214
(818) 248-3925
JLee@cvwd.org

Cost: $306,000

Relevant Key Staff
Paul Chau, David Ferguson, Salma Taha, Jennifer O'Brien

Potable Hydraulic Model Phase 1 & 2
City of Lakewood, CA



Summary of Project	Key Results Achieved
Updated & enhanced the City's AquaTwin Water hydraulic model through steady-state & extended period simulation (EPS) analyses.	Established reliable ADD, MDD, & PHD steady-state model scenarios based on recent production, billing, & SCADA data.
Performed demand updates & allocation using recent billing, parcel, & meter GIS data.	Improved model accuracy by validating static pressures & resolving discrepancies with recorded SCADA data.
Calibrated well & booster pump operations using pump curves & SCADA data.	Created a system-wide hourly diurnal demand pattern & successfully transitioned the model to EPS operation.
Developed steady-state & EPS scenarios to support system planning & operational evaluation.	Delivered an updated, stable hydraulic model with documented results and City coordination meetings to support ongoing use.

Client Reference
Anthony Manzano
5812 Arbor Rd.,
Lakewood CA 90713
(949) 466-9598
amanzano@lakewoodca.gov

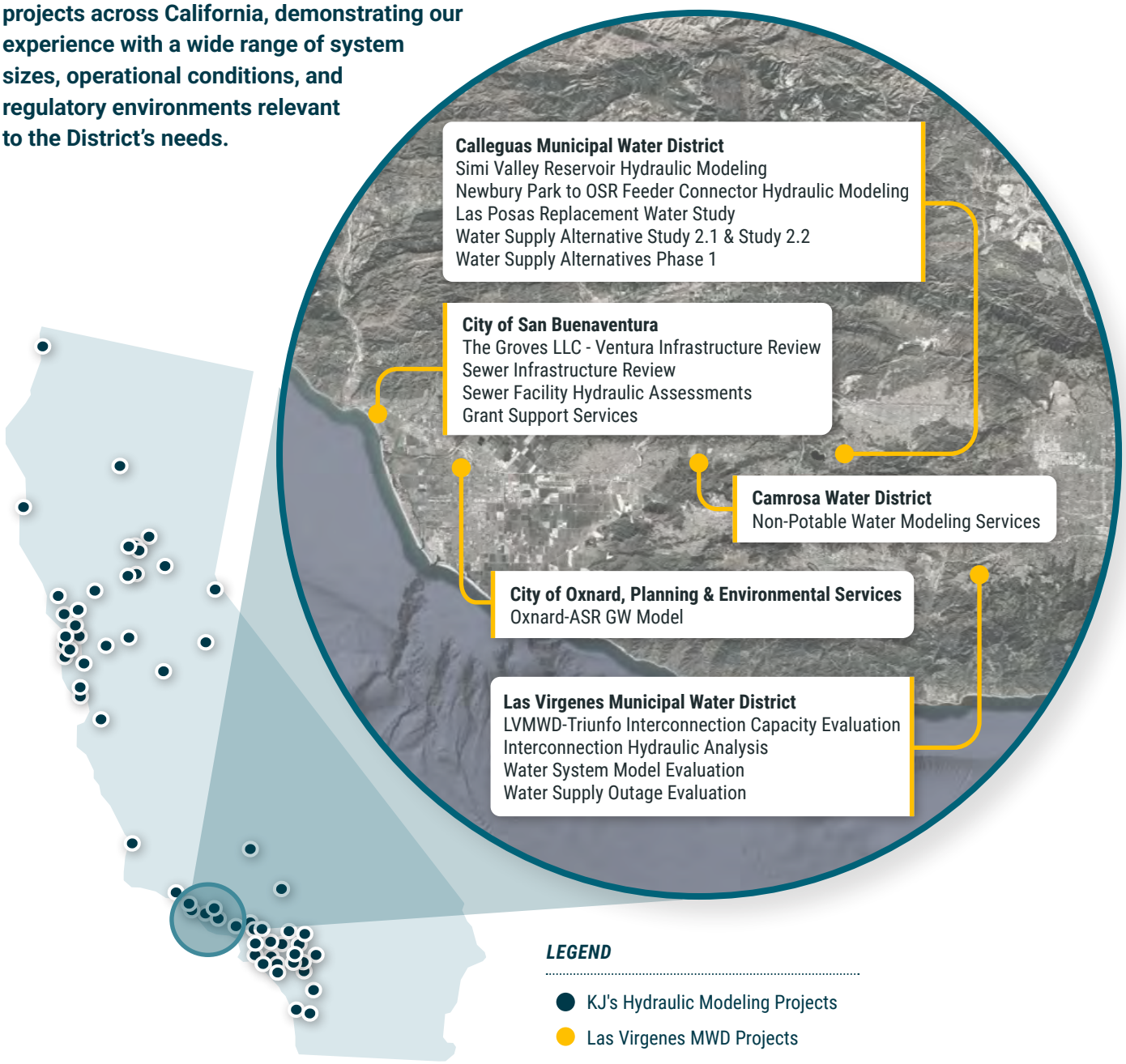
Cost: $25,000

Relevant Key Staff
Paul Chau, Masoom Desai

Proven Modeling Expertise, Mapped to Your Needs

KJ has extensive experience providing potable water and wastewater hydraulic modeling services for public agencies throughout California, **supporting system evaluation, operational planning, fire flow analysis, capacity assessment, and identification of capital improvement needs.** Our work routinely includes development and calibration of GIS-based hydraulic models, integration of SCADA and flow monitoring data, evaluation of existing and future operating scenarios, and preparation of clear, technically defensible documentation to support agency decision-making.

This map highlights KJ's hydraulic modeling projects across California, demonstrating our experience with a wide range of system sizes, operational conditions, and regulatory environments relevant to the District's needs.



Regional Modeling Expertise

KJ brings extensive modeling experience throughout Ventura County and the surrounding region. We have developed, updated, and calibrated hydraulic and sewer system models for Ventura, Oxnard, Calleguas, Simi Valley, and Thousand Oaks, systems that share operational characteristics, hydrologic conditions, and infrastructure challenges similar to those within the District's service area. **Because we have worked directly with your neighboring utilities, we are familiar with their pressure zones, demand patterns, interconnections, and historical modeling decisions.** This perspective strengthens our ability to anticipate cross-jurisdictional considerations, incorporate upstream and downstream system influences, and develop modeling tools that reflect real-world operating conditions in the region.

Institutional Knowledge of the District

KJ has a long-standing partnership with the District, built through the successful delivery of your potable water, sanitation, and recycled water master plans. This history provides continuity with your system data, hydraulic models, planning assumptions, and past decision frameworks. **Because we already understand the foundation of your infrastructure and key operational considerations, our team can immediately focus on the technical elements and refinements that matter most**.

Figure 2 highlights the suite of master plans we have completed for the District, which provides a reliable platform for this next phase of model development and planning.

Figure 2. KJ has completed three of your mater plans, giving us continuity with your data and planning assumptions.

Kennedy Jenks

by the numbers

500+
Planning projects completed in the last 25 years

300+
Potable water system planning projects

150+
Sewer system planning projects

230+
Modeling projects

100+
GIS projects

100+
Combined modeling projects completed by our proposed team

Project Understanding

The District and the JPA are seeking a consultant to develop an update of their Potable Water Hydraulic Model and develop a Sewer Hydraulic Model. These documents will help inform the District of the current capacity of their existing systems, as well as the capacity for future expansion of the system as new uses come online, such as the JPA's Pure Water Program.

It is understood that the following key issues are important in the development of this Project:

- Development of accurate & reliable hydraulic models.
- Developing accurate fire flow data that seamlessly integrates with GIS & Operations Staff workflow.
- Identify critical areas in both systems related to potential pressure surge (water), I&I (sewer), & overall system capacity.
- Keeping the hydraulic model software consistent without reducing functionality.
- Build & calibrate sewer hydraulic model utilizing collected flow meter data to develop diurnal flow patterns & rainfall-dependent inflow and infiltration (RDII) using RTK hydrographs for each sewershed.
- Integration with a future Asset Management System

A Risk-Based Approach Focused On Long-Term Reliability

KJ's approach to updating and developing your potable water and sewer hydraulic models ensures analyses are based on accurate data and that our calibration process clearly identifies system capacity and deficiencies. Leveraging our deep hydraulic modeling expertise and our experience developing the 2014 Potable Water Model, we will deliver this work with the highest accuracy. **Figure 3** summarizes our approach and the benefits to the District, with details provided on the following pages.

Potable Water Model & Sewer Model Approach

	1 Project Initiation	2 Data Collection	3 System Analysis	4 Capacity Analysis	5 Hydraulic Model Reporting
Key Approach Element	• Basis of kickoff meeting with District staff • Assign roles & responsibilities • Identify communication protocol	• Review Existing • Documentation & Data • Understand improvements to the system after 2014 Master Plan • Develop & Execute Strategic Sewer Flow Monitoring Plan	• Develop a collaborative calibration plan • Update Hydraulic Models infrastructure • Incorporate existing SCADA & operational parameters	• Identify Capacity Based limitations • Define improvement recommendations • Risk-based improvement schedule	• Comprehensive summary of system calibration • GIS based model that is AMS ready • Usable results for quick field reference
Benefit to the District & JPA	• Align on key issues, goals, & expectations • Capture institutional • knowledge • Understand major vulnerabilities & pain points • Efficiently allocate planning resources	• Minimize data gaps with real-time monitoring • Accurate model calibration by identifying key confluence points	• Easily maintained, accurate hydraulic models • Reliable facility analyses • Proactive development of key infrastructure data for future AMS	• Align Pure Water Project goals • Prioritize capacity needs and risk to overall system operations • Maximize ROI by setting up for future operational needs	• Proactive planning for future growth & improvements scenarios • Easy access to data in the field, particularly fire flow results • Comprehensive understanding of both water & sewer systems

Figure 3. KJ's project approach provides the District and JPA with numerous benefits, including accurate analyses and reliable hydraulic models that convey existing system conditions and capacity for future planning.

1 Project Initiation

Understanding Your Systems Is Key to Developing an Accurate Hydraulic Model

KJ begins by listening to you. The Basis of the project kickoff will align KJ's potable water and sewer project teams with District staff for project goals, assumptions, and the desired structure for the updated Potable Water and developed Sewer Hydraulic models.

During the project initiation phase and kickoff, KJ staff, in collaboration with the District, will identify key roles and responsibilities, gain insight into the routine and proposed operations of the potable water and sewer system, and confirm project goals and outcomes.

The District will receive the greatest return on its investment with effective updates and development of the two hydraulic models. By engaging District staff early in the process, KJ will focus our analysis on the most critical portions of the potable water and sewer systems, particularly areas of known concern and future needs.

2 Data Collection

Review Existing Documentation to Identify Relevant Components for the Plan Updates

KJ will conduct a thorough review of all pertinent data and planning documents to aid in the Hydraulic model update and development. At the Kickoff meeting, KJ will provide District staff with a data needs list, many of which have already been identified by the District. By combining this list of data needs with the KJ team's history through development of the 2014 Potable Water, Sanitation, and Recycled Water Master Plans and experience with developing several water and sewer hydraulic models will allow the team to efficiently incorporate the pertinent information into the hydraulic models.

KEY PROJECT SAVINGS **Selecting a single consultant to deliver both hydraulic models allows project meetings and key data sets to be consolidated, reducing duplication and overall project costs.**

Real-time Flow Monitoring Minimizes Data Gaps

Unlike the potable water system model, the sewer collection system hydraulic model will be developed from existing GIS data, and additional data will be collected to perform an accurate model calibration. **Because the quality of the hydraulic model depends entirely on the quality of the underlying data, one key step is a QC review of the GIS data before importing it into the model.** During this review, KJ will work with the District to identify and correct errors, improving efficiency during model development. Model validation is another essential QC step. After the initial model builds are complete, we will run the models to identify any errors or gaps in the facility data—such as incorrect sewer invert elevations—so they can be corrected with the District prior to calibration. KJ will also work with the District to understand where recent flow monitoring has been completed as part of the I&I program. In collaboration with District Engineering and Operations staff and our flow metering subconsultant, K-Flow Solutions (K-Flow), we will develop a flow metering plan to capture wet weather data at strategic confluence points in the collection system for the 2026–2027 wet weather season. Up to eight (8) temporary flow meters will be installed and maintained for up to four months, with the option to extend if no wet weather events occur (estimated October 2026 through January 2027).

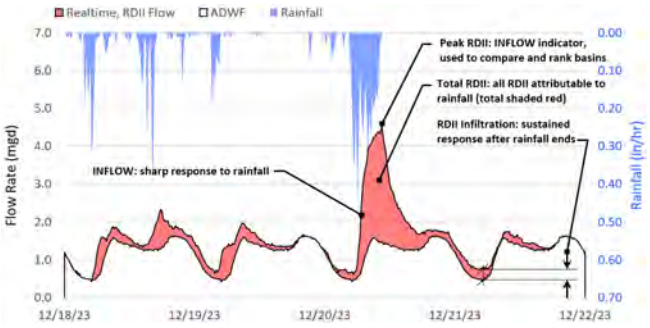


Figure 4. Graph from K-Flow representing the sewer system response to rainfall and other I&I potential.

Locations will be selected to accurately correlate flows with land uses to support the return-to-sewer rate calculation, and K-Flow will monitor data in real time via their in-house web application (Figure 4) to minimize downtime. Final locations will minimize traffic control needs and will be confirmed through the calibration plan in collaboration with the District.

3 System Analysis

Model Infrastructure Updates/Development

The District has indicated that a goal of the project is to have modeling software that is consistent with both the existing InfoWater hydraulic model for the recycled water system as well as a future asset management system.

KJ's Broad Modeling Experience Will Help the District Select Best Fit Software

Prior to the model calibration effort, KJ will assist the District in selecting the hydraulic modeling software that best fits the District's needs, examining cost, ease of use, unique features/capabilities, integration with GIS geodatabases, and the software's future-proofing. KJ has active licenses and expertise in Autodesk (Innovyze Infowater/Infoworks ICM), PCSWMM, and Aquanuity (Aquatwin Sewer) modeling software; **we will leverage our experience to help the District make the best choice.**

Updates and infrastructure development for each hydraulic model will first be imported from the existing model and GIS data. Careful consideration will be taken into account to ensure proper connectivity of distribution and collections pipelines. Recently constructed infrastructure will be modeled based on record drawings. **Proposed infrastructure, such as that related to the Pure Water Project, will also be added without impacting existing conditions** and will be used for future modeling scenarios, including after commissioning of the Pure Water Project.

While updating and building the hydraulic model, **attribute data will be imported and formatted to be consistent with common asset management systems.** This will enable seamless data merging into a new asset management system to support asset monitoring, risk assessment, and future capital improvement planning & prioritization.

After the skeletonized model is updated with all existing and future infrastructure currently identified, **the KJ team will work with District staff to populate operational parameters,** including but not limited to SCADA, supply deliveries, pump curves, recent pump tests, and tank operating levels.

Possible AMS Programs for LVMWD/JPA:

- Maximo
- Lucity/CentralSquare
- Cartegraph

KJ's Scott Lehman has experience implementing Asset Management Systems for several clients, most recently:

- **Zone 7 Water Agency,** Alameda County, CA

  As part of a multi-phase Asset Management program, KJ provided 3rd party software selection support. Phase II of the Program which includes work order software implementation including asset data collection, preventative maintenance job plan development document management, & GIS integration.

- **North Charleston Sanitation District,** North Charleston, SC

  Provided software selection & implementation support services. This included asset data collection, professional support during implementation, software training, & reporting.

- **Tahoe City Public Utilities,** Tahoe City, CA

  This included development of selection criteria, development of the proposal, & consulting services for the selection & implementation of the Computerized Maintenance Management System.

Water Model Calibration

The basis of the calibration plan will include AMI billing data and the generation of diurnal demand curves for each pressure zone within the model. **Knowledge of your potable water model enables our team to hit the ground running and calibrate it quickly, providing greater confidence in the model's accuracy.** As part of the calibration plan and model update, the KJ team will recommend multiple fire flow locations to further update the friction factors, enabling both proper domestic pressures to be modeled and realistic fire flow values to be used. KJ's subconsultant, Davis Fire Protection, will perform an estimated five (5) hydrant flow tests to assist with calibration. This is the same approach KJ used when partnering with Dravis Fire Protection for the Thousand Oaks Water Model and Master Plan update project. KJ will also utilize the recent Pipeline Condition report to ensure that the model results are consistent with aging portions of the distribution system. **Figure 5** shows the District's 2014 Master Plan, which we will utilize throughout this project.

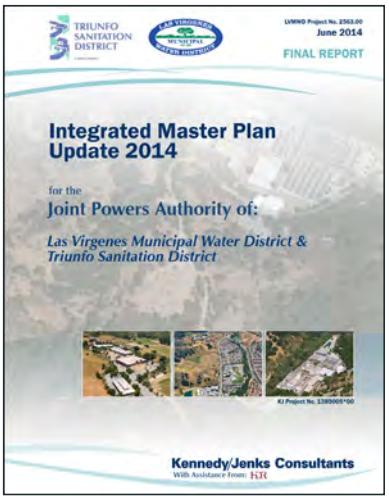


Figure 5. The District's 2014 Master Plan completed by KJ.

Sewer Model Calibration

Compared to the potable water hydraulic model, the Trunk Sewer hydraulic model requires a more in-depth analysis to calibrate and validate the collection system hydraulic model and ensure it is a representative "digital twin" of the current system. **KJ will review the District's GIS database, sewer lift stations, metered flows, record drawings, and flow meter data at the Tapia Water Reclamation Facility.** We will again develop a calibration plan with District staff to review the hydraulic model's existing components (lift stations, force mains, gravity sewer pipes, outfalls, trunk line connection points from County of Los Angeles' combined sewer system, etc.) to align with the Trunk Sewer system assets.

To maximize the accuracy of the spatial distribution of sewer loads, KJ will:

- Reevaluate the sanitary sewer unit flow factors for residential, commercial, & industrial land use types based on the collected flow monitoring data from the 2026-2027 wet weather seasons.
- Multiply the water billing data for customers within the sewer service area by the updated sanitary sewer unit flow factors (return to sewer ratio) based on land use type.
- Compare the total calculated return sewer flow to the measured flow data from the permanent flow meters to confirm the mass balance is correct & quantify any base flow/ groundwater infiltration
- Geolocate the sewer point loads based on water meter and/or parcel GIS data

KEY PROJECT SAVINGS

Review of water billing can be done once by the same consultant if hired to complete both hydraulic models. Water billing data is used as a base for the return to sewer ratio used for comparison with measure flow performed by KJ's subconsultant, K-Flow Solutions.

With the sewer loads spatially distributed, KJ will then use the flow meter data to calibrate the hydraulic model and RTK hydrographs upstream of each metered confluence point. **Figure 6** on the following page shows the workflow for the sewer model calibration.

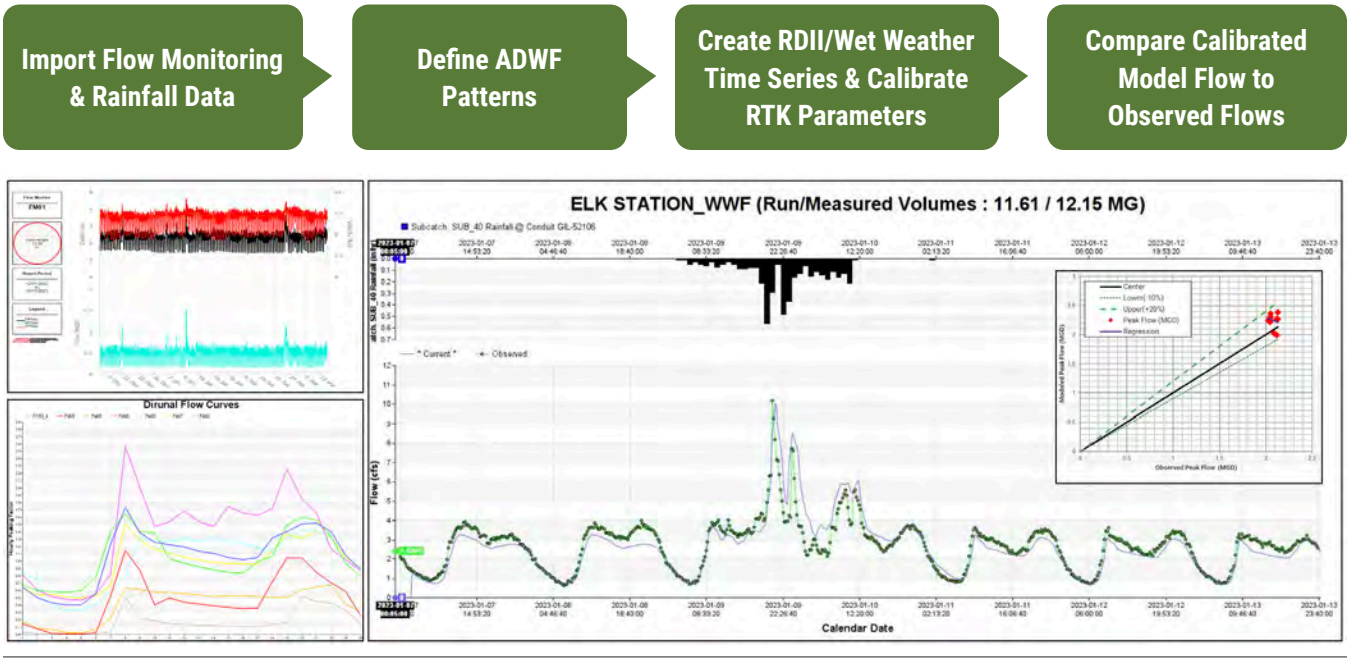


Figure 6. Using the described approach, KJ provided a calibrated accurate sewer model for Crescenta Valley Water District as shown in the calibration plot above.

4 Capacity Analysis

Incorporating Risk to Your CIP Analysis Provides Most Value for Your Finite CIP Budget

KJ will run the **calibrated water model** under existing and future demands, including max day demand (MDD) and peak hour conditions, to identify system deficiencies, including low operating pressures, excessive pipeline velocities, or deficient fire flow capacities. KJ will use the potable water hydraulic model to help the District develop potential capital improvement projects if key infrastructure (i.e., turnouts, storage tanks, pipelines) shows deficiencies. Included in this evaluation will be high-level recommendations to protect the system from water hammering/surge events.

KJ will run the **calibrated sewer model** considering existing and future scenarios for peak dry weather flow (PDWF), peak wet weather flow (PWWF), and PWWF with planned capital improvements such as pure water flows and potential dry weather stormwater flow diversions. KJ will assess the system's existing capacity, identify system deficiencies, required maintenance efforts, and assess future pipe capacity limitations within the system. The District's sewer collection system flows are unique in that the PDWF, which occurs during the summer months, is comparable in magnitude to the PWWF in the winter months due to seasonal fluctuations and potentially higher groundwater. KJ will capture the different stresses on the collection system driven by the PDWF (seasonal activity) and the PWWF (I&I).

5 Hydraulic Model Reporting

KJ will document all work performed to develop the updated potable water and new Trunk Sewer Hydraulic models, and provide these documents to the District and JPA for review. KJ's Hydraulic model reports will clearly define and summarize the methodology used to develop the hydraulic model. All data and analyses will be presented transparently, enabling the District and JPA to revisit and justify the recommendations as needed. The report will also recommend any areas of concern that may warrant a capital improvement project. All model data exports, particularly fire flow hydrant results, will be included for quick reference whenever needed.

Modeling Approach and Plan

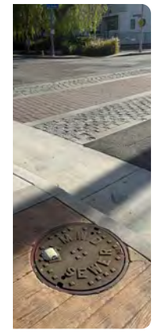
Potable Water

Sewer

Strategically placed hydrant testing to be determined during calibration planning phase. Testing will increase accuracy of the model & understanding of systemwide fire flow rates

Strategically placed flow monitoring locations to minimize cost with traffic control & maximize data capture

Example of catchment area based on strategically placed flow meter



Example of strategically placed Placed Flow Monitoring Locations to minimize cost with traffic control & maximize data capture. Manhole located in sidewalk near the intersection of Calabasas Rd. & El Canon Ave.

Leveraging existing data at lift stations limits the number of flow monitoring locations to save on budget

Example of focus area for potential surge—Long pipe runs with no loop connections

Example of catchment area based on strategically placed flow meter

Example of potential flow monitoring location that does not require traffic control. Manhole located east of the Las Virgenes Rd. & Mureau Rd. intersection. Secondary option within LA County Flood Control property

Example of potential flow monitoring location that does not require traffic control. Manhole located on Old Topanga Canyon Rd outside of drive lanes. Avoids need to access manhole on Mulholland Hwy, which is not recommended

Effective QA/QC Achieves Project Success

KJ's quality control/quality assurance (QA/QC) program is critical to delivering projects successfully. The focus of our program is that every deliverable is reviewed and checked by an independent set of eyes. We will develop and implement a QA/QC Plan tailored to the specific project challenges to deliver high-quality results. An experienced, qualified Quality Manager will be assigned to your project and confirm that the QA/QC Plan is implemented and that recommended changes are addressed.

Approach to Quality Management During Design and Throughout Implementation

All KJ work undergoes a mandatory QA/QC process to check work integrity and consistency. Integrated into our project management system from inception, QA/QC includes independent technical reviews conducted by experienced staff who are not directly involved in the work. For each task order, we prepare a QA/QC Plan aligned with your review approach. On planning and modeling projects, we also conduct a Concept and Criteria Review (CCR) at the data collection stage, engaging senior staff to evaluate concepts, validate existing and collected data, and review preliminary results. This proactive process reduces rework, allows project work plans to function as intended, and reduces the need to repeat procedures if input data needs to be further evaluated or adjusted.

Key elements of our Quality Management capabilities and approach include:

- Internal Kickoff with Quality Control specialist to ensure project goals align with risk mitigation.
- Quality assurance through proactive establishment of schedule, data & quality control procedures.
- Quality gates are established as hold points during work planning & are used as quality checkpoints during execution. Particular care is taken when validating field data and measurements.
- **Transparent Communication:** Regular coordination meetings, written progress updates, & budget/schedule tracking tools maintain transparency & responsiveness.
- **Comprehensive Review:** Prior to any deliverables being distributed, our QA/QC manager will complete a thorough review of the work product, including supporting data and completed work.

Implementing and Maintaining Quality Control

Our QA/QC Review Team oversees implementation, maintenance, and milestone reviews to ensure effectiveness. As Project Manager, Adam Bugielski will engage experienced staff not directly involved in the work for independent technical reviews. Adam, along with QA/QC Manager David Ferguson, will manage subconsultants, monitor scope and budget, and review all subconsultant deliverables before submission to the District.

QA/QC Reviews Delivered at the Right Level and Time to Support Project Success

Our QA/QC process shown in the **Figure 5** on the following page is designed to promote regular communication with you and the project team to identify and resolve project issues quickly. The QA/QC process is tailored to this project to provide the right review at the right level at the right time.

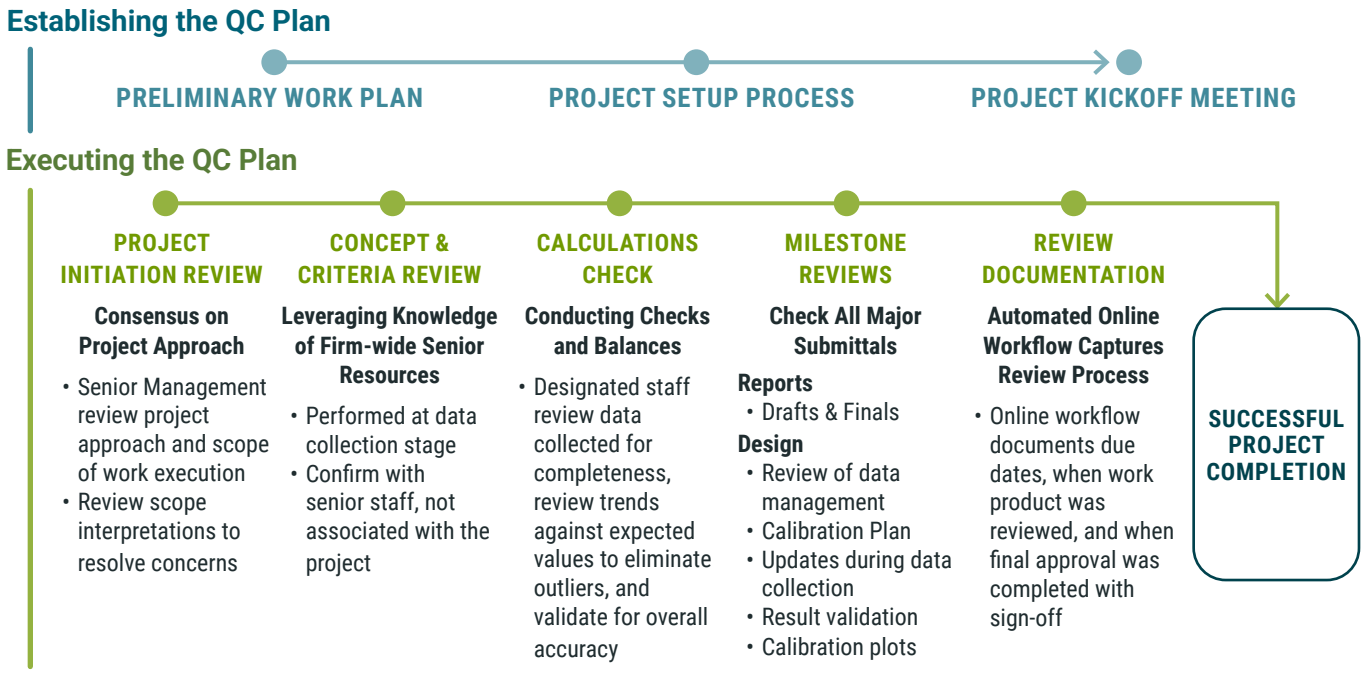


Figure 5. KJ's QA/QC process provides confidence within our work as we maintain regular communication with the District, identifying and resolving project issues swiftly.

Scope

Potable Water Model Update

Task 1 – Project Management, Meetings, and Quality Control/Quality Assurance

1.1 Project Management: KJ shall provide one Project Manager for both model efforts who shall serve as the primary point of contact. KJ Project Manager oversees project coordination and communication, invoicing, schedule and budget tracking. It is assumed that the Project will be completed in 15 months.

1.2 Kick-Off Meeting: KJ shall attend an in-person kick-off meeting with District staff. Prepare and submit meeting agenda and meeting minutes. Up to three (3) KJ staff will attend in person and two (2) virtual Attendees. During the Kick-Off Meeting, project objectives, data needs, and schedule will be discussed and confirmed.

1.3 Project Meeting: Throughout the project regular coordination meetings with District staff may be needed as the project progresses. KJ shall attend up to 12 progress review meetings to discuss project status, request or present information, review deliverables, and gain concurrence on key project issues. Progress meetings shall be attended in-person or virtual as needed. KJ shall prepare and submit meeting agendas and meeting notes.

1.4 QA/QC: Project deliverables will undergo quality reviews prior to submittal to the District in accordance with KJ's Quality Control Program. An internal team project initiation review meeting and Concept & Criteria Review meeting will be conducted to review project approach and methodology early in the process. As the project is executed, other QC reviews are performed at appropriate milestones, which are generally associated with submittals to the District; internal QC review will occur prior to submission of a submittal.

Task 2 – Data Collection & Review

2.1 Data Collection & Review: Prepare and maintain a data request tracking log and provide common access among all team members via Microsoft Teams or other District approved data management platform. Obtain and review all available and pertinent information, reports, data, and mapping relevant to the Potable Water hydraulic model Updates including, but not limited to the following:

- The existing 2014 Water GEMs model
- The District's current GIS geodatabase
- The District's iGreen historian data
- 2014 Potable Water Master Plan
- Record drawings for recently completed projects
- Recent pump test data
- SCADA setpoints and controls scheme
- Most Recent Urban Water Management Plan (Draft 2025 if available)
- Water consumption/billing data (AMI data at hourly intervals if available)
- Recently completed water main condition assessment
- Record drawings for recently completed projects
- Design plans for proposed facilities related to the Pure Water Project

Additional data collection needs will be identified in later tasks, as needed to complete the hydraulic model calibration.

Deliverables:

- Data Request Tracking Table summarizing available data and identifying data gaps

Task 3 – Hydraulic Model Update

3.1 Model Infrastructure Updates: The District currently uses the potable water model in WaterGEMS and a recycled water model in infoWater. Alternative water modeling software shall be briefly evaluated for consistency with all hydraulic models and the potential future Asset Management System and current GIS needs. KJ will present the benefits and limitations of maintaining WaterGEMS, converting to InfoWater, and a third option of AquaTwin. If an alternative software is selected by the District for use on this project, KJ shall convert and calibrate the model to the selected water modeling software. For purposes of this scope of work, it is assumed that InfoWater will be selected as the modeling software for consistency with the District's recycled water model.

As a result of the efforts in task 2.1, KJ will update the converted hydraulic model and include any newly constructed or planned infrastructure. This includes but is not limited to the Calleguas Municipal Water District interconnect project and the future infrastructure related to the Pure Water Project. KJ will provide a GIS database (formatted for common Asset Management Systems) of the model elements that the District can access online and review.

Use the data collected in Tasks 2.1 to complete or update the facilities of the existing potable model. KJ shall update the existing SCADA controls, tank levels, and pumping facilities (pump curves and setpoints) based on this information to provide the most accurate operation condition possible.

3.2 Potable Water Demand Analysis: It is understood that the District has AMI data for metered water demands, which will be utilized to evaluate monthly, daily, and hourly demands. Prior to using the AMI data, KJ will thoroughly review the data for anomalies and coordinate with the District to make adjustments to the AMI data, as needed. The District's land use data shall be used for future demand evaluation in conjunction with the demand forecast tool.

As part of the demand analysis, KJ shall perform these tasks:

- Develop Diurnal demand Curves for each pressure zone
- Identify average day, maximum day, minimum month demands for existing
- Develop average day, maximum day, minimum month demands for future land use factors

3.3 Potable Water Supply Analysis: Existing Water Supply Sources. Evaluate and summarize existing water supply sources, capacities, and potential issues that could affect water delivery to the District.

New/Future Supply Sources. KJ will update the existing supply source (imported water) based on historical Water supplies and demands identified in Task 3.2. Newly constructed interconnections will be taken into account, even in emergency scenarios, to ensure model functionality. Future supply sources, particularly related to Pure Water, will be included in the hydraulic model.

3.4 Calibration Plan: KJ will provide a draft calibration plan in accordance with AWWA Manual M32 for the District's review that will encompass both static and extended period simulation (EPS) calibration procedures. A final calibration plan will

be provided based on the District's comments. The calibration plan will include the following components:

- Documentation of any changes to the existing infrastructure as part of task 3.1
- Summary of Existing Demand/Supply data provided by Tasks 3.2 and 3.3.
- Recommended Hydrant testing locations for fire flow testing.
- Update hydraulic friction factors - The friction factors will be updated based on the static calibration results developed through hydrant demand testing as stated above and review of the District's water main condition assessment.
- Any additional data not collected during Task 2.1.

The calibration level of accuracy will be developed in accordance with the general guidelines provided by AWWA Manual M32, Section 4.1.4.2. Predicted HGLs will be within 5-10 ft of the field-recorded values, and water level fluctuations predicted by the model will be within 3-6 ft of the field-recorded values.

3.5 Scenario Development & Evaluation: The updated potable water hydraulic model will have the following scenarios updated/developed and will incorporate the data collected and verified from previous tasks:

- Existing Operations
- Minimum and Maximum Day Demand Scenario
- Fire Flow Scenario
- Peak Hour Demand Scenario

3.6 Capacity Analysis: Utilizing the calibrated hydraulic model including previous documentation, data, fire flow results, KJ will evaluate the system for capacity related constraints. The following will be reviewed as part of the capacity analysis:

- Evaluate current system pressure and flow rates versus data used in the 2014 water master plan to determine the existing average day, peak hour, and minimum/maximum day demand implications. Review and update design criteria from the 2014 Water Master Plan to be used for potable water hydraulic modeling and planning.
- Use the calibrated model to analyze the capacity of the existing system in its current condition and with future system buildout conditions under both peak hour and maximum day demands.
- Utilize the calibrated model to identify any capacity deficiencies either caused by undersized main, excessive head losses potential due to age and material of system, or long straight runs with no looped connections (potential risk to system caused by surge).

Deliverables:

- Calibration Plan (draft and final – electronic PDF format)
- Calibrated hydraulic model electronic file
- Electronic copies of all data files and GIS layers developed or updated as part of the project
- Fire flow tags for import into GIS

Task 4 – Modeling Report

4.1 Draft Modeling Report: The draft modeling report will summarize all the information provided, the work that was completed, and the results observed at completion of the update to the potable water hydraulic model. The modeling report will include the following sections:

- Description of the data sources utilized.
- Overview of the existing and added facilities include set points and controls.
- Summary of the methodology and approach to the Model update.
- Summary of the Calibration Plan.
- Documentation of any conflicts or issues resolved during the model update.
- Summary of any changes to the existing model.
- Hydrant Fire Flow results tables.
- Demand/Pressure output results,
- Future supply/interconnect summary of potential operations
- Identification of deficient or near deficient areas
- Identification of areas subject to potential damage resulting from transient (surge/water hammer) forces for future analysis
- High level recommendation for potential capital improvement projects
- Draft Model Report will be submitted to the District for review and comment.

4.2 Final Modeling Report: Upon completing a review meeting with District staff and receiving any comments on the draft Model Report, KJ will update the final report and submit electronic copies in PDF format to the District.

Deliverables:

- Modeling report (draft and final – electronic PDF format)

Sewer System Hydraulic Model Creation

Task 1 – Project Management

1.1 Project Management: KJ shall provide one Project Manager for both model efforts who shall serve as the primary point of contact. KJ Project Manager oversees project coordination and communication, invoicing, schedule and budget tracking. It is assumed that the Project will be completed in 15 months.

1.2 Kick-Off Meeting: KJ shall attend an in-person kick-off meeting with District staff. Prepare and submit meeting agenda and meeting minutes. Up to three (3) KJ staff will attend in person and two (2) virtual Attendees. During the Kick-Off Meeting, project objectives, data needs, and schedule will be discussed and confirmed.

1.3 Project Meeting: Throughout the project regular coordination meetings with District staff may be needed as the project progresses. KJ shall attend up to 12 progress review meetings to discuss project status, request or present information, review deliverables, and gain concurrence on key project issues. Progress meetings shall be attended in-person or virtual as needed. Coordination meetings with the local collection system owner, Los Angeles County, will be included as needed in the 12 meetings identified KJ shall prepare and submit meeting agendas and meeting notes.

1.4 QA/QC: Project deliverables will undergo quality reviews prior to submittal to the District in accordance with KJ's Quality Control Program. An internal team project initiation review meeting and Concept & Criteria Review meeting will be conducted to review project approach and methodology early in the process. As the project is executed, other QC reviews are performed at appropriate milestones, which are generally associated with submittals to the District; internal QC review will occur prior to submission of a submittal. Record drawings for recently completed projects.

Task 2 – Data Collection and Review

2.1 - Data Collection and Review – Prepare and maintain a data request tracking log and provide common access among all team members via Microsoft Teams or other District approved data management platform. Obtain and review all available and pertinent information, reports, data, and mapping relevant to the Sewer hydraulic model development including, but not limited to the following:

- The District's current GIS geodatabase
- The District's iGreen historian data
- 2014 Sewer Master Plan
- Record drawings for recently completed projects
- Recent pump test data for lift stations
- Pump curves, wet well levels, and flow meter data
- SCADA setpoints and controls scheme
- PureWater Basis of Design Report
- Water consumption/billing data
- Recent CCTV inspections
- WWTP influent and effluent flow monitoring data
- Available rainfall records from rain gauges in the District's service area
- Water consumption/billing data (AMI data at hourly intervals if available, utilized to develop return to sewer ratios for land use types)
- Record drawings for recently completed projects
- Design plans for proposed facilities related to the Pure Water Project

Additional data collection needs will be identified in later tasks, as needed to complete the hydraulic model calibration.

Deliverables:

- Data Request Tracking Table summarizing available data and identifying data gaps

Task 3 – Hydraulic Model Development

3.1 Model Infrastructure Development: The District currently uses the potable water model in WaterGEMS and a recycled water model in infoWater. Alternative sewer modeling software shall be briefly evaluated for consistency with all hydraulic models and the potential future Asset Management System and current GIS needs. KJ will present the benefits and limitations of utilizing SewerGEMS, InfoWorks ICM, or AquaTwin Sewer. For purposes of this scope of work, it is assumed that InfoWorks ICM will be selected as the modeling software for consistency with the District's recycled water model.

As a result of the efforts in Task 2.1, KJ will model the existing truck sewers and lift stations. Additional consideration will be taken for any new or proposed infrastructure in the Trunk Sewer System such as that related to the Pure Water Project or dry weather/ first flush stormwater diversions. KJ will provide a GIS database (formatted for common Asset Management Systems) of the model elements that the District can access online and review.

Use the data collected in Task 2.1 to model the facilities of the Trunk Sewer System KJ shall model the existing SCADA controls and lift stations (pump curves and setpoints) based on this information to provide the most accurate operation condition possible.

3.2 Calibration Plan: Inclusive of data received from the District a calibration plan will be developed and submitted to the District for review. The flowing steps will be taken to develop the calibrated sewer loads for the model:

- Locations of the proposed monitoring devices to measure existing dry and wet weather flows. Locations will be selected to minimize traffic control needed.
- Import Flow Monitoring and Rainfall Data. Import flow monitoring data for each monitored location. Import weighted rainfall data for the collection system service area.
- GWI and BWF Extraction. Use software to separate dry weather flow meter data into groundwater infiltration (GWI) and base wastewater flow (BWF). BWF represents the sewer loadings from upstream customers.
- Define BWF Pattern and Adjust Sewershed Loads. Use the isolated BWF to develop a demand pattern that can be applied to upstream customers. Adjust the magnitude of the sewer loads to match the monitored flows during dry weather flow conditions (less the GWI).
- Create RDII/Wet Weather Time Series. The rainfall derived inflow and infiltration (RDII) during a wet weather event is defined as the total observed flow minus the BWF and GWI. This helps identify what portion of wet weather flow is due to I&I.
- Calibrate RTK Hydrograph Parameters. The RTK parameters are used to measure the short-term, medium-term, and long-term sewer flow responses to a wet weather event. The modeling software is used to calibrate the RTK parameters for each sewershed (area upstream of the flow monitoring station). A genetic algorithm is used to iterate the RTK parameters until the predicted RDII matches the observed RDII. The more significant wet weather events that are captured during the flow monitoring period, the more accurate the RDII calibration is.
- Finally, the calibrated flow can be compared to the observed flow at each flow monitoring location to examine how well the model performs.

3.3 Sewer Flow Monitoring: Flow monitoring will be conducted by KJ subconsultant, K-Flow, as the primary source of developing the loading in the sewer hydraulic model. It is assumed that 8 flow monitoring locations throughout the system will be placed to measure flows over a minimum of 2-month period to capture seasonal functionality as well as wet weather events. Wet weather data will be utilized to determine the amount of inflow and intrusion in the Trunk Sewer System.

3.4 Scenario Development & Evaluation: The sewer hydraulic model will have the following scenarios updated/developed and will incorporate the data collected and verified from previous tasks:

- Existing system with peak dry weather flow
- Existing system with peak wet weather flow
- Future system with peak dry weather flow
- Future system with peak wet weather flow

- Future system includes build-out and additional flow from Pure Water Operations and Dry weather storm water diversions.

3.5 Capacity Analysis: Utilizing the calibrated hydraulic model and flow monitoring reports provided by K-Flow, KJ will evaluate the system for capacity related constraints. The following will be reviewed as part of the capacity analysis:

- Evaluate current sewer flow monitoring data versus data used in the 2014 sewer master plan to determine the existing peak dry weather and peak wet weather flow factors. Identify areas that have undergone sewer replacement and incorporate inflow and infiltration (I&I) analysis from recent flow reports into the model. Review and update design criteria from the 2014 Sewer Master Plan to be used for sewer hydraulic modeling and planning.
- Use the calibrated model to analyze the capacity of the existing system in its current condition and with future system buildout conditions under both peak dry weather and peak wet weather flows.
- Utilize the calibrated model to identify any capacity deficiencies either caused by excessive sewer loading or I&I.

Deliverables:

- Calibration Plan (draft and final – electronic PDF format)
- Calibrated hydraulic model electronic file
- Electronic copies of all data files & GIS layers developed or updated as part of the project

Task 3 – Modeling Report

4.1 Draft Modeling Report: The draft modeling report will summarize all the information provided, the work that was completed, and the results observed at completion of the update to the potable water hydraulic model. The modeling report will include the following sections:

- Description of the data sources utilized.
- Overview of the modeled facilities include set points and controls.
- Summary of the methodology and approach to the Model update.
- Summary of the Calibration Plan.
- Documentation of any conflicts or issues resolved during the model update.
- Summary of flow monitoring locations and data.
- Sewer Model load output results,
- Future loading summary of potential operations
- Identification of deficient or near deficient areas
- High level recommendation for potential capital improvement projects

4.2 Final Modeling Report: Upon completing a review meeting with District staff and receiving any comments on the draft Model Report, KJwill update the final report and submit electronic copies in PDF format to the District.

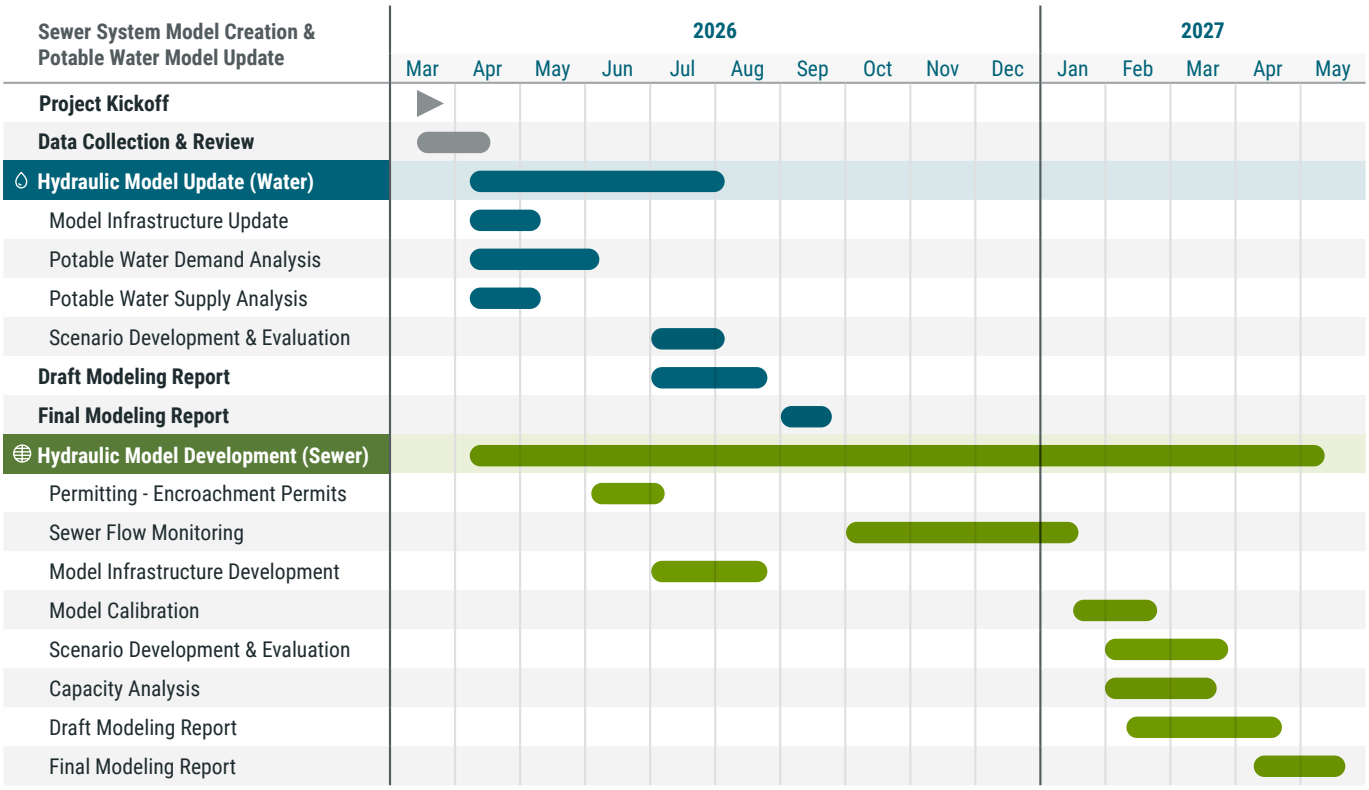
Deliverables:

- Modeling report (draft and final – electronic PDF format)

Assumption:

- It is assumed the current GIS database will be used to build the hydraulic model.
- The Consultant will review sewer system data—including attributes, as-builts, record drawings, and GIS—and provide the District a list of discrepancies for verification. The District will update the GIS within an agreed timeframe, and the Consultant will incorporate these updates into the final model.
- Up to eight flow-monitoring locations will require traffic control, limited to one lane closure per site.
- Wet-weather data is assumed to be collected between Dec. 2026 and Feb. 2027; if no events occur, additional compensation will be requested.
- Fire-flow testing locations will not require traffic control or permits.
- All permit and encroachment fees will be paid by the District. Kennedy Jenks will prepare permit applications, and the District will submit them.

Schedule



Task Durations

Project Kickoff: 1 day

Data Collection and Review: 3 weeks

Hydraulic Model Update (Water): 80 days

- **Model Infrastructure Update:** 1 month
- **Potable Water Demand Analysis:** 2 months
- **Potable Water Supply Analysis:** 1 month
- **Calibration Plan & Calibration:** 3 months
- **Scenario Development & Evaluation:** 1 month
- **Draft Modeling Report (Water):** 2 months
- **Final Modeling Report (Water):** 3 weeks

Hydraulic Model Development (Sewer): 282 days

- **Calibration Plan:** 2 months
- **Permitting – Encroachment Permits:** 1 month
- **Sewer Flow Monitoring:** 2 months
- **Model Infrastructure Development:** 2 months
- **Model Calibration:** 2 weeks
- **Scenario Development & Evaluation:** 2 months
- **Capacity Analysis:** 1 month
- **Draft Modeling Report (Sewer):** 2 months
- **Final Modeling Report (Sewer):** 1 month

H | Legal Issues and Potential Conflict of Interest

There are no pending investigations of our firm, and no enforcement, settlement, or disciplinary actions have been taken within the last five years against our firm or any proposed key personnel. There are no known potential conflicts of interest related to this engagement.

J | Contractual Services Agreement

Kennedy/Jenks Consultants, Inc. does not take any exceptions to the terms and conditions of this RFQ.

Combined: Potable Water & Sewer

Proposal Fee Estimate

Kennedy Jenks

CLIENT Name: Las Virgines Municipal Water District / Joint Powers Authority

PROJECT Description: Potable Water Hydraulic Model Update & Sewer Hydraulic Model Development

Proposal/Job Number: B012170*35613 **Date:** 1/27/2026

	David F	Scott L	Paul C	Adam B	Jennifer O	Salma	Joette J	Masoom D	Marco R	Name Cad	Name Cad	Name Cad	Name Cad	Name PA	Name Adm														
January 1, 2026 Rates Classification:	Eng-Sci-9	Eng-Sci-8	Eng-Sci-7	Eng-Sci-7	Eng-Sci-6	Eng-Sci-5	Eng-Sci-4	Eng-Sci-4	Eng-Sci-2	Sr. CAD-Design	CAD-Design	Sr. CAD-Tech	CAD-Tech	Project Assistant	Admin. Assist.	Total	KJ Labor	KJ Escalation	KJ Assoc. Proj. Costs	Sub K-Flow Solutions	Sub Davis Fire Protection	KJ Sub-Markup	KJ ODCs	KJ ODCs Markup	Total Labor	Total Subs	Total Expenses	Total Labor + Subs + Expenses
Hourly Rate:	$335	$320	$300	$300	$275	$250	$230	$230	$190	$195	$180	$165	$145	$145	$130	Hours	Fees	0%	$0.00	Fees	Fees	5%	Fees	5%				Fees
Task 1 - Project Management, Meetings, and Quality Control/Quality Assurance																													
1.1 Project Management				24										18		42	$9,810	$0	$0			$0		$0	$9,810	$0	$0	$9,810
1.2 - Kick-Off Meeting				2		4	4	4	4							18	$4,200	$0	$0			$0	$45	$2	$4,200	$0	$47	$4,247
1.3 - Project Meeting (12 Meetings)		2	4	18		18	12	18	12							84	$20,920	$0	$0			$0	$536	$27	$20,920	$0	$562	$21,482
1.4 QA/QC	20			4												24	$7,900	$0	$0			$0		$0	$7,900	$0	$0	$7,900
																						$0						
Task 1 - Subtotal	20	2	4	48	0	22	16	22	16	0	0	0	0	18	0	168	$42,830	$0	$0	$0	$0	$0	$580	$29	$42,830	$0	$609	$43,439
Task 2 – Data Collection and Review																													
2.1 - Data Collection and Review (Water)	0	0	0	2	0	8	12	0	0	0	0	0	0	0	0	22	$5,360	$0	$0			$0	$0	$0	$5,360	$0	$0	$5,360
2.2 - Data Collection and Review (Sewer)	0	0	0	2	0	0	0	8	12	0	0	0	0	0	0	22	$4,720	$0	$0			$0	$0	$0	$4,720	$0	$0	$4,720
Task 2 - Subtotal	0	0	0	4	0	8	12	8	12	0	0	0	0	0	0	44	$10,080	$0	$0	$0	$0	$0	$0	$0	$10,080	$0	$0	$10,080
Task 3 – Hydraulic Model																													
Potable Water Hydraulic Model Update	3	1	2	9	4	16	20	84	174	0	0	0	0	0	0	313	$66,705	$0	$0			$438	$0	$0	$66,705	$9,188	$0	$75,893
3.1 - Model Infrastructure Updates		1		1	4			20	32							58	$12,400	$0	$0			$0		$0	$12,400	$0	$0	$12,400
3.2 - Potable Water Demand Analysis	1			1				24	40							66	$13,755	$0	$0			$0		$0	$13,755	$0	$0	$13,755
3.3 - Potable Water Supply Analysis				1				4	6							11	$2,360	$0	$0			$0		$0	$2,360	$0	$0	$2,360
3.4 - Calibration Plan & Model Calibration	2		1	2				24	80							109	$22,290	$0	$0		$8,750	$438		$0	$22,290	$9,188	$0	$31,478
3.5 - Scenario Development & Evaluation			1	2				12	16							31	$6,700	$0	$0			$0		$0	$6,700	$0	$0	$6,700
3.6 - Capacity Analysis				2		16	20									38	$9,200	$0	$0			$0		$0	$9,200	$0	$0	$9,200
Sewer Hydraulic Model Development	3	1	4	18	8	120	264	0	0	0	0	0	0	0	0	418	$100,845	$0	$0			$4,600	$0	$0	$100,845	$96,600	$0	$197,445
3.1 - Model Infrastructure Development		1		4	8	36	80									129	$31,120	$0	$0			$0		$0	$31,120	$0	$0	$31,120
3.2 - Calibration Plan & Model Calibration	2		2	8		40	120									172	$41,270	$0	$0			$0		$0	$41,270	$0	$0	$41,270
3.3 - Sewer Flow Monitoring				2		4	4									10	$2,520	$0	$0	$92,000		$4,600		$0	$2,520	$96,600	$0	$99,120
3.4 - Scenario Development & Evaluation	1		2	2		24	40									69	$16,735	$0	$0			$0		$0	$16,735	$0	$0	$16,735
3.5 - Capacity Analysis				2		16	20									38	$9,200	$0	$0			$0		$0	$9,200	$0	$0	$9,200
Task 3 - Subtotal	6	2	6	27	12	136	284	84	174	0	0	0	0	0	0	731	$167,550	$0	$0	$92,000	$8,750	$5,038	$0	$0	$167,550	$105,788	$0	$273,338
Task 4 – Modeling Report																													
Potable Water Hydraulic Model Report	2	0	3	6	2	0	0	40	76	0	0	0	0	0	0	129	$27,560	$0	$0			$0	$0	$0	$27,560	$0	$0	$27,560
4.1 - Draft Modeling Report	1		2	4	2			32	60							101	$21,445	$0	$0			$0		$0	$21,445	$0	$0	$21,445
4.2 - Final Modeling Report	1		1	2				8	16							28	$6,115	$0	$0			$0		$0	$6,115	$0	$0	$6,115
Sewer Hydraulic Model Report	2	0	3	6	2	40	76	0	0	0	0	0	0	0	0	129	$31,400	$0	$0			$0	$0	$0	$31,400	$0	$0	$31,400
4.1 - Draft Modeling Report	1		2	4	2	32	60									101	$24,485	$0	$0			$0		$0	$24,485	$0	$0	$24,485
4.2 - Final Modeling Report	1		1	2		8	16									28	$6,915	$0	$0			$0		$0	$6,915	$0	$0	$6,915
Task 4 - Subtotal	4	0	6	12	4	40	76	40	76	0	0	0	0	0	0	258	$58,960	$0	$0	$0	$0	$0	$0	$0	$58,960	$0	$0	$58,960
All Tasks Total	**30**	**4**	**16**	**91**	**16**	**206**	**388**	**154**	**278**	**0**	**0**	**0**	**0**	**18**	**0**	**1201**	**$279,420**	**$0**	**$0**	**$92,000**	**$8,750**	**$5,038**	**$580**	**$29**	**$279,420**	**$105,788**	**$609**	**$385,817**

Potable Water Only

Proposal Fee Estimate

Kennedy Jenks

CLIENT Name: Las Virgines Municipal Water District / Joint Powers Authority

PROJECT Description: Potable Water Hydrualic Model Update & Sewer Hydraulic Model Development

Proposal/Job Number: B012170*35613 **Date:** 1/27/2026

	David F	Scott L	Paul C	Adam B	Jennifer O	Salma	Joette J	Masoom D	Marco R	Name Cad	Name Cad	Name Cad	Name Cad	Name PA	Name Adm													
January 1, 2026 Rates **Classification:**	Eng-Sci-9	Eng-Sci-8	Eng-Sci-7	Eng-Sci-7	Eng-Sci-6	Eng-Sci-5	Eng-Sci-4	Eng-Sci-4	Eng-Sci-2	Sr. CAD-Design	CAD-Design	Sr. CAD-Tech	CAD-Tech	Project Assistant	Admin. Assist.	Total	KJ Labor	KJ Escalation	KJ Assoc. Proj. Costs	Sub K-Flow Solutions	Sub Davis Fire Protection	KJ Sub-Markup	KJ ODCs	KJ ODCs Markup	Total Labor	Total Subs	Total Expenses	Total Labor + Subs + Expenses
Hourly Rate:	**$335**	**$320**	**$300**	**$300**	**$275**	**$250**	**$230**	**$230**	**$190**	**$195**	**$180**	**$165**	**$145**	**$145**	**$130**	**Hours**	**Fees**	**0%**	**$0.00**	**Fees**	**Fees**	5%	**Fees**	5%				**Fees**
Task 1 - Project Management, Meetings, and Quality Control/Quality Assurance																												
1.1 Project Management				20										18		38	$8,610	$0	$0			$0		$0	$8,610	$0	$0	$8,610
1.2 - Kick-Off Meeting				2				4	6							12	$2,660	$0	$0			$0	$45	$2	$2,660	$0	$47	$2,707
1.3 - Project Meeting (12 Meetings)			2	4	16			18	16							56	$13,820	$0	$0			$0	$536	$27	$13,820	$0	$562	$14,382
1.4 QA/QC	16			3												19	$6,260	$0	$0			$0		$0	$6,260	$0	$0	$6,260
																						$0						
Task 1 - Subtotal	16	2	4	41	0	0	0	22	22	0	0	0	0	18	0	125	$31,350	$0	$0	$0	$0	$0	$580	$29	$31,350	$0	$609	$31,959
Task 2 – Data Collection and Review																												
2.1 - Data Collection and Review (Water)	0	0	0	2	0	12	20	0	0	0	0	0	0	0	0	34	$8,200	$0	$0			$0	$0	$0	$8,200	$0	$0	$8,200
Task 2 - Subtotal	0	0	0	2	0	12	20	0	0	0	0	0	0	0	0	34	$8,200	$0	$0	$0	$0	$0	$0	$0	$8,200	$0	$0	$8,200
Task 3 – Hydraulic Model																												
Potable Water Hydraulic Model Update	3	1	2	9	4	16	20	88	178	0	0	0	0	0	0	321	$68,385	$0	$0			$438	$0	$0	$68,385	$9,188	$0	$77,573
3.1 - Model Infrastructure Updates		1		1	4			20	32							58	$12,400	$0	$0			$0		$0	$12,400	$0	$0	$12,400
3.2 - Potable Water Demand Analysis	1			1				24	40							66	$13,755	$0	$0			$0		$0	$13,755	$0	$0	$13,755
3.3 - Potable Water Supply Analysis				1				4	6							11	$2,360	$0	$0			$0		$0	$2,360	$0	$0	$2,360
3.4 - Calibration Plan & Model Calibration	2		1	2				24	80							109	$22,290	$0	$0		$8,750	$438		$0	$22,290	$9,188	$0	$31,478
3.5 - Scenario Development & Evaluation			1	2				16	20							39	$8,380	$0	$0			$0		$0	$8,380	$0	$0	$8,380
3.6 - Capacity Analysis				2		16	20									38	$9,200	$0	$0			$0		$0	$9,200	$0	$0	$9,200
Task 3 - Subtotal	3	1	2	9	4	16	20	88	178	0	0	0	0	0	0	321	$68,385	$0	$0	$0	$8,750	$438	$0	$0	$68,385	$9,188	$0	$77,573
Task 4 – Modeling Report																												
Potable Water Hydraulic Model Report	2	0	3	6	2	0	0	40	76	0	0	0	0	0	0	129	$27,560	$0	$0			$0	$0	$0	$27,560	$0	$0	$27,560
4.1 - Draft Modeling Report	1		2	4	2			32	60							101	$21,445	$0	$0			$0		$0	$21,445	$0	$0	$21,445
4.2 - Final Modeling Report	1		1	2				8	16							28	$6,115	$0	$0			$0		$0	$6,115	$0	$0	$6,115
Task 4 - Subtotal	2	0	3	6	2	0	0	40	76	0	0	0	0	0	0	129	$27,560	$0	$0	$0	$0	$0	$0	$0	$27,560	$0	$0	$27,560
All Tasks Total	**21**	**3**	**9**	**58**	**6**	**28**	**40**	**150**	**276**	**0**	**0**	**0**	**0**	**18**	**0**	**609**	**$135,495**	**$0**	**$0**	**$0**	**$8,750**	**$438**	**$580**	**$29**	**$135,495**	**$9,188**	**$609**	**$145,292**

Sewer Only

Proposal Fee Estimate

Kennedy Jenks

CLIENT Name: Las Virgines Municipal Water District / Joint Powers Authority

PROJECT Description: Potable Water Hydrualic Model Update & Sewer Hydraulic Model Development

Proposal/Job Number: B012170*35613 **Date:** 1/27/2026

	David F	Scott L	Paul C	Adam B	Jennifer O	Salma	Joette J	Masoom D	Marco R	Name Cad	Name Cad	Name Cad	Name Cad	Name PA	Name Adm													
January 1, 2026 Rates **Classification:**	**Eng-Sci-9**	**Eng-Sci-8**	**Eng-Sci-7**	**Eng-Sci-7**	**Eng-Sci-6**	**Eng-Sci-5**	**Eng-Sci-4**	**Eng-Sci-4**	**Eng-Sci-2**	**Sr. CAD-Design**	**CAD-Design**	**Sr. CAD-Tech**	**CAD-Tech**	**Project Assistant**	**Admin. Assist.**	**Total**	**KJ Labor**	**KJ Escalation**	**KJ Assoc. Proj. Costs**	**Sub K-Flow Solutions**	**Sub Davis Fire Protection**	**KJ Sub-Markup**	**KJ ODCs**	**KJ ODCs Markup**	**Total Labor**	**Total Subs**	**Total Expenses**	**Total Labor + Subs + Expenses**
Hourly Rate:	**$335**	**$320**	**$300**	**$300**	**$275**	**$250**	**$230**	**$230**	**$190**	**$195**	**$180**	**$165**	**$145**	**$145**	**$130**	**Hours**	**Fees**	**0%**	**$0.00**	**Fees**	**Fees**	5%	**Fees**	5%				**Fees**
Task 1 - Project Management, Meetings, and Quality Control/Quality Assurance																												
1.1 Project Management				20										18		38	$8,610	$0	$0			$0		$0	$8,610	$0	$0	$8,610
1.2 - Kick-Off Meeting				2		4	6									12	$2,980	$0	$0			$0	$45	$2	$2,980	$0	$47	$3,027
1.3 - Project Meeting (12 Meetings)			2	4	16		18	16								56	$14,820	$0	$0			$0	$536	$27	$14,820	$0	$562	$15,382
1.4 QA/QC	16				3											19	$6,260	$0	$0			$0		$0	$6,260	$0	$0	$6,260
																						$0						
Task 1 - Subtotal	16	2	4	41	0	22	22	0	0	0	0	0	0	18	0	125	$32,670	$0	$0	$0	$0	$0	$580	$29	$32,670	$0	$609	$33,279
Task 2 – Data Collection and Review																												
2.1 - Data Collection and Review (Sewer)	0	0	0	2	0	0	0	12	20	0	0	0	0	0	0	34	$7,160	$0	$0			$0	$0	$0	$7,160	$0	$0	$7,160
Task 2 - Subtotal	0	0	0	2	0	0	0	12	20	0	0	0	0	0	0	34	$7,160	$0	$0	$0	$0	$0	$0	$0	$7,160	$0	$0	$7,160
Task 3 – Hydraulic Model																												
Sewer Hydraulic Model Development	3	1	4	18	8	126	284	0	0	0	0	0	0	0	0	444	$106,945	$0	$0			$4,600	$0	$0	$106,945	$96,600	$0	$203,545
3.1 - Model Infrastructure Development		1		4	8	36	80									129	$31,120	$0	$0			$0		$0	$31,120	$0	$0	$31,120
3.2 - Calibration Plan & Model Calibration	2		2	8		40	120									172	$41,270	$0	$0			$0		$0	$41,270	$0	$0	$41,270
3.3 - Sewer Flow Monitoring				2		4	4									10	$2,520	$0	$0	$92,000		$4,600		$0	$2,520	$96,600	$0	$99,120
3.4 - Scenario Development & Evaluation	1		2	2		30	60									95	$22,835	$0	$0			$0		$0	$22,835	$0	$0	$22,835
3.5 - Capacity Analysis				2		16	20									38	$9,200	$0	$0			$0		$0	$9,200	$0	$0	$9,200
Task 3 - Subtotal	3	1	4	18	8	126	284	0	0	0	0	0	0	0	0	444	$106,945	$0	$0	$92,000	$0	$4,600	$0	$0	$106,945	$96,600	$0	$203,545
Task 4 – Modeling Report																												
Sewer Hydraulic Model Report	2	0	3	6	2	44	76	0	0	0	0	0	0	0	0	133	$32,400	$0	$0			$0	$0	$0	$32,400	$0	$0	$32,400
4.1 - Draft Modeling Report	1		2	4	2	36	60									105	$25,485	$0	$0			$0		$0	$25,485	$0	$0	$25,485
4.2 - Final Modeling Report	1		1	2		8	16									28	$6,915	$0	$0			$0		$0	$6,915	$0	$0	$6,915
Task 4 - Subtotal	2	0	3	6	2	44	76	0	0	0	0	0	0	0	0	133	$32,400	$0	$0	$0	$0	$0	$0	$0	$32,400	$0	$0	$32,400
All Tasks Total	**21**	**3**	**11**	**67**	**10**	**192**	**382**	**12**	**20**	**0**	**0**	**0**	**0**	**18**	**0**	**736**	**$179,175**	**$0**	**$0**	**$92,000**	**$0**	**$4,600**	**$580**	**$29**	**$179,175**	**$96,600**	**$609**	**$276,384**

Adam Bugielski, PE

Project Manager

Kennedy Jenks

Professional Summary

Adam Bugielski is a Project Manager with 14 years of experience delivering water and wastewater infrastructure projects. His work includes hydraulic modeling, program management, inter-agency coordination, and support for capital improvement programs. Adam has managed potable water and sewer projects involving pump stations, interconnections, treatment facility upgrades, and system analyses for agencies throughout Ventura County and California. Adam brings a strong technical foundation in modeling, a proven track record delivering clear and actionable planning documents, and the leadership necessary to guide modeling efforts from kickoff through final reporting.

Years of Experience

14

Education

BS, Civil Engineering, California State University, Northridge, CA, 2013

Registrations

Professional Engineer - Civil - California (89065)

Memberships/ Affiliations

American Public Works Association (APWA)

Ventura County Chapter (Scholarship Chair)

American Society of Civil Engineers (ASCE)

WateReuse Association

Project Experience

Casitas-Ventura Interconnect Hydraulic Analysis, City of Ventura, CA | *Project Manager*

The analysis involved hydraulically modeling the water system for the City of Ventura to evaluate the potential impacts of delivering water to the Casitas Municipal Water District (MWD). The analysis was conducted at multiple connection points to ensure optimum efficiency and was summarized in a memorandum to Casitas MWD. Additionally, potential sites for booster pump stations to facilitate water transport from Ventura to Casitas were identified.

Regional State Water Interconnection, Ventura Water, Ventura, CA | *Project Manager*

Assisted with the regional state water interconnect for the City of Ventura. Tasks included hydraulic analysis of connecting to the State Water Project to receive the City's State Water allocation. Analysis also included determining the available water supply to distribute to nearby water districts for domestic and emergency purposes.

Infrastructure Review of Development Projects, Ventura Water, Ventura, CA | *Owner's Project Manager/Engineer*

Ongoing infrastructure review for all development projects within the City of Ventura. Infrastructure reviews include analyzing the water and sewer infrastructure surround a potential development project to determine impacts and potential deficiencies in water supply, storage, distribution or sewer collection and treatment.

Wastewater Master Plan Update, Ventura Water, Ventura, CA | *Owner's Project Manager/Project Manager*

The project developed a new wastewater master plan for the City of Ventura. The comprehensive master plan included an evaluation of 300 miles of pipeline, 14 lift stations, and a treatment facility. The plan encompassed a condition assessment, a hydraulic model development, a capacity and deficiency analysis, and the development of the recommended Capital Improvement Program.

Adam Bugielski, PE

Kennedy Jenks

Water Master Plan Update, Ventura Water, Ventura, CA | *Owner's Project Manager/Project Manager*

This project consisted of developing a new water master plan for the City of Ventura. The full master plan included evaluation of 380 miles of pipeline, 21 pump stations, 32 tanks, 10 wells, and three treatment facilities. Included in the master plan was a condition assessment, a hydraulic model development, a capacity/deficiency analysis, and the development of the recommended Capital Improvement Program.

Water Master Plan Update, City of Santa Paula, Santa Paula, CA | *Project Manager*

Conducted a full master plan update to be utilized for future capital improvement project planning. Included in the master plan was a condition assessment of pump station, storage, and treatment facilities, a hydraulic model development, a capacity/deficiency analysis, and the development of the recommended Capital Improvement Program.

Wastewater Master Plan Update, City of Santa Paula, Santa Paula, CA | *Project Manager*

Conducted a full master plan update to be utilized for future capital improvement project planning. Included in the master plan was a condition assessment of lift stations and treatment facilities, a hydraulic model development, a capacity/deficiency analysis, and the development of the recommended Capital Improvement Program.

Program Management, City of Camarillo, CA | *Project Manager*

Assisted the City with implementing and delivering capital improvement projects related to the water and wastewater system. Project managed through design and construction included wastewater treatment projects, wastewater lift stations, hydraulic modeling, generator replacement, and potable water pump stations.

Water Line Interconnect – Eastside to Westside, City of Ventura, CA | *Owner's Project Manager*

This project will serve water customers on Ventura's west end in the event all water supply sources are significantly reduced or eliminated. The planning phase covers a 24-inch diameter steel transmission line from east to west across the City in two pipeline segments. The completed system will include 4.5 miles of 24-inch steel pipe and two pressure-reducing stations.

Laguna Road Pipeline and Booster Pump Station, United Water Conservation District, Oxnard, CA | *Project Manager*

The project involved the design of two projects to install a booster pump station and pipeline to interconnect United Water Conservation District and Pleasant Valley County Water District. This project will deliver recycled water from the City of Oxnard's Advanced Water Purification Facility to UWCD's Pumping Trough Pipeline, which supplies non-potable irrigation water to agricultural customers.

VenturaWaterPure Program Management, City of Ventura, Ventura, CA | *Principal Engineer*

The project involved several high-profile initiatives that comprised the VenturaWaterPure program, a potable reuse project. The team managed projects including the feasibility study and design of a 14-inch ocean outfall and pump station, a 6-million-gallon storage tank, an advanced water purification facility, and injection wells. As part of this program, the team conducted a feasibility study to replace the existing traditional activated sludge water reclamation facility with a membrane bioreactor.

Paul Chau, PE

Technical Advisor

Kennedy Jenks

Professional Summary

Paul Chau is a Technical Advisor with 18 years of experience leading hydraulic modeling and master planning efforts for potable water, recycled water, and wastewater systems throughout California. He leads KJ's Master Planning Group and has directed or managed numerous projects involving hydraulic model development, calibration, scenario evaluation, flow monitoring integration, and the creation of GIS-based planning tools. Paul has delivered sewer and potable water master plans, wastewater hydraulic models, recycled water system evaluations, groundwater recharge feasibility studies, and system-wide capacity analyses for agencies including Las Virgenes Triunfo JPA, Calleguas MWD, the City of Ventura, United Water Conservation District, and the City of Thousand Oaks.

Years of Experience

18

Education

BS, Environmental Engineering and Science, University of California, Los Angeles, 2006

MS, Civil and Environmental Engineering, Stanford University, 2007

Registrations

Professional Engineer - Civil - California (75784)

Project Experience

Hydraulic Model Update & Water Master Plan, City of Thousand Oaks, CA | *Technical Advisor*

Served as a technical advisor for the preparation of the City of Thousand Oaks' (City) 2025 Master Plan Update. The purpose of the project is to identify infrastructure improvements required for the City's water distribution system.

Wastewater Master Plan Update, City of Thousand Oaks, CA | *Project Manager*

Served as a project manager for the preparation of the City of Thousand Oaks' (City) Wastewater Master Plan Update. The purpose of the project is to identify infrastructure improvements required for the City's sewer collection system.

Sewer and Potable Water Master Plan, City of Carlsbad, CA | *Project Director*

The update to the City's sewer and water master plans included updating, calibrating, and utilizing a hydraulic model to evaluate system deficiencies. Also included flow monitoring and condition assessments of the existing system. A bespoke GIS-based tool will be provided to help the City track new developments and the associated system impacts in a clear and organized manner. A risk-based prioritization approach was used to organize the City's CIP.

2023 Wastewater Master Plan, Crescenta Valley Water District, La Crescenta, CA | *Project Director*

KJ worked with Crescenta Valley Water District (District) to develop their 2023 Wastewater Master Plan. KJ performed an in-depth Business Risk and Vulnerabilities Assessment for each component of the District's wastewater collection system, developing a complete asset register, and prioritized system improvement projects based on the criticality of the asset and the likelihood of failure. Completed a wastewater hydraulic model build and calibration and used the model to corroborate both known and unknown system deficiencies to help inform project prioritization. Developed project costs for each identified system improvement and compiled the results of the study into the 2023 Wastewater Master Plan.

Pure Water Project Title XVI Feasibility Study, Las Virgenes Municipal Water District, Calabasas, CA | *Project Engineer*

The Las Virgenes–Triunfo Joint Powers Authority (JPA) implemented the Pure Water Program, which provided a new water supply for the region through a surface water augmentation project delivering advanced treatment of recycled water via a 6 mgd treatment plant. The treated product water was designed to supplement the Las Virgenes Reservoir. As part of the feasibility study, responsibilities included confirming sizing requirements for the advanced water treatment plant through monthly analyses of recycled water supplies and demands, developing pipeline alignments, evaluating supplemental supplies from stormwater and brine concentration, and preparing updated cost estimates. The project was funded by the Bureau.

Water Master Plan, City of Crescent City, CA | *Project Manager*

Led preparation of the City of Thousand Oaks' (City) 2018 Master Plan Update to identify infrastructure improvements required for the City's water distribution system. Utilized the hydraulic model to perform a water age analysis of the system to identify areas that potentially can have low disinfection levels.

Water and Sewer Master Plans, Rosamond Community Services District, Rosamond, CA | *Project Manager*

KJ developed a sewer master plan for Rosamond Community Services District (RCSD), which provides sewer, water, park, and lighting services for the City of Rosamond in Antelope Valley. The District manages a sewer collection system consisting of 66 miles of gravity mains ranging from 6-inch to 48-inch in diameter and one sewer lift station. The collection system discharges to a wastewater treatment plant owned and operated by the District. RCSD's water supply comes from local groundwater and imported water from Antelope Valley East Kern Water Agency (AVEK). An InfoWater hydraulic model was created for the water system, and an InfoSewer hydraulic model was created for the sewer system to evaluate hydraulic bottlenecks and develop a Capital Improvement Program.

Water, Recycled Water, and Sewer Master Plans, City of South Gate, South Gate, CA | Project Manager

KJ prepared a Water Master Plan, Recycled Water Master Plan, and Sewer Master Plan as three standalone documents for the City. The goal was to develop capital improvement programs for the City's potable water, recycled water and sewer systems through build-out. KJ constructed and calibrated three models using the City's GIS and SCADA system. Other tasks included potable water demand/sewer flow projections and recycled water market assessment, pipeline capacity analysis, supply/pumping/storage deficiency analysis, fire flow analysis, cast-iron pipeline replacement program, and CIP development.

Pure Water Project Title XVI Feasibility Study, Las Virgenes Municipal Water District, Calabasas, CA | *Project Engineer*

The Las Virgenes–Triunfo Joint Powers Authority (JPA) implemented the Pure Water Program, which provided a new water supply for the region through a surface water augmentation project delivering advanced treatment of recycled water via a 6 mgd treatment plant. The treated product water was designed to supplement the Las Virgenes Reservoir. As part of the feasibility study, responsibilities included confirming sizing requirements for the advanced water treatment plant through monthly analyses of recycled water supplies and demands, developing pipeline alignments, evaluating supplemental supplies from stormwater and brine concentration, and preparing updated cost estimates. The project was funded by the Bureau of Reclamation and was approved without comment, which was a rare achievement.

David Ferguson, PhD, PE, BCEE

QA/QC

Kennedy Jenks

Professional Summary

David Ferguson provides QA/QC for water and wastewater planning and modeling projects, bringing 46 years of experience in water supply infrastructure, master planning, and system evaluations. His QA/QC role includes technical review of potable water, recycled water, and sewer master plans, evaluation of hydraulic analyses, and oversight of modeling-based planning efforts used to identify system deficiencies and support capital improvement programs. His background in evaluating planning assumptions, hydraulic results, and long-term infrastructure recommendations enables him to provide an independent, senior-level technical review to provide modeling accuracy, documentation quality, and consistency with agency planning objectives.

Years of Experience

46

Education

BS, Civil Engineering, University of Massachusetts, 1980

BS, Environmental Science, University of Massachusetts, 1977

MBA, Business Management, California State University, San Bernardino, 1985

PHD, Executive Management, Claremont Graduate University, 1993

Registrations

Professional Engineer - Civil - California (34626)

Memberships/ Affiliations

American Water Works Association (AWWA)

American Academy of Environmental Engineers & Scientists (AAEES)

Project Experience

Wastewater Master Plan, Crescenta Valley Municipal Water District, La Crescenta, CA | *QA/QC Study Reviewer*

KJ prepared the 2023 Wastewater Master Plan for Crescenta Valley Water District (CVWD), delivering a comprehensive condition and capacity assessment grounded in field data, projections, and hydraulic modeling. This included field assessments, flow monitoring, and a review of population and development projections. The team analyzed existing wastewater flows, evaluated system capacity, identified deficiencies, and developed preferred solutions to address them. Findings from multiple data sources were integrated to provide a holistic understanding of system performance.

Focused Water System Master Plan, City of Riverside, CA | *Technical/QA/QC*

KJ worked with Riverside Public Utilities (RPU) to evaluate potential improvements that can be made to their water distribution system in the Downtown Riverside area to improve fire flow capacity and overall system pressures. Additionally, KJ is evaluating the capacities of potential interties between RPU and other potential neighboring retailers.

Water Master Plan Technical Review, City of Riverside, CA | Project Manager

Served as Project Manager for the Technical Review and Hydraulic Analysis and Optimization of the City's in-house 2010 Water Master Plan Update. Through additional analysis and optimization, reduced the 20-year capital improvement program from $125 to $103 million, saving the City $22 million.

Urban Water Master Plan Update, City of Thousand Oaks, Thousand Oaks, CA | *Project Manager*

Served as a project manager for preparation of the 2015 Master Plan Update. The purpose of the project is to identify infrastructure improvements required for the City's water distribution system. In addition, the hydraulic model is utilized to perform a water age analysis of the system, in order to identify areas of the system that potentially can have low disinfection levels. The project resulted in the installation

of several Reservoir Control Systems (RCSs), one in each of two 5 MG reservoirs, to provide continuous reservoir mixing and on-line disinfectant residual monitoring, chlorine and ammonia feed, and residual control.

Water and Sewer Master Plans, Rosamond Community Services District, Rosamond, CA | *Principal-In-Charge*

KJ is developing water and sewer master plans for the District, which provides water, sewer, park, and lighting services for the City of Rosamond in Antelope Valley. An InfoWater hydraulic model was created for the water system and an InfoSewer hydraulic model was created for the sewer system to evaluate hydraulic bottlenecks and develop a Capital Improvement Program.

Potable Water Master Plan, Calleguas Municipal Water District, Thousand Oaks, CA | *Project Manager*

The purpose of the Potable Water Master Plan Update is to develop a comprehensive plan by which Calleguas can accommodate projected purveyor demands and changing operating conditions while continuing to cost effectively provide a reliable water supply to the 19 purveyors within Calleguas' service area.

Water, Recycled Water, and Sewer Master Plans, City of South Gate, South Gate, CA | *Project Manager*

Responsible for managing the preparation of a Water Master Plan, Recycled Water Master Plan, and Sewer Master Plan as three standalone documents to address water demands, recycled water demands, and gravity sewer flows. Each document evaluates the immediate, short-term (5-year), and ultimate deficiencies and establish the infrastructure requirements.

Well 201 Volatile Organic Compound (VOC) Improvements, Santa Clarita Valley Water Agency, Santa Clarita, CA | *QA/QC*

Assessed the addition of VOC (TCE) treatment at the existing well site (Well 201), including integration with existing Perchlorate (IX) treatment. Planning services included developing design criteria for VOC treatment, hydraulics assessments, site layouts at the Well 201 site (plus up to 2 alternative sites), preliminary design drawings, PDR, OPCC and 3-D renderings. Final design included the addition of VOC treatment: two (2) lead-lag trains of GAC vessels sized to treat a design flow of 2,000 gpm. The treatment equipment includes a new backwash waste storage tank and backwash waste pumps. Design also included sizing of a new pump to accommodate head loss from the addition of the GAC vessels to treat VOC contamination.

Perris North Basin Groundwater Program, Eastern Municipal Water District, Perris, CA | *QA/QC Reviewer*

Preliminary design for three separate groundwater treatment sites in the Perris North Basin. Designed a centralized treatment facility to treat 1,240 gpm of groundwater from two (2) wells for the Moreno Valley Area that included GAC for PCE removal, single-use IX for perchlorate removal and staggered bed IX for nitrate removal. Designed chemical feed systems to provide a chloramine residual disinfectant, and well equipping/wellheads, and a product water pump station/clearwell. Designed a 2,300 gpm centralized treatment facility for the Cactus Corridor, including GAC for PCE removal, and a 650 gpm GAC treatment facility for the South Area Well 204.

Canyon Lake Water Treatment Plant Condition Assessment and Master Plan, Elsinore Valley Municipal Water District, Lake Elsinore, CA | *Project Manager*

Development of a planning document that will serve as a roadmap for future facility needs and upgrades, and phasing of a capital improvement program. The project includes a lake water quality improvement assessment, including hydrodynamic modeling of Canyon Lake, a comprehensive condition assessment of the CLWTP, treatment performance evaluation of the plant under various water quality conditions, process alternatives evaluation, and solids handling evaluation.

Salma Taha

Sewer Modeling Lead

Kennedy Jenks

Professional Summary

Salma Taha is a highly skilled hydraulic modeling engineer with 14 years of experience in diverse water and wastewater engineering projects, including treatment and CSO collection systems. She is proficient in a wide range of modeling software programs, such as InfoWater Pro, InfoSWMM, ArcPro, Civil3D, InfoWorks, WaterGEMS, SewerGEMS, Aquatwin Sewer, HydroCAD, ArcGIS, and PCSWMM. Her expertise in advanced data evaluation and visualization ensures accurate and efficient project outcomes, making her an invaluable asset in the field of hydraulic engineering. She supports water and wastewater modeling tasks for Master Plans, applying advanced tools for capacity assessments, calibration, and system optimization. Her work includes dry and wet weather simulations, inflow and infiltration (I&I) evaluations, and fire flow analyses for agencies across the U.S. and internationally. Salma excels at translating complex data into actionable insights that directly inform long-range planning and infrastructure investment decisions.

Years of Experience

14

Education

BS, Civil Engineering, American University of Sharjah, 2010

Project Experience

Wastewater Collection Master Plan Update, City of Thousand Oaks, CA | *Lead Hydraulic Modeler*

Utilized the City's As-Built data to develop the collection system. Built and calibrated the wastewater hydraulic model for existing and future scenarios using AquaTwin Sewer. Developed diurnal flow patterns for dry weather flow and RTK hydrographs for wet weather flow. The model was used to assess current system demands, capacities, and future needs, as well as to identify necessary system improvements. This analysis also included I&I analysis.

2023 Wastewater Master Plan, Crescenta Valley Water District, La Crescenta, CA | *Hydraulic Modeler*

Collaborated with the District to create their Wastewater Master Plan. Built and calibrated the wastewater hydraulic model for existing and future dry weather and wet weather flow analysis using InfoSWMM. Prioritized system enhancements based on system criticality and failure probabilities. Conducted a comprehensive analysis of existing and projected conditions, including infiltration and inflow assessment.

Potable Water and Sewer Master Plan Updates, Carlsbad Municipal Water District, CA | *Lead Hydraulic Modeler*

Utilized the City's As-Built data to develop the collection system. Built and calibrated the wastewater hydraulic model for existing and future scenarios using AquaTwin Sewer. Developed diurnal flow patterns for dry weather flow and RTK hydrographs for wet weather flow. The model was used to assess current system demands, capacities, and future needs, as well as to identify necessary system improvements. This analysis also included I&I analysis.

Port Angeles Wastewater Modeling Support Services, Port Angeles, WA | *Project Manager*

Served as a project manager for on-call wastewater hydraulic modeling services for the City of Port Angeles. Responsible for analyzing and reviewing the hydraulic modeling results using Aquatwin Sewer for the developer-submitted sewer capacity analyses to ensure adequate system capacity for current and future development.

Water and Recycled Water Hydraulic Modeling Services, Carlsbad Municipal Water District, Carlsbad, CA | *Hydraulic Modeler*

Assessed system pressures and available fire flows for various Water Availability Form (WAF) requests received from developers. Used InfoWater Pro to analyze and identify locations with inadequate fire flows. Additionally, supported the update of the City's sewer and water master plans through flow monitoring and condition assessments of the existing infrastructure. A custom GIS-based tool was developed to help the City clearly and efficiently track new developments and their impacts on the system. A risk-based prioritization approach was also implemented to guide the organization of the City's Capital Improvement Plan (CIP).

Recycled Water Facilities Master Plan Update (RWFMP) Update, Eastern Municipal Water District, Perris, CA | *Hydraulic Modeler*

Update to the existing hydraulic model to reflect recent projects and calibrate the model using flow data from the advanced metering infrastructure (AMI) installed by the District. Updated supply and demand projections to provide an integrated, strategic planning guidance tool with analysis in key areas to guide infrastructure investment decisions in the near term for the recycled water system.

LakePointe Development Gravity Sewer Design and ESDC, Brookfield Residential Properties, Federal Way, WA | *Modeling Specialist*

Development of a hydraulic model using InfoSWMM to assess the feasibility of using Cured-In-Place Pipe (CIPP) for the gravity sanitary sewer serving the Lake Pointe Development in the City of Covington. Evaluating and analyzing the anticipated impacts on pipe design flows and design standards, as well as assessing pipe capacities to determine the suitability of CIPP.

General Sewer Plan Update, City of Ellensburg, WA, Ellensburg, WA | *Hydraulic Modeler*

Worked with the City to develop their Wastewater Master Plan and build a hydraulic collection system model using Aquatwin Sewer, the GIS database. This model was calibrated and analyzed for system capacity and identified potential deficiencies and CIP projects needed to resolve capacity issues. The analysis included infiltration and inflow assessment.

Wastewater Comprehensive Plan Update, City of Bremerton, Washington, Bremerton, WA | *Modeling Specialist*

Development of a hydraulic combined collection system model to assess the projected flows through the Crosstown Pipeline, including the flow from the Central Bremerton force main. This model is used to calibrate and analyze multiple flow scenarios to identify future capacity limitations within these major trunklines, specific to the basins modeled.

Ten Mile Creek Regional Wastewater System TM-1 Relief Interceptor, Phase 2B, Trinity River Authority of Texas, Arlington, TX | *Modeling Specialist*

A hydraulic analysis was developed to confirm the siphon pipe design and sizing at two inverted siphons. The analysis is performed for both dry and wet weather conditions and includes sedimentation analysis.

Masoom Desai, EIT

Potable Water Modeling Lead

Kennedy Jenks

Professional Summary

Masoom Desai specializes in hydraulic modeling, water system planning and feasibility studies, grant applications/administration, and urban water management plans. She has worked on a diverse set of modeling projects using InfoWater, ranging from conceptual-level feasibility studies to master plans and basis of design reports. Masoom is highly adept at analyzing and processing large quantities of data. She has hands-on experience in developing demand/supply projections, high-level cost estimates, and working with complex spreadsheets and GIS databases. Masoom is detail-oriented, responsive, and proactive.

Years of Experience

5

Education

BS, Civil Engineering, Birla Institute of Technology and Science, Pilani, 2017

MS, Biological Sciences, Birla Institute of Technology and Science, Pilani, 2017

MS, Environmental Engineering, Stanford University, 2020

Registrations

Engineer-in-Training (178394)

Project Experience

Potable Water Hydraulic Model Update, City of Thousand Oaks, Thousand Oaks, CA | *Project Manager*

As part of the 2024 potable hydraulic model update for the City of Thousand Oaks, Masoom led the model build for the City's water distribution system using Aquanuity's AquaTwin Water software. This involved using the City's existing geodatabase to create a new model, allocating the latest demand data and updating pump and valve controls. The model is also being utilized for the City's ongoing fire flow simulations.

Sewer and Potable Water Master Plan, City of Carlsbad, Carlsbad, CA | *Project Manager/Project Engineer (Potable Master Plan)*

As part of an On-Call contract, KJ's scope included calibrating the water and sewer hydraulic models, aggregating data on existing and proposed future developments in the service area, and developing dynamic CIP programs that will meet the City's needs for the next 25 years. KJ is currently updating the City's sewer and water master plans, which include updating, calibrating, and utilizing sewer and potable hydraulic models to evaluate system deficiencies. This project built a development tracker tool to stay up to date with the status of ongoing developments and proposed/future developments. Additionally, this project focused on integrating feedback from the water and sewer operations and maintenance team so that the CIPs addressed all known infrastructure and operational issues and had the highest chance of acceptance by the stakeholders at all levels.As the technical lead for the potable water master plan, Masoom is updating the model to reflect 2022-2024 demands, performing a 72-hour model calibration, and evaluating both existing and future system conditions. Masoom is also developing future demand forecasts based on a review of projected near-term and long-term development growth, as well as regional/state housing regulations.

Potable Hydraulic Model Phase 1 and 2, City of Lakewood, Lakewood, CA | *Project Manager*

KJ updated and enhanced the City's AquaTwin Water hydraulic model by recalibrating demands, integrating recent billing and GIS data, and refining well and booster pump operations using pump curve and SCADA inputs. The team developed both

steady-state and extended period simulation scenarios, validated static pressures, created a systemwide diurnal demand pattern, and resolved model discrepancies. This work resulted in a stable, accurate hydraulic model that supported reliable system planning and informed ongoing operational decision-making.

InfoWater Pro Hydraulic Model Updates, City of Riverside, Riverside, CA | *Hydraulic Modeling*

As part of Riverside Public Utilities' Focused Water Master Plan (2021), KJ updated the projected water demands and maximum day demand (MDD) peaking factors based on the 2020 Urban Water Management Plan demand projections. KJ is currently tasked with updating the InfoWater Pro hydraulic model to reflect the latest (2022) demands, re-evaluating model peaking factors, and making recommendations for long-term extended-period simulations.

Recycled Water Facilities Master Plan Update (RWFMP) Update, Eastern Municipal Water District, Perris, CA | *Hydraulic Modeling*

As part of the ongoing Recycled Water Facilities Master Plan (RWFMP) update, KJ is updating the Eastern Municipal Water District's (EMWD) existing InfoWater Pro hydraulic model to reflect recent developments and calibrate the model with system SCADA data and AMI billing data. The calibrated hydraulic model will be used by EMWD to evaluate the system's capacity for proposed future developments. Providing model calibration support and also developing diurnal curves using the latest customer AMI data.

Indian Wells Valley Groundwater Authority Connection Analysis, Antelope Valley-East Kern Water Agency, Palmdale, CA | *Hydraulic Modeling*

KJ worked with Antelope Valley-East Kern Water Agency (AVEK) to evaluate the system impacts of connecting their California City feeder to IWVGA's service area to transfer the State Water Project supply. Led the hydraulic modeling effort to evaluate the impacts of connecting three potential tie-in locations to AVEK's pipeline capacities.

PREP Concept Study, Phase 3, Silicon Valley Clean Water, Redwood City, CA | *Hydraulic Modeling*

PureWater Peninsula (previously PREP/SPRP) is an ongoing multi-year, regionwide indirect potable reuse (IPR) effort to deliver purified water from the planned PureWater Peninsula Advanced Water Purification Facility to Crystal Springs Reservoir. KJ has been working with SVCW, SFPUC, the City of San Mateo, and other regional parties through various phases of this project. Developed a spreadsheet water balance model to simulate RWS supply patterns and estimate available storage for purified water in the reservoir and performed preliminary water quality analysis during the initial planning phase of the project. Led the hydraulic modeling effort during the BODR phase to evaluate each of the proposed alternatives using SFPUC's existing InfoWater Pro model.

Redwood City Retail Customer Feasibility Study, San Francisco Public Utilities Commission, San Francisco, CA | *Hydraulic Modeling*

Conducted hydraulic modeling to evaluate the feasibility of transferring retail customers served by SFPUC to the Redwood City Water Distribution System. Responsible for review of existing system infrastructure and updating Redwood City's InfoWater Pro model with new customer demands, followed by performing model simulations to evaluate impacts of customer transfers to system infrastructure and fire flow capabilities.

Lindhurst Avenue Sewer Main Extension, Linda County Water District, Olivehurst, CA | *Hydraulic Modeling*

KJ updated the District's existing water model. Reviewed GIS data, updated the model to incorporate recent developments, and performed system-wide demand allocation by geolocating customers served by the District.

Scott Lehman, IAM

Asset Management

Kennedy Jenks

Professional Summary

Scott Lehman provides experienced, practical asset management guidance to support alignment between GIS data, hydraulic models, and future asset management system needs, helping reduce integration risk while keeping the focus on delivering reliable modeling outcomes. He has led the development and implementation of comprehensive asset management programs from the ground up. In his consulting capacity, Scott is highly skilled in managing enterprise asset management system migrations and leading condition assessments and risk-based maintenance programs for water and wastewater utilities across the United States. Scott will provide advisory support related to asset management considerations associated with updating the District's potable water hydraulic model and development of a new sewer hydraulic model.

Years of Experience

24

Education

BA, Geography & Anthropology, University of California, Santa Barbara, 1999

Certifications

Institute of Asset Management Certificate, Institute of Asset Management (6120657)

Memberships/ Affiliations

Institute of Asset Management

Project Experience

Enterprise Asset Management Implementation, City of San Diego, San Diego CA | *Asset Management*

Led the effort to document existing business processes and develop streamlined, efficient future processes. The collected workflow process data from four City departments was documented to support the implementation of SAP software, an enterprise asset management software used to record the work of City staff. This comprehensive documentation served as a valuable guide for system implementers, expediting the development of the SAP system and saving time and money.

CMMS Needs Assessment, Zone 7 Water Agency, Livermore, CA | *CMMS Implementation Support/QA/QC*

Served as advisor for the strategic replacement of Zone 7's EAM system to support long-term asset management goals. The initiative included implementing a CMMS platform, developing an asset register, conducting FMECA, and creating preventive maintenance job plans. KJ performed a needs assessment, gap analysis, and workflow redesign, and facilitated competitive procurement through RFQ/RFP development and vendor selection. Data integrity was improved via field verification and technical documentation review. Responsibilities included comprehensive oversight on program development, CMMS implementation, and deliverable review, ensuring alignment with project objectives. The result was a sustainable maintenance program that enhances operational efficiency and asset reliability.

Enterprise Asset Management Selection and Implementation, North Charleston Sewer District, North Charleston, SC | *Project Manager*

KJ supported the District in selecting and implementing a new Enterprise Asset Management (EAM) system to improve infrastructure stewardship and operational efficiency. KJ conducted asset register gap analysis, documented and redesigned workflows, facilitated stakeholder workshops, and evaluated multiple EAM solutions, leading to the selection of Cartegraph. KJ also developed training materials to support system adoption and alignment with District standards. Support included gathering functional and technical requirements, RFP writing support, selecting

criteria development, and applying knowledge gained in implementation projects for other clients. Through this support, District staff have selected and implemented a new software system, adopted new capabilities, streamlined business processes, implemented effective asset hierarchies, and configured efficient technology tools to enable the long-term and cost-effective stewardship of the District's critical infrastructure.

CMMS Replacement Support Services, Tahoe City Public Utility District, Tahoe City, CA | *Implementation Support*

The project involves a comprehensive analysis of the existing CMMS usage, a review of the GIS interface, and a detailed assessment of functional requirements. The goal is to select a new CMMS/EAM system that aligns with TCPUD's operational needs. The project includes drafting and refining the Request for Proposal (RFP), assisting with vendor selection, and supporting contract negotiations.

Asset Management Services, City and County of Honolulu, HI | *QA/QC*

Oversaw quality assurance and quality control processes for the Asset Management Gap Analysis and Roadmap project for the City & County of Honolulu's Storm Water Quality Division. Ensured accuracy and consistency in survey design, data collection, and analysis in collaboration with AECOM, using SurveyMonkey for administration and Power BI for reporting. Reviewed and validated gap assessment findings and implementation roadmap. Maintained compliance with project requirements and delivered high-quality outputs to support Storm Water Master Planning and structured asset management implementation.

Asset Management Department, Hillsborough County Water Resources Department, Tampa, FL | *Asset Management Section Manager*

Managed asset risk and capital improvement planning for a portfolio of facilities, including five wastewater plants, five water plants, distribution systems, and collection systems worth approximately 7 billion dollars. Led a team of seven staff members that set asset management program objectives, executed risk assessments, developed repair and preplacement budgets, prioritized proposed projects based on asset management outputs, administered the computerized maintenance management system (CMMS), and developed requests for proposals seeking outside contract support.

Asset Inventory and Risk Assessment, Summerville Utilities, Summerville, SC | *Project Manager/Technical Lead*

Development of a methodology for assessing risk, defining asset hierarchy, collecting field data, and reporting. The project deliverables included data ready for inclusion in a CMMS and a guidance document on the methodology used. The City used these deliverables to develop a prioritized repair and replacement plan for its 10 mgd plant.

Asset Management Program Implementation, Lee County Utilities, Lee County, FL | *Asset Management/GIS*

Provided project GIS and asset data collection support for the asset management program, which included the development of a comprehensive asset management program. Responsible for developing the asset data from four wastewater facilities and over 60 lift stations, which served as the base data for the newly implemented work order system. The program also included the establishment of the asset hierarchy, risk assessment methods, formulation of an asset management plan, and a phased approach to implementation.

Jennifer O'Brien

GIS Specialist

Kennedy Jenks

Professional Summary

Jennifer O'Brien specializes in configuring enterprise GIS environments and developing dynamic workflows that improve data accuracy and accessibility. She is highly skilled in ESRI tools and ArcGIS Enterprise, with extensive expertise in creating and configuring field data collection interfaces using Field Maps and Survey123 to streamline data capture and validation. Jen excels in advanced data evaluation and visualization, analyzing collection and distribution systems to effectively communicate information to diverse audiences. Her experience includes successfully integrating GIS and CAD systems for complex infrastructure projects, enabling seamless data exchange and visualization. Jen's proficiency in workflow automation and standardized plan and profile sheet integration with Civil 3D and ArcGIS Enterprise makes her a strong contributor to projects requiring robust, maintainable solutions.

Years of Experience

13

Education

BA, Geography and Environmental Studies, University of Colorado, Colorado Springs, 2011

MS, GIS, University of Denver, 2015

Project Experience

Hydraulic Model Update & Water Master Plan, City of Thousand Oaks, Thousand Oaks, CA | *GIS Specialist*

As part of the 2024 Potable Hydraulic Model Update for the City of Thousand Oaks, KJ conducted a model build for the City's water distribution system using Aquanuity's AquaTwin Water software. This involved using the City's existing geodatabase to create a new model, calculating and allocating the latest average day demands, and updating pump and valve controls. The model is also being utilized for the City's ongoing fire flow simulations.

Wastewater Master Plan Update, City of Thousand Oaks, CA | *GIS Specialist*

Supported the City of Thousand Oaks Wastewater Master Plan Update by developing and managing comprehensive spatial databases, integrating field inspection data, CCTV records, and stakeholder inputs into a unified GIS platform. KJ coordinated all stakeholder engagement—facilitating workshops, City meetings, presentations, field investigations, and QA/QC reviews—while managing schedule, budget, technical deliverables, and multidisciplinary teams. Their leadership produced a fully integrated master plan supported by calibrated system models, GIS-based condition databases, regulatory assessments, and a prioritized 10-year capital improvement strategy.

Sewer and Potable Water Master Plan, City of Carlsbad, CA | *GIS Specialist*

The update to the City's sewer and water master plans included updating, calibrating, and utilizing a hydraulic model to evaluate system deficiencies. Also included flow monitoring and condition assessments of the existing system. A bespoke GIS-based tool will be provided to help the City track new developments and the associated system impacts in a clear and organized manner. A risk-based prioritization approach was used to organize the City's CIP.

Integrated Water Supply and Drainage Implementation Framework, Solano County Department of Resource Management, Fairfield, CA | *GIS Specialist*

Supported the development of a stakeholder-driven framework to inform Solano County's Utilities Master Plan. Provided GIS services to map and analyze water supply and drainage infrastructure, helping identify key challenges and opportunities. Assisted in visualizing spatial data to support collaborative planning and decision-making across agencies and stakeholders.

Pure Water Soquel Conveyance Infrastructure Project, Garney Construction, Soquel Creek, CA | *GIS Specialist*

KJ designed 70,000 LF of conveyance pipelines for the Pure Water Soquel Program, delivering Civil 3D plan and profile sheets, trenchless crossings, and surge mitigation designs. The team integrated survey and GIS data, managed utility coordination and permitting, and advanced 30%, 60%, and 100% design packages with constructability reviews and cost modeling.

Wastewater Enterprise As-Needed Civil Engineering and Safety Survey No. 3 (TO KA-19), City and County of San Francisco, Department of Public Works, San Francisco, CA | *GIS Specialist*

Responsible for advanced data evaluation and visualization using GIS and other software platforms. She created and configured field data collection interfaces using ESRI tools, including Field Maps, Survey 123, and ArcGIS, to streamline data collection and storage.

Denver Basin Well Assessment, City of Aurora, Aurora, CO | *GIS Specialist*

Developed a Field maps-based online data collection workflow that enabled staff to efficiently capture missing attributes for historical well records targeted for redevelopment. Compiled and delivered a comprehensive, quality-controlled geodatabase to the client, including integrated SharePoint links to as-built documentation and field-verified observations.

Online Data Collection and Asset Management - San Francisco Public Utilities Commission | *GIS Specialist*

Compiled a robust database of irrigation and potable fittings, pipelines, and other appurtenances from CAD datasets to integrate into GIS. Additionally, developed a web map and field data collection tool for cross-connection testing on these fittings and a real-time dashboard to track progress from the field team..

Stormwater Asset Management - Program Development (as a subconsultant), City of Virginia Beach, VA | *GIS Specialist*

Developed a Field maps-based online data collection workflow that enabled staff to efficiently capture missing attributes for historical well records targeted for redevelopment. Compiled and delivered a comprehensive, quality-controlled geodatabase to the client, including integrated SharePoint links to as-built documentation and field-verified observations.

Infrastructure Asset Management Program (as a subconsultant), City of Virginia Beach, Virgina Beach, VA | *GIS Specialist*

Led the development of a formal gap analysis (using IAM Anatomy) to support the onboarding of new data (including pavements and stormwater assets) and associated business processes into the DPW Cartegraph computerized maintenance management system (CMMS). Supported DPW in the comprehensive CMMS data review and evaluation as well as a gap analysis to identify and document "as-is" and "to-be" CMMS-specific business processes. Project outcomes were used to develop DPW-specific business, functional, and technical requirements for a replacement CMMS solution. Participated in short-listed vendor demonstrations to aid in vendor selection.

Jeff Savard, PE

Principal-In-Charge

Kennedy Jenks

Professional Summary

Jeff Savard currently serves as Vice President of the firm and Office Leader for the Ventura County office. The majority of Jeff's experience has been with the planning and design of potable water, recycled water, and wastewater systems. Jeff has worked on a variety of public works projects including the planning, design, construction administration, and resident engineering for treatment plants, pipelines, reservoirs, pump stations, drainage systems, sanitary sewer systems, recycled water systems, potable water systems, and various related projects. In addition, he has participated in groundwater management plans, urban water management plans, and potable and recycled water master plans, plus he has extensive experience in land surveying.

Years of Experience

36

Education

BS, Civil Engineering, California Polytechnic State University, San Luis Obispo, 1990

Registrations

Professional Engineer - Civil - California (51156)

Memberships/ Affiliations

Association of Water Agencies of Ventura County

Channel Counties Water Utilities Committee

American Public Works Association (APWA)

Project Experience

Potable Water, Recycled Water, and Sanitary Master Plan, Las Virgenes Municipal Water District, Calabasas, CA | *Principal-In-Charge*

KJ prepared an Integrated Master Plan that comprehensively evaluated the water, recycled water, and sewer systems associated with Las Virgenes Municipal Water District (District). The plan was developed in a workshop-driven process that involved multiple utilities and stakeholders, including the Joint Powers Authority, Triunfo Sanitation District, and Calleguas MWD.

KJ provided consulting services to the District for the update of the potable water, recycled water, and sanitation Master Plans as well as an Integrated Plan to align the utility systems with a common vision. The plans included a comprehensive assessment of build-out water demands, wastewater flows, and recycled water opportunities with considerations for water conservation and SBx7-7 compliance, development of updated potable water and recycled water hydraulic models, an updated wastewater treatment plant process model, and formulation of a phased Capital Improvement Program for each utility system. The plan was performed under a workshop-driven process with the Board of Directors and the wastewater JPA.

Digester Performance Evaluation, Las Virgenes Municipal Water District, Calabasas, CA | *Principal-In-Charge*

KJ analyzed past performance data, estimated the potential impact if a third digester is added to the operation, and compiled available information on the effect of increased sludge retention time and other relevant parameters resulting from increased digester volume. The evaluation included analyses of solids reduction, biogas production, and other digester health parameters (pH, alkalinity, volatile fatty acids) as well as digested sludge dewatering and cake odor, based on available data from the plant and data collected from literature.

Calabasas Road 10-Inch Emergency Waterline Replacement, Las Virgenes Municipal Water District, Calabasas, CA | *Technical Advisor*

Assisted in the design of approximately 2,400 feet of 8 inch HDPE slip lined inside and existing 10-inch steel pipeline. In a period of just three weeks, repair alternatives

were evaluated, the site was surveyed, hydraulic modeling was performed, and final design specifications and drawings were completed and submitted. The project was constructed during the night to minimize disruption to motorists and businesses.

New Digester No. 3, Las Virgenes Municipal Water District, Calabasas, CA | *Principal-In-Charge*

Pre-design, design, and construction support services for the design of a new third digester and rehabilitation of the heating system for Digesters Nos. 1 and 2 along with planning of a new Fats, Oils, and Greese and food waste digestion program and the receiving facilities.

Urban Water Master Plan Update, City of Thousand Oaks, Thousand Oaks, CA | *Principal-In-Charge*

Project included updating the City's water master plan including updating and calibrating the hydraulic model, updating water demands, evaluating water supplies, addressing water quality/age issues, and preparing a master plan report and capital improvement plan.

Midtown and Westside Sewer Master Plan, City of San Buenaventura, Ventura, CA | *Principal-In-Charge*

Project consists of conducting a comprehensive study of the Midtown and Westside tributary areas which contribute to a significant portion of the wastewater collected by the City. The focus of the study is to identify means for reducing I/I and to determine existing/future deficiencies. The study also will establish a condition assessment program aimed at identifying existing or potential problem areas.

Recycled Water Master Plan, City of Oxnard, Planning and Environmental Services, Oxnard, CA | *Principal-In-Charge*

The project consisted of developing a recycled water system for the largest city in Ventura County. It also included preparing an implementation plan to serve as the 'road map' for the City, which addressed such institutional issues as: permitting; recycled water ordinance and administrative code revisions; rates and financing; staffing needs and training; and public outreach strategies; as well as preparing standard details for the City's use in enforcing recycled water requirement on developers.

Potable Water Master Plan, Calleguas Municipal Water District, Thousand Oaks, CA | *Principal-In-Charge*

Prepared Potable Water Master Plan Update to develop a comprehensive plan by which can accommodate projected purveyor demands and changing operating conditions while continuing to cost effectively provide a reliable water supply to 19 purveyors within Calleguas' service area.

Recycled Water Master Plan Update, Ventura County Waterworks District No. 9, Simi Valley, CA | *Principal-In-Charge*

Project consisted of preparing a Recycled Water Master Plan (RWMP) in accordance with the requirements of the SWRCB 21 October 2004 Water Recycling Funding Program Guidelines. The RWMP involved the evaluation of potential recycled water customers, the development of potential pipeline configurations (and other infrastructure), and the selection of the preferred alternative for optimization of the recycled water system.

Wastewater Master Plan, City of San Buenaventura, Ventura, CA | *Project Manager*

In addition to the City's collection system, the project also involves planning efforts associated with the City's Water Reclamation Facility.

Water System Computer Model Update, City of Fillmore, Fillmore, CA | *Project Manager*

The city's computer model was updated, sewer mains were analyzed, and recommendations for improvements were made.

Joette Jackson, PE

Staff Engineer

Kennedy Jenks

Professional Summary

Joette Jackson is a civil engineer with 9 years of experience in the planning and design of public water and wastewater systems. Her design expertise includes the design of small and medium diameter pipelines, wastewater meter stations, and the design of sanitary sewer lift stations and force mains. This expertise includes developing civil design drawings and preparing contract documents and specification. Her expertise in water and wastewater system planning includes identifying and evaluating Capital Improvement Program (CIP) projects, developing budgetary costs estimates, population and demand projections, and performing impact fee analysis. She is experienced in analyzing large quantities of data and the creation of water and wastewater system models utilizing the hydraulic modeling software InfoWorks ICM, InfoSWMM, and InfoWater Pro.

Years of Experience

9

Education

BS, Architectural Engineering, The University of Texas at Arlington, 2017

Registrations

Professional Engineer - Civil - Texas (144592)

Memberships/ Affiliations

Water Environment Association of Texas - Hydraulic Modeling Subcommittee

Water Environment Association of Texas, Member

Project Experience

Sewer and Potable Water Master Plan, City of Carlsbad, Carlsbad, CA | *Project Engineer/Hydraulic Modeler*

The update to the City's sewer and water master plans included updating, calibrating, and utilizing a hydraulic model to evaluate system deficiencies. Also included flow monitoring and condition assessments of the existing system. A bespoke GIS-based tool will be provided to help the City track new developments and the associated system impacts in a clear and organized manner. A risk-based prioritization approach was used to organize the City's CIP. Responsibilities include developing the sewer model using hydraulic modeling software, calibration of the model utilizing infrastructure data collected from the City and flow meter data, and an analysis of the system using existing and future wastewater flow projections.

Flower Mound 2020 Water and Wastewater Master Plan, Town of Flower Mound, Flower Mound, TX | *Project Engineer*

Master plan updates were performed for the Town of Flower Mound's water and wastewater system. Population, water demand, and wastewater flow projections through build out were determined. Hydraulic modeling was utilized to analyze the Town's water and wastewater system through buildout to develop a Capital Improvements Plan.

Corinth 2023 Water and Wastewater Master Plan and Impact Fee Updates, City of Corinth, Corinth, TX | *Project Manager and Project Engineer*

Managed and performed master plan and impact fee updates for the City of Corinth's water and wastewater system. Population and demand projections through build out were determined. Hydraulic modeling in InfoWater and InfoSewer was utilized to analyze the City's water and wastewater system through buildout to develop a Capital Improvements Plan. Water and Wastewater impact fees were analyzed to determine the maximum assessable impact fee. Performed presentations to City Council to inform staff of the impact fee updates.

Cedar Hill Water and Wastewater Master Plan and Impact Fee Updates, City of Cedar Hill, Cedar Hill, TX | *Project Engineer*

Master plan and impact fee updates were performed for the City of Corinth's water and wastewater system. Population and water demand and wastewater flow projections were developed through build out. Hydraulic modeling in WaterGems and InfoWorks ICM was utilized to analyze the existing systems' capacities and required infrastructure improvements to handle projected growth and demand. Utilizing data developed in the master plan updates, water and wastewater impact fees were analyzed to determine the maximum assessable impact fee.

Annual Water and Wastewater Model Updates, Town of Flower Mound, Flower Mound, TX | *Project Manager and Project Engineer*

Performed annual updates to water and wastewater models, including land use analysis and projections of water demand and wastewater flow for new developments. Updated hydraulic models and assessed system capacity to support future growth.

Northeast System Planning, Upper Trinity Regional Water District, North TX | *Project Engineer*

Water system planning analysis for the Upper Trinity Regional Water District to identifying necessary pipeline and pump station improvements to meet projected water demands from multiple customer cities. Hydraulic modeling in InfoWater was utilized to assess the system and determine necessary improvements for various future demand scenarios.

Water Age Analysis, City of Corinth, Corinth, TX | *Project Engineer*

Analysis utilizing hydraulic modeling software to determined areas in the City of Corinth with high water age. Conducted a hydraulic modeling analysis to determine solutions to reduce the City's water age and the effects of installing mixers in the City's elevated storage tanks.

Lake Sharon Pump Stations Impeller Analysis, City of Corinth, Corinth, TX | *Project Manager*

Project includes field testing on the City of Corinth's Lake Sharon Pump Station to generate pump and system curves to be utilized to determine the hydraulic effects of trimming the pump impellers. The most efficient impeller size was identified and verified in the City of Corinth's water hydraulic model.

Ten Mile Creek Regional Wastewater System TM-1 Relief Interceptor, Phase 2B, Trinity River Authority of Texas, Arlington, TX | *Hydraulic Modeling*

Provided hydraulic modeling for the preliminary and final design of ~4,500 LF of 60- to 66-inch parallel sewer pipeline, including replacing unlined reinforced concrete pipe and a Parshall Flume meter station. The project featured trenchless tunnel crossings of Interstate 35E and Belt Line Road in Lancaster and DeSoto, TX.

CRWS Meter Station Rehabilitations, Trinity River Authority of Texas, Various Locations, TX | *Project Engineer*

Evaluated rehabilitation and replacement options for three wastewater meter sites in the CRWS. Assessed meter technologies, site designs, and reuse potential of existing stations. Sized meters for current minimum flows and future peak flow projections.

North Glenville Road Roadway, Water, and Wastewater Improvements, City of Richardson, Richardson, TX | *Project Engineer*

Supported roadway, water, and wastewater improvements along North Glenville Road, including installation of a 16-inch water line and 8- to 24-inch wastewater pipeline. Project included wastewater rehabilitation using Cured-In-Place Pipe (CIPP) technology.

Marco Pardo Rojas, EIT

Staff Engineer

Kennedy Jenks

Professional Summary

Marco Pardo Rojas began his journey with KJ as an intern, where he quickly showcased his technical proficiency and dedication to sustainable engineering. His contributions to various pipeline and planning projects in Southern California have been invaluable. Now a full-time employee, Marco excels in agenda preparation, writing and drafting, data management, and reporting. His clear communication and attention to detail help deliver organized, client-ready materials that support smooth coordination and informed decision-making.

Years of Experience

3

Education

BS, Environmental Engineering, San Diego State University, 2024

Registrations

Engineer-in-Training (185213)

Project Experience

Sewer and Potable Water Master Plan, City of Carlsbad, Carlsbad, CA | *Technical Support*

Provided data collection and table drafting. Wrote technical memos for potable water and sewer regulations and reviewed existing systems.

Wastewater Collections Master Plan Update, City of Thousand Oaks, Thousand Oaks, CA | *Technical Support*

Prepares and communicates client meeting agenda, attends meetings, takes meeting notes, and compiles and organizes data requests. Prepares Technical Memos for the City's existing system, prevailing issues analysis, alternatives analysis and compiling, infiltration and inflow analysis, and compiles case studies for solutions development.

Moorpark Water Reclamation Facility Pump Station No. 1 Upgrade, County of Ventura, Ventura, CA | *Technical Support*

Set up a model incorporating additional developments, ran scenarios, and organized data.

Las Posas Valley Groundwater Basin – Calleguas Municipal Water District Aquifer Storage and Recovery Project Operations Plan, Best & Krieger, LLP, Ventura, CA | *Hydraulic Modeler*

Conducted a feasibility study to evaluate emergency water supply options for Ventura County Waterworks District No. 1 (VCWWD) and nearby agricultural well owners impacted by Calleguas Municipal Water District's (CMWD) Aquifer Storage & Recovery (ASR) operations. Leveraged Autodesk InfoWater Pro hydraulic modeling from VCWWD's 2022 Water Distribution System Master Plan to assess the potential for supplying water from CMWD turnouts during ASR recovery mode, when groundwater levels are significantly lowered. The analysis supported strategic planning for mitigating water supply disruptions under emergency conditions.

Lead and Copper Rule Revisions – Service Line Inventory, City of Simi Valley, Simi Valley, CA | *Engineering Support*

KJ assisted the District with developing an inventory identifying service line materials in accordance with the requirements of the Lead and Copper Rule Revisions (LCRR) and submitting the service line inventory list to the State Water Resource Control

Board (SWRCB) Division of Drinking Water (DDW). Marco participated in field work, utilizing GIS maps and the City's internal software, and supported compilation of the final data set.

Groundwater Injection Wells, City of Santa Monica, Santa Monica, CA | *Staff Engineer*

KJ is providing design, bidding, and engineering services during construction for the City of Santa Monica for the implementation of two injection wells, one potable water extraction well, and four monitoring wells. Serving as the well-equipping lead designer, which involves downhole well equipment and pump, mechanical piping layouts, electrical coordination, and hydrogeologic coordination.

Well 30 Manganese Treatment Design, City of Davis, Public Works Department, Davis, CA | *Staff Engineer*

Design services for Well 30 manganese treatment project under on-call engineering services contract (Task Order 12). Recent water quality sampling at the well indicates elevated concentrations of manganese above the secondary maximum contaminant level (MCL). Site improvements at the Well 30 site related to this project will include treatment process components, a new building, and a standby generator. Project will also include bidding assistance services and engineering services during construction.

Highway 74 Gravity Sewer Main, Elsinore Valley Municipal Water District, Lake Elsinore, CA | *Staff Engineer*

Professional engineering services for the planning, design, and construction of approximately 12,500 feet of 15 inch gravity sanitary sewer main within State Highway 74, between Wasson Canyon Road and Elmer Street, and within Wasson Canyon Road, between State Highway 74 and Mauricio Avenue. This project is located within EVMWD's Regional Water Reclamation Facility sewershed and will make sanitary sewer service available to the Meadowbrook community.

Southern Wine Country Sewer Final Design, Eastern Municipal Water District, Perris, CA | *Staff Engineer*

KJ is providing professional engineering services for the planning, design, and construction of 9,900 feet of 15-inch gravity sanitary sewer main, 10,300 feet of 12-inch gravity sanitary sewer main, and 3,000 feet of 10-inch gravity sanitary sewer main, as well as the design of laterals to property lines.

Northern Wine Country Sewer Final Design, Eastern Municipal Water District, Perris, CA | *Staff Engineer*

Professional engineering services for the planning and design of 9,900 feet of 15 inch gravity sanitary sewer main, 10,300 feet of 12 inch gravity sanitary sewer main, and 3,000 feet of 10 inch gravity sanitary sewer main, as well as the design of laterals to property lines along Anza Rd and De Portola Rd in southern Wine Country. In addition, the planning and design of 4,300 feet of 12 inch sanitary sewer main and 9,700 feet of 8 inch sanitary sewer main as well as the design of laterals to property lines along Rancho California Rd, Glen Oaks Rd, Warren Rd, and East Benton Rd. This project will make sanitary sewer available in the region and reduce the number of septic tanks currently leaching into Rancho California Water District's wellhead protection area, improving water quality.

Kevin Krajewski, PE

Role: Project Manager, Data QA/QC Specialist

Education
B.S., Mechanical Engineering,
University of California – Davis, 1995

Registration
Mechanical Engineer, CA (M31744)

Total Years of Experience
29 years

Training and Certifications
- Asbestos Awareness
- Confined Space Entry Certified
- First Aid/CPR/AED

Publications
- "A Baytown Experience: Using Pump Station Wet Wells as Flow Meters," WEAT Collections Systems and Odor & Corrosion Specialty Conference, 2022 (Jutan, LaTia)
- "You Can't Squeeze Wine from a Stone: The Success of Napa Sanitation District's I&I Reduction Program," WEFTEC Annual Conference, 2017 (Damron A., Winkelman M)
- "Collection System Flow Monitoring Technology at EBMUD," WEFTEC Annual Conference, 2009
- "Sacramento Regional County Sanitation District Interceptor Sulfide Generation Model," WEFTEC Annual Conference, 2007
- "Ahead of The Flow," Public Works Magazine, 2006
- "Oro Loma Sanitary District Bockman Lift Station: Flow Monitoring and I/I Analysis – A Case Study," CWEA Conference, 2004
- "Cost-Effective Collection System Assessment," HWEA Collection Systems Conference, 2003

Professional Summary

Kevin Krajewski is a senior-level project engineer, engineering manager, division manager, practice leader, and respected industry leader for over 29 years. He has served as the QA/QC advisor and data manager, and project manager on hundreds of flow monitoring, smoke testing, and condition assessment projects throughout California and the Western United States.

Kevin's expertise includes flow and rainfall monitoring and analysis of rain-dependent infiltration and inflow (RDII) into collection systems, including storm event classification, development of synthetic RDII hydrographs and estimates of peak wet weather flows for design storm events.

Fairfield-Suisun Sewer District (FSSD) Experience

Kevin was the project manager and data QAQC manager for wet weather sanitary sewer flow monitoring services within the Fairfield-Suisun Sewer District in 2022. Kevin conducted reconnaissance and managed confined space entry crews to establish average dry weather flows and evaluate the RDI/I response at 5 open-channel flow monitoring sites within the District sanitary sewer collection system. The duration of the work was 2 months; pipe sizes ranged from 10 inches to 36 inches in diameter.

This work was follow-up work from master plan work conducted in 2018 (16 sites for 2 months, pipe diameters 18" – 48") and 2020 (5 sites for 2 months, pipe diameters 10" – 36"), both of which Kevin was the PM and data QAQC manager.

Relevant Additional Local Experience

Similar to FSSD, in the past 20 years, Kevin has served as project manager/engineer/data manager for these following municipalities, or as sub-contracted by their master planning engineering firms, for projects ranging from 4 to 140 sites and pipe diameters ranging from 6 to 120 inches:

- City of Pittsburg
- City of Antioch
- Central Contra Costa Sanitary District
- Napa Sanitary District
- Vallejo Sanitation and Flood District
- West County Wastewater District
- West Bay Sanitary District
- San Luis Obispo
- Selma-Kingsburg-Folwer
- San Bernardino MWD
- Elsinore Valley WD
- Coachella Valley WD
- EBMUD
- Sacramento
- Davis
- Dixon
- Vacaville
- Roseville
- Woodland
- Pacifica
- Madera
- Tulare
- Visalia
- Woodlake
- Vista
- Oxnard
- Ventura
- Goleta San
- Burbank
- Glendale
- Riverside
- Berkeley
- San Jose
- Santa Clara
- Sunnyvale
- Lincoln
- Tracy
- Turlock
- Livingston
- Merced
- Auburn
- Live Oak
- Stockton
- Los Banos
- Banning
- Santa Barbara
- Santa Monica
- Chino Hills
- Anaheim
- Carlsbad

K-FLOW SOLUTIONS

Davis Fire Protection

Fire Flow Analysis

Professional Summary

Davis Fire Protection is a full-service fire protection systems contractor providing engineering, inspection, testing, repair, and installation services throughout California. As active members of the National Fire Protection Association (NFPA) with comprehensive licensing under CSLB #1034812, Davis Fire brings decades of experience in fire system performance, hydrant reliability, and water-based suppression infrastructure essential for accurate fire flow evaluation.

Relevant Capabilities

Fire Hydrant and Water Supply Infrastructure Expertise

Testing and inspection of fire hydrants, fire mains, and water pressure systems—critical assets for validating modeled fire flow performance.

Experience repairing and assessing hydrant performance, including leak identification and ensuring compliance with certification standards.

Fire Protection System Engineering Insight

Engineering and installation of full-scale fire sprinkler and suppression systems, providing deep understanding of required pressures, demand characteristics, and NFPA-driven design assumptions relevant to model calibration.

Experience with underground fire main lines and water supply appurtenances—components directly tied to system fire flow availability.

Testing, Certification & Compliance Knowledge

Conducting annual and five-year certifications for fire protection systems, aligning with rigorous NFPA and state guidelines—valuable for evaluating system readiness and validating modeled outputs.

Skilled in diagnosing performance deficiencies across fire protection components, contributing meaningful insights into areas of hydraulic risk.

Regional Presence and Responsiveness

Davis Fire Protection maintains a strong operational footprint in Ventura County, offering rapid support and local familiarity with regional fire protection infrastructure requirements. Their Ventura County office (805-303-2070) supports commercial, industrial, and municipal clients with testing, inspection, emergency response, and system repair services. This proximity enables efficient coordination for field data collection, hydrant testing support, and real-time response to information needs during model development.

Kennedy Jenks

Contact Information

Adam Bugielski, PE
Project Manager
(661) 857-4745
AdamBugielski@kennedyjenks.com

Oxnard Office
2775 North Ventura Road, Suite 202,
Oxnard, CA 93036

AGENDA ITEM NO. 10.B

DATE: May 4, 2026

TO: JPA Board of Directors

FROM: Engineering and Facilities

SUBJECT: On-Call Construction Management and Inspection Services

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The Las Virgenes-Triunfo Joint Powers Authority (JPA) approved funding for this matter in the JPA Budget. On April 7, 2026, the LVMWD Board, acting as the Administering Agent of the JPA, authorized execution of a professional services agreement with NV5, in the amount of $450,000, with four one-year renewal options for on-call construction management and inspection services. The contract will be utilized for both LVMWD and JPA capital projects.

SUMMARY:

On February 2, 2026, LVMWD staff issued a Request for Proposals (RFP) for professional services from qualified firms to provide construction management and inspection services on an on-call basis. The District received eight proposals, and after thorough review, staff recommended that the LVMWD Board (acting as the Administering Agent of the JPA) accept the proposal from NV5 based on its references, availability of resources and competitive rates.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

The cost of the proposed services is not expected to exceed $450,000 annually. Task orders will be issued for the on-call services to support existing capital improvement projects including those authorized in the adopted Fiscal Year 2025-26 Budget. Charges for the work will be allocated to the associated capital improvement projects.

DISCUSSION:

On February 2, 2026, staff issued a Request for Proposals (RFP) for professional services from qualified firms to provide construction management and inspection services on an on-call basis. The RFP addressed on-call as needed and supplemental construction management and inspection needs for capital improvement projects where internal staff may not be

available or are otherwise engaged in existing projects. In addition, an outside consultant can frequently provide services such as specialty inspection work associated with welding, electrical, and coating tasks that existing staff does not have the certifications to perform. This contract may be used on both District projects as well as projects that fall under the JPA.

Task orders will be issued under this agreement on an as-needed, on-call basis, and payments will be made according to the rate schedule submitted by the consultant. The initial contract term will be for one year, in the amount of $450,000, for all task orders. Staff recommends authorization to approve up to four potential one-year renewal options, in the amount of $450,000 each. No guarantee would be made to the consultant for any minimum amount of work. The District/JPA would further reserve the right to hire specialty managers and/or inspectors at any time through a separate contract, and the proposed agreement would not confer any exclusivity to the successful firm for construction management or inspection services.

NV5's proposal demonstrated experience successfully delivering past projects for the District, including under the District's previous on-call construction management and inspection services contract (2020-2025), geotechnical engineering for emergency waterline repairs in Calabasas during the December 2024 storms, and inspection services on the Deer Lake Development Project. NV5 also identified multiple construction managers and inspection staff who would be available for JPA and/or District projects, clearly demonstrating an ability to handle concurrent projects. Lastly, NV5's rate structure was very competitive and was further negotiated by staff, offering significant cost-savings to the District/JPA as compared to the some of the other proposals. Notably, staff negotiated a reduction in NV5's markup on consultant services from 15% to 5%, which is anticipated to present a significant cost savings to both the JPA and District over the life of the contract.

GOALS:

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

Prepared by: Sarah Mathews, PE, Senior Engineer

ATTACHMENTS:
Proposal by NV5

A. TITLE PAGE

Submitted by NV5, Inc.
1868 Palma Drive, Suite A-E, Ventura, CA 93003

Las Virgenes Municipal Water District

On-Call Construction Management & Inspection Services, 2025-RFP-037
February 20, 2026

Contact:
Luanne Bean, PE, Director of Program and Construction Management
1868 Palma Drive, Suite A-E, Ventura, CA 93003
luanne.bean@nv5.com
951.377.1566

Table of Contents

CLIENT TESTIMONIAL

"The NV5 staff is knowledgeable, courteous, and friendly and they truly care about their projects and the services they provide. From Engineering Design to Inspection to Plan Check Services, the NV5 team can do it all, and we can always rely on them to deliver a quality product on time and within budget. Currently, they are assisting us with assessment district planning, plan checking, construction inspection and other general engineering services. I highly recommend NV5 for your professional and engineering consulting needs."

— Matthew Sinacori, Director of Public Works/ City Engineer, City of Dana Point

C. TRANSMITTAL LETTER

PN: 2700226-0015818.00

February 20, 2026

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

SUBJECT: On-Call Construction Management & Inspection Services

Dear Selection Committee,

NV5, Inc. is excited to have the opportunity to continue providing On-Call Construction Management and Inspection Services to the Las Virgenes Municipal Water District (LVMWD). Our team has the technical knowledge and experience to deliver your projects on schedule and within budget. NV5's strengths include the following:

Current Partnership: As a current incumbent on this on-call contract, our experience and strong existing relationship with LVMWD gives us the ability to continue providing construction management and inspection services for your projects. We operate with a sound understanding of your organizational structure, administrative processes and the community you serve. This in turn allows us to provide the required construction support services in the most efficient manner. Specifically, our team is providing geotechnical consulting, exploration, and construction inspection and testing at 5745 Parkmore Road in Calabasas; provided construction materials testing services for the Cold Canyon Road Pump Station Pipeline; and provided construction management, electrical inspection and soils testing for the stationary emergency generators for potable water pump stations.

Relevant Experience: We have a proven track record of successfully providing on-call construction management and inspection to municipalities throughout Southern California, most of which have been repeat clients. Our team has provided similar services to LVMWD and dozens of other agencies, including the cities of Culver City, Anaheim, South Pasadena, and Glendale, just to name a few.

Proposed Team: NV5 offers LVMWD a team of dedicated professionals with proven capability and expertise. We are proposing **Luanne Bean, PE**, as Project Manager. Ms. Bean has more than 35 years of expertise in construction management and inspection for water, wastewater, facilities, streets, and other infrastructure projects. She will be joined by a team of dedicated construction managers, construction inspectors, special inspectors, and materials inspectors who can mobilize quickly to meet whenever the need arises.

Accessibility and Responsiveness: Our team takes pride in providing immediate response and personal attention to our clients' needs. Each of our construction inspectors is equipped with a mobile office to record daily reports and allow real-time access to the City — granting you convenient, full access to the current status of your projects. Additionally, our inspectors send out regular supplementary emails noting elements of significance performed, along with photos for a quick glance of work, enabling all City staff to immediately be up to date.

Proposal Validity: This proposal shall remain valid for a period of 90 days from the date of this submittal.

Addendum Acknowledgment: We have reviewed LVMWD's Addendum No. 1, dated February 12, 2026.

NV5 looks forward to the opportunity to continue working with LVMWD to help you achieve your goals and objectives. If you need further information, Ms. Bean's contact information is below. Thank you for your time and consideration.

Sincerely, NV5, Inc.

Luanne Bean, PE
Director of Program and Construction Management

Jeffrey M. Cooper, PE
EVP, Chief Operating Officer

COMPANY INFORMATION/CONTACT
Name: NV5, Inc.
Address: 1868 Palma Drive, Suite A-E, Ventura, CA 93003
Telephone Number: 951.377.1566
Email of Contact: luanne.bean@nv5.com

D. KEY PERSONNEL

Organization Chart

Our team of experts brings direct, relevant, successful and current experience working on projects of similar scope and complexity. We are equipped with the resources to provide LVMWD with the requested construction management and inspection services. There will be no changes to personnel named in this proposal or during performance of services without LVMWD's approval. Shown below are team roles and responsibilities. Please see **Resumes** for our key personnel in the **Appendix, page A1**.

PRINCIPAL-IN-CHARGE

Jeffrey M. Cooper, PE

PROJECT MANAGER

Luanne Bean, PE

CONSTRUCTION MANAGERS

Luanne Bean, PE
Peter Salgado, PE
Jim Daly, PE
India Allen, CCM, QSD/P

GEOTECHNICAL ENGINEER

D. Scott Moors, PG, CEG, CHg

CONSTRUCTION INSPECTORS

Haykaz Aghajanian, PE
Bob Bean
Joe Chiquete
Mike Helma, LEED AP
Kenneth P. Hicks, QSP
Dean Jensen
David Ledyard
Jinan Mohammed
Duane Neyens
Salvador Sanchez
Shane Schmidt
Daniel Warren

SPECIAL INSPECTORS / MATERIALS TESTING

Ahmad Idress Ahmadzai
Robert Bean
Chris Fernandez
Matthew Habberfield
James Iverson
D. Scott Moors, PG, CEG, CHg
Salvador Sanchez
Ed Sullivan
Daniel Warren
Jesse Wooten

+ Over 40 additional Inspectors & Technicians

CONSTRUCTION ADMINISTRATION

Rafael Gutierrez
Linda Wheeler

LABOR COMPLIANCE SUBCONSULTANT

PACIFIC RESOURCES SERVICES
Benjamin Ocasio

Staffing Model

The proposed team will be led by a dedicated Project Manager, **Luanne Bean, PE**, who will serve as the primary point of contact and be responsible for overall task order delivery, resource coordination, and quality assurance. Supporting Ms. Bean is a team of construction managers and inspectors who are experts in their field. The chart above reflects a clear delineation of responsibility, including how subconsultant staff integrate into our delivery model to provide support.

References

Provided below are references of clients for whom construction management and inspection services have been performed in the recent years that are comparable in quality and scope to that specified in this RFP.

CITY OF CULVER CITY

Hong Wang, PE
Senior Civil Engineer

310.253.5604
hong.wang@culvercity.org

Relevant Projects:

- Diversion Sewer Pipes to Abandon Fox Hills Pump Station - NV5 provided CM&I for this $593,322 contract that was completed on time and within budget.
- Diversion Pipeline - NV5 provided CM&I and engineering services for this $798,349 project that was completed on time and within budget.
- Bankfield Sewage Pump Station - NV5 provided construction management, inspection, and limited design engineering services for this $260,000 project that was completed on time and within budget.

CITY OF COMPTON

John Strickland
Public Works Department

310.605.5505
jstrickland@comptoncity.org

Relevant Project:

Emergency Sewer Line Replacement - NV5 provided CM&I for this $199,995 project that was completed on time and within budget.

CITY OF ANAHEIM

Jacob Hester, PE
Water Engineering & Design Manager

714.765.4421
jhester@anaheim.net

Relevant Project:

Design-Build for Shady Lane, Olive Street and Country Hill Road Water Main Replacement - NV5 served as the Construction Manager/ Resident Engineer for this $48,720 water main replacement project that was completed on time and within budget.

Robert Hoang
Principal Engineer, Anaheim Public Utilities, Water Engineering Division

714.765.4229
rhoang@anaheim.net

Relevant Project:

La Palma Avenue and Tustin Avenue Water Main Replacement at OCTA Railway Crossing - NV5 is providing CM&I for this ongoing $269,913 contract.

F. QUALIFICATIONS & EXPERIENCE

Firm Profile

NV5, Inc. is a **California Corporation** that has been providing engineering and consulting services to public and private sectors for more than 75 years, delivering solutions through six business verticals: Testing, Inspection and Consulting; Infrastructure; Utility Services; Environmental Health Sciences; Buildings and Program Management; and Geospatial Technology. With more than 100 offices nationwide and abroad, NV5 has access to over 5,000 employees in a variety of fields who help clients plan, design, build, test, certify and operate projects that improve the communities where we live and work.

Our Irvine office specializes in the engineering design, project management, construction management and inspection of capital improvement projects, including: streets, traffic systems, water and wastewater systems, drainage and flood control, parks and recreational facilities, vertical construction, and landscaping and grading. Our team includes licensed civil engineers, licensed contractors, construction managers, certified inspectors and experienced public works professionals. All team members have extensive experience working within the structure of municipal government and public construction policy and will seamlessly integrate with the City's team.

Key Services

The successful delivery of our products and services has resulted in repeat clients for a broad range of municipal projects. Our key services include:

- CONSTRUCTION MANAGEMENT + INSPECTION
- PROJECT MANAGEMENT
- CONSTRUCTABILITY REVIEW
- MATERIALS TESTING SERVICES
- CIVIL ENGINEERING DESIGN
- STAFF AUGMENTATION
- WATER + WASTEWATER ENGINEERING
- LAND SURVEY + GIS
- GEOTECHNICAL ENGINEERING
- BUILDING + SAFETY SERVICES

We maintain an extensive history of working with various local agencies. Throughout the course of completing myriad public works capital improvement projects, our team has demonstrated an unparalleled ability to work well with local agency staff, project stakeholders, engineers and contractors. We have successfully delivered projects in a timely and cost-effective manner, and we have acquired a keen understanding of local agency requirements, a critical element in the facilitation and resolution of project issues. We are excited about the opportunity to continue to serve LVMWD and are committed to maintaining good relationships with your staff, relevant government agencies and project stakeholders.

Relevant Project Experience

NV5 has successfully provided construction management and inspection services for LVMWD and other water districts and municipalities throughout Southern California and beyond. Listed below is a sampling of projects that involve services relevant to those requested by the District.

On-Call Construction Management and Inspection Services

LAS VIRGENES MUNICIPAL WATER DISTRICT | CALABASAS, CA

NV5 provides as-needed Construction Management and Inspection Services to the District, including construction inspection and special inspection services. NV5 has completed many projects with LVMWD, including the Deer Lake Project for a 1-MG tank replacement, including electrical inspection, soils compaction and concrete testing, as well as electrical inspection services for the Stationary Emergency Generators for the Potable Water Pump Stations Project with 200 KW and 600 KW generators installed at four sites.

- **DATES:** 2020-CURRENT
- **KEY PERSONNEL:** LUANNE BEAN, BOB BEAN, SALVADOR SANCHEZ, SCOTT MOORS, DANIEL WARREN, ED SULLIVAN, AHMAD AHMADZAI

Emergency Waterline Repairs

LAS VIRGENES MUNICIPAL WATER DISTRICT | CALABASAS, CA

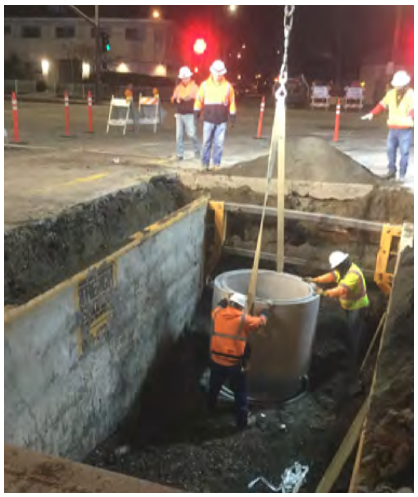
During the winter storms of December 2024, LVMWD's pipeline located at 5745 Parkmore Road and the 26000 block of Idlewild Way suffered damages including slope stability failures. NV5 provided geotechnical engineering including a special investigation and repair recommendation/report for this work followed by field special inspections, and materials engineering and testing services during the repair for this project. NV5's geotechnical report was critical for LVMWD's insurance claim for the slope rehabilitation and the causes for failure to assure that the final slope corrections produced a stable slope, and to minimize future liability and an inverse claim for LVMWD. NV5 mobilized on a Saturday to perform the initial failure report on an emergency basis at the request of the District.

- **DATES:** JANUARY 2024-FEBRUARY 2025
- **KEY PERSONNEL:** LUANNE BEAN, SCOTT MOORS, ED SULLIVAN, AHMAD AHMADZAI

Diversion Pipeline

CITY OF CULVER CITY | CULVER CITY, CA

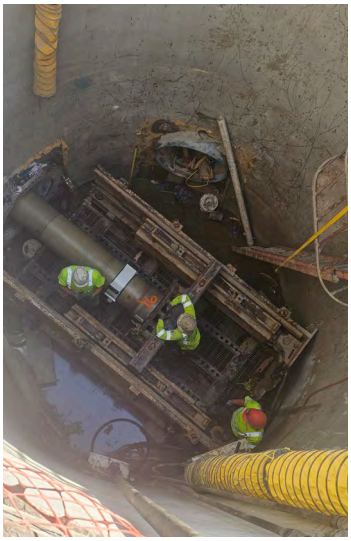
NV5 provided construction management, inspection, and engineering services for the construction of sewer main diversion pipes reversing sewer flow via conventional cut and cover as well as trenchless jack and bore methods to abandon Mesmer and Overland Sewer Pump Stations. This also involved extensive permits and coordination with Caltrans, the City of Los Angeles, and the City of Culver City for these jack and bore pipelines underneath the I-405 and Route 90. The goal of the project was to divert flows from four of the City's sewer pump stations to a new sewage pump station, Bankfield Station, which is another project in which NV5 provided construction management and inspection services during construction.



- **DATES:** MARCH 2019-2021
- **KEY PERSONNEL:** LUANNE BEAN, DANIEL WARREN, RAFAEL GUTIERREZ

Diversion Sewer Pipes to Abandon Fox Hills Pump Station

CITY OF CULVER CITY | CULVER CITY, CA

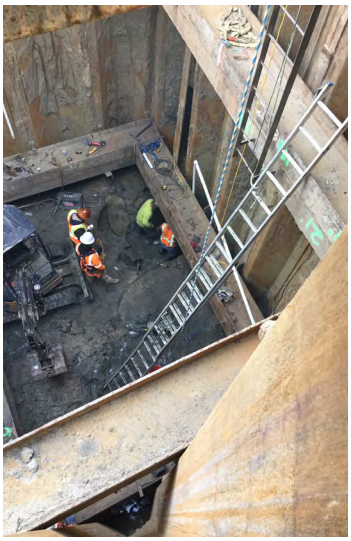


NV5 provided construction management and inspection services for the Diversion Sewer Pipes to Abandon Fox Hills Pump Station project. The project constructed 1,230 LF of 18-inch diversion sewer mains from Fox Hills pump station to Bankfield pump station. The project included constructing 18-inch FRPM (Fiberglass-reinforced pipe) in a 36-inch RCP casing by microtunneling (1,223 LF) at an average depth of 28 feet to 30 feet; constructing new manholes; pavement restoration of all existing improvements; 18-inch force main tie-in near City of Los Angeles manhole and associated temporary bypass system; 1,600 LF of abandonment of portions of the existing dual force 12-inch and 18-inch mains; 1,230 LF of CCTV inspection; and demolition of Fox Hills pump station and the Overland pump station

- **DATES:** APRIL 2025-JANUARY 2026
- **KEY PERSONNEL:** LUANNE BEAN, INDIA ALLEN, JINAN MOHAMMED, SALVADOR SANCHEZ, RAFAEL GUTIERREZ, LINDA WHEELER

Bankfield Sewage Pump Station

CITY OF CULVER CITY | CULVER CITY, CA



NV5 provided construction management, inspection, and limited design engineering services for the construction of the Bankfield Sewer Pump Station adjacent to the Caltrans Right-of-Way. The new pump station receives diverted flows from two existing pump stations, and diverted flows from two more pump stations at a later date. The new pump station has a 10-foot-by-20-foot sewer wet well that is 35 feet deep, constructed in groundwater with a discharge permit to the City of L.A. Sewer Interceptor since the water was contaminated and RWQCB would not issue a permit to discharge to storm drain. There are two submersible pumps, a flow meter vault, a valve vault, a bypass vault for the two force mains, an emergency diesel-fueled backup electrical generator, and complete SCADA systems. NV5 assisted with the final design and implementation of the emergency diesel generator, as well as pipeline redesign for the sewer force main, including the AQMD permitting, as the original plans did not accommodate a generator. There is also a building to house instrumentation and SCADA systems, a bathroom and electrical components. *This project is an American Public Works Association BEST Awards winner.*

- **DATES:** OCTOBER 2018-AUGUST 2020
- **KEY PERSONNEL:** LUANNE BEAN, DANIEL WARREN, SALVADOR SANCHEZ, INDIA ALLEN, RAFAEL GUTIERREZ

Emergency Sewer Line Replacement

CITY OF COMPTON | COMPTON, CA

While working on another project for the City, NV5 identified a severely deficient sewer line via review of the City's most recent CCTV videos, whereby the sewer line was severely cracked or missing altogether. NV5 alerted the City that an emergency on this reach was developing and could not wait until the project was done. Shortly thereafter, the City experienced a minor sewer overflow in this same area because of this deficiency identified by NV5. NV5 worked with the City through our on-call contract to develop minimal engineering bid plans based on the Greenbook, and further assisted the City in an emergency declaration with the City Council and actively solicited emergency bids on behalf of the City to recommend award to a Class A General Engineering Contractor in just a few short weeks. NV5's role then shifted to Construction Manager and Construction Inspector to successfully assist the City in the construction of approximately 4,000 LF of sewer main, including lateral reconnections to homes and businesses in both residential and arterial streets.

- **DATES:** OCTOBER 2023-APRIL 2024
- **KEY PERSONNEL:** LUANNE BEAN, INDIA ALLEN, HAYKAZ AGHAJANIAN, SALVADOR SANCHEZ, RAFAEL GUTIERREZ

Reverse Osmosis Water Treatment Plant

CITY OF BEVERLY HILLS | BEVERLY HILLS, CA

NV5 served as Owner's Representative for the City during the design and construction of a pre-treatment system for the City's existing Reverse Osmosis Water Treatment Plant. Our team oversaw the planning and initial design to construct this project as a design-build facility for the City. Once the project was initially bid as a design-build project, the City opted instead to finalize the design and re-bid the project under a conventional design-bid-build option. NV5 continued throughout this process as the Owner's Representative to oversee the second bidding for conventional construction and continued on as Construction Manager as well as provided full-time inspection services throughout bidding, material procurement, construction, commissioning, testing, Division of Drinking Water permitting, and training of City Operations Staff.

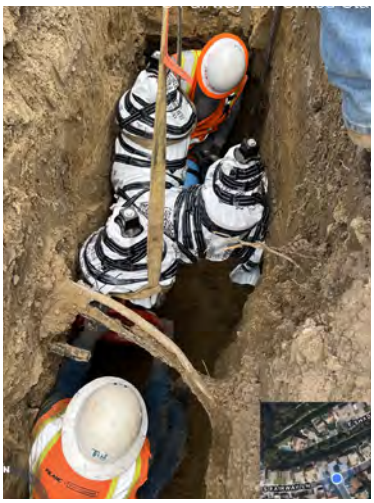
- **DATES:** OCTOBER 2018-FEBRUARY 2024
- **KEY PERSONNEL:** LUANNE BEAN, SALVADOR SANCHEZ, DANIEL WARREN, RAFAEL GUTIERREZ, MIKE HELMA, INDIA ALLEN

Rural Ridge Circle and Wilshire Avenue Water Main Replacement

CITY OF ANAHEIM | ANAHEIM, CA

NV5 provided Construction Management/Resident Engineering and Inspection Services for this water main replacement project. The work consisted of two water main improvement areas: the Rural Ridge area for 4,230 LF and the Wilshire-Pearl area for 2,750 LF of 8-inch to 15-inch potable water main, tie-ins to the existing potable water system, 142 1- and 2-inch water services and meters, existing main abandonment, and final street restoration. NV5 provided full Construction Management, Resident Engineering, and Inspection Services for this project, including coordination with the City, shop drawing and RFI review, change order analysis, and scheduling management.

- **DATES:** FEBRUARY 2022-JULY 2023
- **KEY PERSONNEL:** LUANNE BEAN, SALVADOR SANCHEZ, DANIEL WARREN, JOE CHIQUETE, RAFAEL GUTIERREZ, INDIA ALLEN



Design-Build for Shady Lane, Olive Street and Country Hill Road Water Main Replacement

CITY OF ANAHEIM | ANAHEIM, CA

NV5 served as the Construction Manager/Resident Engineer for this water main replacement project. The project consisted of three independent areas of water main replacement within the sensitive residential areas of Country Hill Road, Olive Street, and Shady Lane. There was 3,960 LF of 12-inch, 10-inch, 8-inch and 6-inch C909 PVC and DIP waterline, line-stops, tie-ins, and new laterals and meter services installed with final street restoration. This additionally involved the standard water main replacements including: shutdowns; dewatering; excavation; placement of the water mains, valves, and appurtenances; disinfection; and pressure testing followed by final street restoration under the direction of Anaheim Public Utilities and NV5's Resident Engineering Services.

- **DATES:** FEBRUARY 2022-AUGUST 2024
- **KEY PERSONNEL:** LUANNE BEAN, INDIA ALLEN

La Palma Avenue and Tustin Avenue Water Main Replacement at OCTA Railway Crossing

CITY OF ANAHEIM | ANAHEIM, CA

NV5 is providing construction management and inspection services for the City's La Palma Avenue and Tustin Avenue Water Main Replacement at OCTA Railway Crossing project. Metrolink with the Orange County Transportation Authority -- under the governing body of Southern California Regional Rail Authority (SCRRA) – is expanding the Anaheim Canyon Metrolink Station, which includes the addition of a train track crossing at La Palma Avenue and one 12-inch water main at Tustin Avenue. The water main replacement project involves bore and jack installation of two new water mains (12-inch and 36-inch) underneath the OCTA railroad track in La Palma Avenue and Tustin Avenue, followed by the abandonment of the existing water mains that will now be too shallow and are not adequately reinforced to carry the load underneath the new train track. The project includes close coordination with the City, OCTA, Metrolink, Southern California Regional Rail Authority (SCRRA), among other agencies.

- **DATES:** FEBRUARY 2022-CURRENT
- **KEY PERSONNEL:** LUANNE BEAN, INDIA ALLEN, KENNETH HICKS, SALVADOR SANCHEZ, DANIEL WARREN, RAFAEL GUITERREZ

Graves Reservoir Replacement

CITY OF SOUTH PASADENA | SOUTH PASADENA, CA

NV5 provided comprehensive construction management and inspection services on the demolition and construction of a new 1.2-mg partially buried cast-in-place reservoir sited in a residential neighborhood. An existing well was re-equipped as the source of groundwater for the reservoir. The existing well pump was renovated and a new pumping station was constructed with two 1,400-gpm VFD pumps that pump from the reservoir to the City water system. A new sodium hypochlorite generation system, new pre-treatment with state-of-the-art GAC for PCE and CCI4 removal followed by a new ion exchange system for removal of nitrate as NO3, ClO4 and sulfate was installed. The new pump house is controlled by a PCIS system composed of approximately 80 new instruments with approximately 80 new I/Os. These new signals are routed through the new PLCs, HMIs, and SCADA. The Contractor was required to work with the City's System Integrator subcontracted directly with the City in accordance with the Control Strategies of the Specifications. NV5 provided full-service CMS including construction management, inspection, lead and asbestos demolition oversight, public relations, SRF loan reimbursement management including Buy-American provisions and labor compliance, biological monitoring, and geotechnical and materials testing for this comprehensive project. Completed reservoir included Verdura walls in front of the reservoir for landscaping to cover and provide an aesthetically pleasing element for the local residential community.

- **DATES:** AUGUST 2018-SEPTEMBER 202
- **KEY PERSONNEL:** LUANNE BEAN

On-Call Construction Inspection Services for Water and Sewer Projects

CITY OF SAN JUAN CAPISTRANO | SAN JUAN CAPISTRANO, CA

NV5 provides full-time on-call inspection for the City's water and sewer projects. Our NV5 inspectors report directly to the City's Project Manager

- **DATES:** DECEMBER 2020-CURRENT
- **KEY PERSONNEL:** PETER SALGADO

Crowther Sanitary Sewer Pipeline Replacement

CITY OF PLACENTIA | PLACENTIA, CA

NV5 provided construction management, inspection services and materials testing services for the Crowther Sanitary Sewer Pipeline Replacement project. The scope of work included replacement of approximately 7,400 LF of gravity sewer pipeline in Crowther Avenue, Placentia Avenue, and Orangethorpe Boulevard, located within the Cities of Placentia and Fullerton. The work involved installation of 15-inch, 18-inch, and 22-inch PVC and fused HDPE sewer pipeline and manholes. NV5 spearheaded the required coordination to Public Health Department and Golden State Water Company for those areas where the water/sewer separation could not be met for variances with alternate construction of the sewer pipeline. The work also included reconnection into all of the existing gravity mains and service laterals with a terminus tie-in connection at the existing Orange County Sanitation District's trunk line on State College Boulevard. The project — which included a jack and bore encasement crossing underneath the 57 freeway, BNSF ROW, in Caltrans right-of-way — involved coordination with multiple agencies, including Caltrans, the Orange County Sanitation District, Golden State Water, Department of Health Services, the City of Fullerton, and other utility and governmental agencies. Working in high-traffic areas, as well as a jack-and-bore crossing underneath the Orange County Flood Control District's flood control channel and a jack-and-bore crossing underneath the BNSF railroad, and multiple crossings of Southern California Gas Co.'s high-pressure gas feeder, were among the project's challenges. NV5 provided Construction Management, full-time Inspection and Materials Testing Services for this project.

- **DATES:** JULY 2021-2024
- **KEY PERSONNEL:** LUANNE BEAN, INDIA ALLEN, RAFAEL GUTIERREZ, HAYKAZ AGHAJANIAN, NV5 GEOTECH (SOILS COMPACTION TESTING)

Arantine Hills Sewer and Water Infrastructure Projects (Lift Station, Force Main, Sewer Main, Potable Water Line)

CITY OF CORONA | CORONA, CA

NV5 provided construction management and inspection services for the $14.7M three-phase Arantine Hills sewer and water improvement projects to provide the necessary infrastructure for the Arantine Hills Development. The project involved the construction of a buried cast-in-place sewer lift station with above-grade controls. This was connected to a second project to construct the sewer force main with fused HDPE pipe via conventional open trench and trenchless jack-and-bore sewer construction along arterial streets and Caltrans ROW, forming 4 miles of pipeline. Relocation of 3,300 LF of potable water line also was required to install the new force mains. A third project managed simultaneously was the construction of the California Avenue Sewer at a depth of 25 feet below grade. All three projects were to be completed together for the final and finished sewer lift station to function. Upon completion of the project, the City planned to decommission its Water Reclamation Facility No. 3. Coordination with developers was required for the construction of the sewer lift station within their property, and Caltrans was required along certain reaches of the pipeline construction for construction within their ROW.

- **DATES:** AUGUST 2017-FEBRUARY 2019
- **KEY PERSONNEL:** LUANNE BEAN, DANIEL WARREN, SALVADOR SANCHEZ

On-Call Geotechnical/Special Inspection/Material Testing

VARIOUS MUNICIPALITIES & AGENCIES | CALIFORNIA

NV5 specializes in geotechnical, inspection, and testing services for transportation, pavement rehabilitation, and infrastructure improvement projects for local agencies. Selected local on-call service contracts include:

- Casitas Municipal Water District: Construction Inspection, Geotechnical, Materials Testing
- Calleguas Municipal Water District: Geotechnical and Materials Testing
- County of Santa Barbara: Geotechnical and Materials Testing
- City of Santa Barbara: Geotechnical and Materials Testing
- City of Goleta: Geotechnical and Materials Testing
- County of Ventura: Construction Inspection, Geotechnical, Materials Testing

Deer Lake Project

LAS VIRGENES MUNICIPAL WATER DISTRICT | CALABASAS, CA

NV5 provided as-needed soils compaction, concrete strength testing services, and inspection services for the Deer Lake Project. The Deer Lake Project included demolition of an existing 0.4 MG tank and replacing it with a 1 MG tank. The tank is 78'-0" in diameter with a reinforced concrete ring foundation that is 3'-9" wide by 2,-8" tall as designed by Paso Robles Tank, Inc. for the new 78'-0" steel tank. This project included grading, compaction, and new foundation for which NV5 provided soils compaction testing and concrete strength tests.

- **DATES:** NOVEMBER 2020-DECEMBER 2021
- **KEY PERSONNEL:** LUANNE BEAN, ROBERT BEAN, SALVADOR SANCHEZ, NV5 GEOTECH, SCOTT MOORS

Las Virgenes Municipal Water District-Calleguas Municipal Water District Interconnection

CALLEGUAS MUNICIPAL WATER DISTRICT – WESTLAKE VILLAGE / THOUSAND OAKS / AGOURA HILLS, CA

The LVMWD–CMWD Interconnection Project consisted of constructing a new intertie pipeline between Las Virgenes Municipal Water District and Calleguas Municipal Water District to improve regional water supply reliability and emergency redundancy.

NV5 provided comprehensive special inspection and materials testing services, including:

- Reinforced concrete inspections for vaults and structural appurtenances
- Rebar placement and shop drawing verification
- Formwork and concrete placement observation
- Compaction testing for trench backfill and aggregate base
- Concrete sampling and field testing
- Masonry inspection for utility structures

Our inspectors ensured strict compliance with district standards and structural specifications. Through consistent field presence and quality control oversight, NV5 supported the successful installation of critical regional water transmission infrastructure.

Onshore Ventura Water Pure Ocean Outfall

CITY OF VENTURA | VENTURA, CA

The Water Pure – MEG Offshore Outfall project included ground stabilization improvements utilizing Cement Deep Soil Mixing (CDSM) to support critical water infrastructure components. As a subconsultant to Mimiaga Engineering Group, NV5 provided comprehensive observation and quality assurance services during CDSM operations. Our team observed the soil mixing process, performed sampling for quality control and quality assurance, logged and submitted CDSM samples for laboratory testing, and provided daily field reporting. Inspectors also submitted daily CDSM column production data to the client to assure transparency and compliance with design parameters. In addition, NV5 observed fill placement activities and performed field density testing to verify proper compaction and stability of overlying materials. Our diligent oversight ensured adherence to project standards and the effective implementation of ground stabilization measures in a challenging coastal environment.

- **DATES:** COMPLETED OCTOBER 2024
- **KEY PERSONNEL:** SCOTT MOORS, ED SULLIVAN, JESSE WOOTEN, AHMAD AHMADZAI

Lake Sherwood Pump Station

CALLEGUAS MUNICIPAL WATER DISTRICT | LAKE SHERWOOD, CA

NV5 provided special inspection services for structural components of the Lake Sherwood Pump Station. The project included construction of reinforced concrete foundations, equipment pads, and CMU block walls to support new mechanical and electrical systems. Inspection services included verification of reinforcing steel placement, dowels, anchor systems, embedments, and observation of concrete placement. Masonry inspections were performed to confirm reinforcement, grout placement, and structural compliance. NV5's quality assurance oversight ensured structural integrity and long-term durability of this critical water supply facility.

Waterline Replacements

CITY OF VENTURA | VENTURA, CA

NV5 provided special inspection services for municipal waterline replacement improvements throughout the City of Ventura. The project included installation of new water transmission mains and associated structural appurtenances to enhance system reliability and long-term service life. Our inspectors performed reinforced concrete and structural inspections for thrust blocks, valve vaults, and related infrastructure components. Services included verification of reinforcing steel placement, formwork inspection, anchor bolt alignment, and observation of concrete placement procedures. NV5 ensured compliance with approved plans, structural details, and applicable municipal standards. Through proactive coordination with contractors and City representatives, NV5 supported quality assurance efforts that contributed to safe, durable, and code-compliant water infrastructure improvements.

Project Understanding

The LVMWD was formed in 1958 as local water needs arouse out of a drought that saw local wells run dry and provided the first water deliveries to local customers in 1963. As a municipal water district, it provides potable water, wastewater treatment, recycled water and biosolids composting to more than 70,000 people in western Los Angeles County — including Agoura Hills, Calabasas, Hidden Hills, and Westlake Village — with a 122-square-mile service area providing drinking water, operating the Tapia Water Reclamation Facility to treat sewage, and pioneering the use of recycled water for irrigation since 1983 to conserve potable water supplies. The Las Virgenes Triunfo Joint Powers Authority now serves approximately 100,000 people throughout LVMWD's service area to the extreme western end of Ventura County. LVMWD is active in water conservation, recycling, and investigating innovative technologies, like ocean-based desalination with OceanWell, as ways to improve sustainability through innovation. Additional resources available to the community include the production of Class A compost from treated wastewater through biosolids composting at the Rancho Las Virgenes Composting Facility.

LVMWD relies on imported water from Metropolitan Water District of Southern California, thus it is reliant on the State Water Project and also operates a municipal wastewater collection system and treatment plant (Tapia Water Reclamation Facility) and distributes recycled water. Nearly 40 percent of the LVMWD service area is permanently dedicated as national and state parkland or privately held open space, and habitat conservation and environmental stewardship has become a key factor in project delivery for the District.

LVMWD's mission is dedicated to providing reliable, high-quality water service in a cost-effective and environmentally sensitive manner. NV5 understands this mission and is dedicated to helping LVMWD maintain and meet this mission as we have done in the past with our On-Call Construction Management and Inspection Services. NV5 likewise will work toward LVMWD's Vision of Valuing Every Drop – Bringing Water Full Circle. To this end, NV5 has a wealth of staff who can serve as construction managers, engineers, geotechnical engineers, inspectors, and special inspectors, bringing expertise, value, and resources to LVMWD at moment's notice. With integrity, NV5 makes a commitment to LVMWD, following LVMWD's leadership, collaborating with the required responsibilities to ensure projects are completed on time and on budget. NV5 shares LVMWD's focus on ensuring a reliable water supply, particularly during drought conditions, through conservation programs and infrastructure maintenance.

The FY 2025-26 budget included $153 million for projects enhancing infrastructure resilience, primarily targeting aging pipelines, pump stations, and wastewater treatment facilities. Key projects NV5 can assist with include:

- **Pipeline Replacements:** Ongoing rehabilitation and replacement of aging, high-failure-rate pipes within the 68-mile recycled water ("purple pipe") system.
- **Infrastructure Reliability:** Upgrades to, and repairs of, water pump stations and treatment facilities, such as the Tapia Water Reclamation Facility.
- **System Upgrades:** Continued efforts to replace, rehabilitate, and maintain water and sewer infrastructure.
- **Regulatory Compliance:** Projects designed to meet changing treatment requirements and environmental regulations.

Key projects include:

- **Potable Water Replacement:** Twin Lakes Pump Station, Equestrian Tank Renovation, Cornell Pump Station, Potable Water Systems PLC Upgrade, Building No. 8 Office Space Renovation, Electronic Document Management System, Multi-Site Security Assessment and Improvement, Stunt Road Pump Station Improvements, Pressure Regulation Valve Replacement, Emergency Pipeline Construction Repair, Water Tank Rehab-Jed Smith / McCoy, Westlake Reservoir Water Quality Equipment, PW System Small Valve Replacement, PW System Rehabilitation, Vehicle Replacement Program, Lindero Canyon/Agoura Potable Main Relocation, Potable Water Tank Rehabilitation, Building No 7 Balcony Floor Replacement.
- **Recycled Water:** CIP10849 Parkway Recycled Water Tank Rehabilitation, CIP10850 Indian Hills Recycled

Water Tank Rehabilitation.

- **Sanitation:** SCADA System Communications, Multi-Site Security Assessment and Improvement, Tapia Flow Equalization, Lift Station, Fire Hardening, New RAD Well and Pumps, Tapia Influent Pump Replacement, Trunk Sewer Improvements, Tapia Secondary Clarifier Rehabilitation, Tapia Primary Clarifiers Rehabilitation, Tapia Tertiary Filter Influent Valve/Backwash, Tapia Bisulfite Line Replacement, Rancho Dewatering Reactor Building Patio Cover, Rancho Metering Bin Replacement, NEW - Tapia Process Pipe/Tank Painting, NEW - Forklift (Rancho), NEW - Rancho Site Security.

Common Goals: We understand that it is imperative to work closely with LVMWD to ensure a successful project. The common goals shared with LVMWD:

- Complete the project on time and on schedule.
- Develop an integrated team with LVMWD, keeping LVMWD informed.
- Document the quality of Contractor's work.
- Resolve and document construction issues promptly with LVMWD, the Design Engineer, and the Contractor.
- Minimize or eliminate complaints from the public.
- Mitigate foreseeable construction change orders and claims.
- Respond quickly to emergency situations and be accessible 24/7.

NV5's Collaborative Approach

NV5's collaborative and effective approach to on-call construction management and inspection involves a proactive, flexible strategy using task orders to address immediate, fluctuating project needs. Key elements include rapid deployment of qualified personnel for site inspections, strict adherence to quality standards via checklists, comprehensive documentation to manage risks and changes, and constant communication and coordination with LVMWD, achieved via the following:

- **Task-Order Based Structure:** NV5's work is managed through specific, negotiated task orders, defining the scope, budget, and schedule for each assignment on a time-and-materials basis.
- **Internal Compliance & Monitoring:** NV5's continuous monitoring of progress and budget accountability assures projects stay within the constraints of the on-call agreement.
- **Proactive & Flexible Inspection:** NV5's inspectors are adaptable and flexible, being accustomed to visiting multiple, diverse job sites including utility installation, paving, and vertical construction.
- **Comprehensive Documentation:** NV5 understands that construction documentation is one of our key deliverables defending LVMWD's management of public funds through proof that funds were appropriately spent to the quality required by LVMWD's plans and specifications.

- **Technical Expertise & Communication:** NV5's staff features specialized experts ready to assist in verifying that construction complies with plans and specifications, while maintaining clear communication with contractors and LVMWD.
- **Phased Management Approach:** NV5 has expert staff able to provide services in all project phases from start to finish and operations.

Best Practices

- Immediate Mobilization: NV5 has the ability to provide staff on short notice.
- Risk Management: NV5's staff can identify and offer mitigation to potential issues early, such as safety violations or deviations from plans, documenting and coordinating resolutions with LVMWD.
- Safety & Compliance: NV5's staff will verify on-site activities to meet local, state, and federal safety regulations.
- Technology Utilization: NV5 has pioneered CMIS, a comprehensive web-based platform to streamline and house LVMWD's project management, construction management, and inspection needs offering this platform to LVMWD free of charge for each of our projects worked on with LVMWD.

NV5's execution of the work assigned by LVMWD will include:

- **Quality Assurance (QA):** Inspectors perform daily site visits as directed by LVMWD and as outlined in our task orders to monitor compliance with design plans and specifications.

- **Standardized Reporting:** NV5's use of CMIS provides standardized reporting for our on-site inspection staff documenting project history, contractor performance, and field conditions.
- **Corrective Action:** When issues arise, NV5's inspectors use a tiered approach, first requesting corrective action verbally with LVMWD's consent, followed by written corrective action, and finally working with LVMWD to escalate to payment suspensions if necessary.
- **Documentation:** NV5's maintenance of permanent files including digital photos of each construction phase and verification of prevailing wage payroll information, submittals, RFIs, Change Orders, correspondence and the soup-to-nuts database contained in our comprehensive CMIS platform, offered free of charge to LVMWD for all projects NV5 is involved with.

NV5's goal as LVMWD's representative in the construction process is to provide LVMWD with the best possible outcome with the least amount of disruption while keeping the project on budget and on time with great project documentation. NV5's engineers, project managers, construction managers, special inspectors and inspectors bring a positive attitude while exercising tact and good judgment in a professional manner. Any combination of construction phase services is available to LVMWD through NV5's experienced and professional resources. The services will be tailored to suit the size, complexity, and specific project needs of LVMWD's management staff, and the construction, operational, and program needs.

NV5's QA/QC

At NV5, Project Management and QA/QC begin with communication protocols to LVMWD and the Contractor. We are always a phone call away, and everyone from the Construction Manager to the inspection staff carry our electronic tether, our cell phones, 24/7. Key and important discussions will be followed up with formal email correspondence for reference and clarity. Open and continued communication is key to success! NV5 follows QA/QC procedures that encompass the following basic principles to accomplish these tasks:

- Represent Your Best Interest: NV5 will represent LVMWD's best interest in all matters.
- Provide Leadership: NV5's lead personnel are selected and retained because of their leadership abilities and will be key individuals throughout your project.

- Enforce Contract Requirements: NV5 will enforce the contract requirements to make certain all provisions of the contract are met, including quality!
- Take Ownership of Project: NV5 team members will take a *pride of ownership* approach to the engineering and construction of every project.
- Deliver a High-Quality Project: NV5's attention to detail helps deliver a quality project.

The above can be summarized into discrete steps for Construction QA/QC and will be outlined in NV5's Construction Management Plan, including:

- Defining and sharing QA/QC acceptance criteria as outlined in the codes and specifications.
- Reviewing project-specific inspection criteria as outlined in the specifications.
- Development of checklists for testing and startup/commissioning.
- Providing a continuum QA/QC punch list throughout the life of the project.
- Looking ahead, using past experience to provide insights to construction quality.

Recommended Scope Of Work

NV5's Recommended Scope of Work as outlined as follows and will be tailored for each of the task orders on a case-by-case basis.

TASK 1: PRE-CONSTRUCTION SERVICES

1.1 Project Kick-Off Meeting and Construction Management Plan: This is extremely important before meeting with Contractor at the Pre-Construction Meeting to establish with LVMWD and NV5 the mutual communication requirements and project protocols for the rest of the project. Team members get to meet each other and gain understanding of the project. NV5 understands that the LVMWD's PM has a wealth of historical information to relay that affects the project moving forward. Our final plan will incorporate LVMWD's recommendations on the plan and will be delivered within two (2) weeks.

1.2 Pre-Construction Meeting with Contractor: This meeting will include subcontractors, NV5, other agencies/

stakeholders (such as SCE and local City staff), and LVMWD and operations staff, taking the information from the Project Kick-off Meeting and moving it to the next level. While many items are standard for pre-con meetings — such as permitting, utility constraints, RFIs and submittals — the requests for shutdowns, bypassing, startup and testing need to be discussed in depth be shown on the Contractor's critical path baseline schedule. Minutes will be taken by NV5 and uploaded to CMIS shortly after the meeting.

TASK 2: CONSTRUCTION MANAGER/RESIDENT ENGINEER, INSPECTORS AND TESTING SERVICES

NV5 considers Construction Inspection services and our daily construction reports to be a critical element of the project. It is important to document compliance of the Contractor, and if they are not in compliance, alert LVMWD and recommended corrective actions. LVMWD should get what they are paying for, and NV5 is here to provide this key and critical part of the project's QA/QC for continued conformance and compliance with the plans and specifications.

2.1 Project Meetings: These will be held weekly in person, on-site, or over teleconference such as Teams or Zoom to go over the routine elements such as RFIs, submittals, pay apps, change orders, etc., along with project specific and non-routine elements. Additionally, meetings that we anticipate will be necessary are pre-bypass, functionality testing, startup, and other meetings for both the installation and the cutover of the finished product. NV5 will provide an agenda in advance to LVMWD for review and comment, schedule the meeting at the agreed time/location, and distribute minutes shortly thereafter (within three business days), also uploading them to CMIS.

2.2 Project Correspondence and Communication: LVMWD can expect ongoing verbal communication as NV5's staff are equipped with cell phones 24/7, iPads for on-site real time communication with our inspectors, and laptops for other staff such as Construction Managers and engineering staff. NV5 believes in picking up the phone, perhaps starting a three-way call when needed to get to the root of the issue quickly, developing solutions that are in the project's and LVMWD's best interest. All call are followed by written emails and uploading into CMIS for tracking and documentation

2.3 SWPPP, BMPs, NPDES, ISMND Mitigation Measures, and Permit Requirements: These items are critically important, as NV5 understands that most Contractors will be working under LVMWD's NPDES. NV5 will inspect the standard SWPPP requirement for BMPs for dust, erosion control including wind and wet weather, as well as rumble plates for track off. NV5 will manage the Contractor's implementation of and maintenance of the ISMND Mitigation Measures in our daily reports. NV5 will check and double check that environmental and permit requirements are met throughout construction.

2.4 Electronic Document Control System: This is already in place with NV5's free, in-house free electronic document control system called CMIS, which is based on Caltrans requirements and is extremely user friendly. Elements are neatly categorized, logged, and available for downloading and printing at any time by any user with the appropriate access. Additionally, each user is grouped, whether Contractor, LVMWD (Owner), or Construction Management staff with different levels of privileges, allowing internal sharing of documents without including the Contractor. A ball-in-court tag is automatic on all logs for RFIs/submittals/change orders, etc. CMIS contains Inspectors' Daily Reports, WSWD, Pay Application, Project Punch List, Inspection Hours, QA Testing, QC Tests, Submittals, RFIs, General Correspondence, Contract Change Orders, Document Overview, and Project Contacts, Pay Application, Photos, Plans, Specifications and a host of other filing cabinets. NV5 will provide free, online live training sessions for LVMWD staff and the Contractor, and a library of training materials is also accessible online. NV5 has dedicated IT personnel who can answer questions throughout the project, making the use of this system seamless and friendly to all. CMIS is fully archivable at the end of the project providing, LVMWD an electronic copy of organized work.

2.5 Submittal, Requests for Information (RFIs), Change Orders: Review of these items can be performed by NV5 depending on our task order requirements. These will come through CMIS, alerting alert specific users of a ball-in-court with regular pings through email until the issue is resolved. Submittals /RFIs/change orders can sometimes be large in size, and this serves to not overburden or have

rejected emails due to submittal electronic size. The first order of business for NV5's staff is to review the document, understand it, validate it, and recommend a solution for concurrence by LVMWD and their Design Engineer as required. Change orders require an entitlement evaluation prior to looking at labor, materials, and equipment above all else. If necessary, we will ask the Contractor for additional information to provide further clarification. CMIS management provides auto logging and tracking.

2.6 Baseline Schedule, Schedule Updates, Three Week Look Ahead Schedule Review: This is another controlling aspect of the project that NV5 can be principally responsible for. NV5's Construction Manager is also a former scheduler understanding fully the needs of properly tied tasks with predecessors, successors, and milestones. However, float can be hidden with lead/lag commands, and our review will look for these elements since the project owns the float, not the Contractor. The schedule formulates the project key communication points for ease of tracking, and we will provide recommendations to LVMWD's Project Manager for review and approval.

2.7 Photographic Documentation, Inspection, Special Inspection, Materials Testing: These are provided by NV5's in-house staff to show compliance with the contract documents, all permits, CEQA, NEPA, and other special requirements. A simple phone call to NV5's Project Manager mobilizes special inspection and materials testing, including soils compaction, concrete compressive strength, welding inspection, and structural steel placement, as required to show the Contractor's compliance with the project plans and specifications. Within NV5's court as well is the coordination as required to LVMWD, Design Engineers, and other agencies for their inspections. All inspectors have iPads and upload live inspector's reports including photographs to CMIS which is also available at any time live viewing by LVMWD. Prior to startup and testing, NV5 will make certain the Contractor performs the required functionality testing so that startup and testing goes smoothly. NV5 will be on-site during start-up and testing of the facility. NV5's inspectors provide a Daily Inspection Report detailing the Contractor's progress in CMIS.

2.8 Schedule of Values and Progress Payments: The Schedule of Values forms the basis of the progress payment from the Contractor to LVMWD. Of key importance is that larger elements of the bid specs are broken down into discrete roll-up schedules, which add up to the bid specifications for ease of payment request acceptance/defense from the Contractor to NV5 allowing for easy tracking and review. CMIS also tracks and logs progress payments.

2.9 Monthly Progress Report: This is written by NV5 for ease of project summary and potential use in tracking or Board meetings complete with progress photos. Likewise, NV5 can prepare and present board updates based on NV5's Monthly Progress Reports.

2.10 Safety: This is an element of key importance on any project. NV5 has in-house safety staff and will provide their Injury and Illness Prevention Plan (IIPP) for their Construction Inspectors. NV5's inspectors provide daily observation of the Contractor's work for verification of conformance with OSHA requirements, with prompt notification to the Contractor and LVMWD of any observed safety violations.

2.11 Record Drawings: These are ongoing from the start of the project. NV5 will review the Contractor's record drawings on a weekly basis to ensure that the drawings are up to date and accurate. NV5 will review the Contractor's record drawings at the end of each month prior to approving Contractor's monthly progress payment request. NV5's Construction Inspectors also maintain an independent, up-to-date set of record drawings on-site.

TASK 3: PROJECT CLOSE-OUT

3.1 Punch List: Punch lists are created from the inception of the project and constantly cleared before work is covered up. CMIS logs and tracks punch list items complete with photos. Final punch lists will be developed by NV5 and coordinated with LVMWD, their Design Engineer, and the Contractor for outstanding items of work, including all documentation and submittals required by the contract documents, and NV5 will verify that all punch list items have been addressed to the satisfaction of LVMWD and the Design Engineer.

3.2 Closeout: This will culminate with the Contractor's turning the record drawings to LVMWD, as well as an archived copy of CMIS containing the digital and organized copy of the project files — including daily reports, photographs, submittals, RFIs, pay requests, and other documentation.

TASK 4: ENGINEERING

4.1 Additional Support: NV5 can provide task-based support including staff augmentation, feasibility studies, engineering plans and specifications, environmental support and studies, geotechnical engineering and investigations, and regulatory permitting for major initiatives and CIP projects.

H. LEGAL ISSUES & POTENTIAL CONFLICTS OF INTEREST

Litigation History

The industry in which NV5 provides professional services can yield claims that arise from time to time. These claims predominately consist of general allegations related to professional errors or omissions for work performed under a contract or project. Accordingly, NV5 maintains adequate insurance coverage to protect against any and all claims. Furthermore, there are no claims or lawsuits, either threatened or pending, that would impair NV5's ability to perform on this request for proposal.

Conflicts of Interest

NV5 has no current or potential conflicts of interest that would interfere with our ability to provide these services to LVMWD.

Fee Schedule

Effective through December 31, 2026. After this time, NV5 will receive a 3% rate increase for each consecutive year beginning January 1, 2027.

CONSTRUCTION SERVICES	HOURLY RATE **
Senior Construction Manager	$210
Construction Manager	$195
Office Engineer	$130
Senior Construction Inspector * ***	$164
Construction Inspector* ***	$158
Project Controls Engineer	$160
Administration	$100
GEOTECHNICAL/MATERIALS TESTING	**HOURLY RATE ** **
Principal Engineer/Geologist/Consultant	$260
Senior Engineer/Geologist/Consultant (PE, CEG)	$236
Project Engineer/Geologist/Consultant	$204
Senior Staff Engineer/Geologist/Consultant	$181
Staff Engineer/Geologist/Consultant	$164
Project Manager	$208
ICC Special Inspector I / Soil-Asphalt-ACI Technician I (Prevailing Wage)	$148
ICC Special Inspector II / Soil-Asphalt-ACI Technician II (Prevailing Wage)	$152
ICC Special Inspector III / Soil-Asphalt-ACI Technician III (Prevailing Wage)	$159
AWS Certified Welding Inspector I (Prevailing Wage)	$152
AWS Certified Welding Inspector II (Prevailing Wage)	$159
Roofing/Waterproofing Inspector I (Prevailing Wage)	$152
Roofing/Waterproofing Inspector II (Prevailing Wage)	$159
NDT Technician I (UT/Mag Part./Dye Pen.) (Prevailing Wage)	$150
NDT Technician II (UT/Mag Part./Dye Pen.) (Prevailing Wage)	$155
Project Inspector / OSHPD IOR C, DSA PI III (Prevailing Wage)	$154
Project Inspector / OSHPD IOR B, DSA PI II (Prevailing Wage)	$171
Project Inspector / OSHPD IOR A, DSA PI I (Prevailing Wage)	$193
DSA Masonry / Shotcrete Inspection I (Prevailing Wage)	$159
DSA Masonry / Shotcrete Inspection II (Prevailing Wage)	$169
Sample Pickup/Delivery	$96
Saturday Sample Pickup/Delivery	$144
Machine, truck & 1 operator	$280
Machine, truck & operator & helper	$410
Laboratory Technician	$158
Certified Payroll Admin	$61
Court Appearance and Depositions	$590
Clerical	$88
REIMBURSABLE EXPENSES	**COST**
Reproduction	Cost
Consultant Services	Cost + 15%
Automobile Transportation	per IRS standard

* Assumes prevailing wages are applicable for fieldwork.

** Regular rates. Work in excess of 8 hours and work on Saturdays will be billed at 1.5 times the regular rate. Work in excess of 12 hours and work on Sundays and Holidays will be billed at 2 times the regular rate.

*** No allowance has been made for CWAs or PLAs. If the work is subject to a CWA or PLA, additional fees will apply.

Schedule of Rates for Subconsultant Pacific Resources Services

PACIFIC RESOURCES SERVICES RATES

PACIFIC RESOURCES SERVICES		
Staff		**Hourly Rate**
Benjamin Ocasio	Lead Labor Compliance Analyst	$158.09
Morita Capili	Labor Compliance Analyst II	$135.50
Monica Mendez	Lead Site Visits – Analyst 1	$112.92
Evan Ocasio	Office Support - Analyst	$90.34

All hourly costs are fully burdened. Mileage at appropriate IRS rate.

Contractual Services Agreement

NV5 has reviewed LVMWD's standard Professional Services Agreement and has no exceptions or alterations.

APPENDIX

CONTACT INFO
luanne.bean@nv5.com

EXPERIENCE
35 years

EDUCATION
M.S. Civil Engineering

B.S. Civil Engineering

LICENSES
Civil Engineer (CA)
No. 50129

Former Class A General Engineering Contractor

REGISTRATIONS
FEMA OPS - I

HAZMAT First Responder/ Operations Level

DOT Offers of Bulk and Non-Bulk HAZMAT Packages

Nuclear Waste Safety for Workers

SCRRA Safety Trained

Confined Space Entry Trained

LUANNE BEAN, PE

Project Manager + Construction Manager

Ms. Bean has more than 35 years of experience in the engineering, design, and construction of water and wastewater projects. As a Registered Civil Engineer and a former Class A General Engineering Contractor, Ms. Bean has seen construction from both sides of the fence. Her technical skills include specialized structural analysis and design of large 600-MGD water treatment plants, pipelines up to 12 feet in diameter, mechanical analysis, SCADA & I&C oversight and coordination, diesel generator design and AQMD permitting, the preparation of engineering plans, specifications and cost estimates, as well as construction management. She has held various positions with many public agencies, including Structural Discipline Director for Southern Nevada Water Authority's $6B CIP program, for which she specialized in structural and forensic analysis, Project Manager for the Metropolitan Water District, and Project Officer in charge of disaster funding across three states and five counties for FEMA.

Project Experience

On-Call Construction Management and Inspection Services

LAS VIRGENES MUNICIPAL WATER DISTRICT | CALABASAS, CA

Project Manager/Construction Manager. Ms. Bean provides as-needed Construction Management and Inspection Services to the District, including construction inspection and special inspection services. NV5 has completed many projects with LVMWD, including the Deer Lake Project for a 1-MG tank replacement, including electrical inspection, soils compaction and concrete testing, as well as electrical inspection services for the Stationary Emergency Generators for the Potable Water Pump Stations Project with 200 KW and 600 KW generators installed at four sites.

Diversion Sewer Pipes to Abandon Fox Hills Pump Station

CITY OF CULVER CITY | CULVER CITY, CA

QA/QC Manager. Ms. Bean served as QA/QC Manager for the Diversion Sewer Pipes to Abandon Fox Hills Pump Station project. NV5 provided construction management and inspection services for the project, which constructed 1,230 LF of 18-inch diversion sewer mains from Fox Hills pump station to Bankfield pump station. The project included constructing 18-inch FRPM (Fiberglass-reinforced pipe) in a 36-inch RCP casing by microtunneling (1,223 LF) at an average depth of 28 feet to 30 feet; constructing new manholes; pavement restoration of all existing improvements; 18-inch force main tie-in near City of Los Angeles manhole and associated temporary bypass system; 1,600 LF of abandonment of portions of the existing dual force 12-inch and 18-inch mains; 1,230 LF of CCTV inspection; and demolition of Fox Hills pump station and the Overland pump station.

Diversion Pipeline

CITY OF CULVER CITY | CULVER CITY, CA

Project Manager/Construction Manager. Ms. Bean oversaw the construction management, inspection and engineering services for the construction of sewer main diversion pipes reversing sewer flow via conventional cut and cover as well as trenchless jack and bore methods to abandon Mesmer and Overland Sewer Pump Stations. This also involved extensive permits and coordination with Caltrans, the City of Los Angeles, and the City of Culver City for these jack and bore pipelines underneath the I-405 and Route 90. The goal of the project was to divert flows from four of the City's sewer pump stations to a new sewage pump station, Bankfield Station.

Bankfield Sewage Pump Station

CITY OF CULVER CITY | CULVER CITY, CA

Project Manager/Construction Manager. Ms. Bean oversaw the construction management and inspection services for the construction of the Bankfield Sewer Pump Station adjacent to the Caltrans Right-of-Way. The new pump station receives diverted flows from two existing pump stations, and diverted flows from two more pump stations at a later date. There are two submersible pumps, a flow meter vault, a valve vault, a bypass vault for the two force mains, an emergency diesel-fueled backup electrical generator, and complete SCADA systems. NV5 assisted with the final design and implementation of the emergency diesel generator as well as pipeline redesign for the sewer force main, including the AQMD permitting, as the original plans did not accommodate a generator. There is also a 25-foot-by-20-foot building to house instrumentation and SCADA systems, a bathroom and electrical components. *This project is an American Public Works Association BEST Awards winner.*

Reverse Osmosis Water Treatment Plant

CITY OF BEVERLY HILLS | BEVERLY HILLS, CA

Project Manager. Ms. Bean led the team responsible for serving as the City's (Owner's) Representative during the design and construction of a pre-treatment system for the City's existing Reverse Osmosis Water Treatment Plant. NV5 oversaw the planning and initial design to construct this project as a design-build facility for the City. Once the project was initially bid as a design-build project, the City opted instead to finalize the design and re-bid the project under a conventional design-bid-build option. NV5 continued throughout this process as the Owner's Representative to oversee the second bidding for conventional construction and continued on as Construction Manager as well as provided full-time inspection services throughout bidding, material procurement, and construction, commissioning, testing, Division of Drinking Water permitting, and training of City Operations Staff.

Emergency Pearl Avenue Sewer Replacement

CITY OF COMPTON | COMPTON, CA

Project Manager/Construction Manager. Ms. Bean lead the team to provide a quick two-week design of City of Compton's failed Pearl Avenue sewer that was overflowing on an emergency basis. Ms Bean then spearheaded the efforts for bids to the City on an emergency bid to obtain a Class A General Engineering Contractor, then recommended award the lowest responsive and responsible bidder. During construction, Ms. Bean led the team in Construction Management and Inspection to support the City's effort in the emergency replacement of 3,600 LF of failed 8-inch sewer main in a residential district with connections in a busy four-lane arterial roadway. Through Ms. Bean's team efforts, start to finish, this project was completed in approximately three months.

La Palma Avenue and Tustin Avenue Water Main Replacement at OCTA Railway Crossing

CITY OF ANAHEIM PUBLIC UTILITIES DEPARTMENT | ANAHEIM, CA

Project Manager. Ms. Bean is overseeing the construction management and inspection services as Metrolink with the Orange County Transportation Authority, under the governing body of Southern California Regional Rail Authority (SCRRA), is expanding the Anaheim Canyon Metrolink Station, which includes the addition of a train track crossing at La Palma Avenue and one 12-inch water main at Tustin Avenue. The water main replacement project involves bore and jack installation of two new water mains (12-inch and 36-inch) underneath the OCTA railroad track in La Palma Avenue and Tustin Avenue, followed by the abandonment of the existing water mains. The project includes close coordination with the City, OCTA, Metrolink, Southern California Regional Rail Authority (SCRRA), among other agencies.

Graves Reservoir Replacement

CITY OF SOUTH PASADENA | SOUTH PASADENA, CA

Project Manager/Construction Manager. Ms. Bean provided comprehensive construction management services on the demolition reservoir and construction of the new 1.2 mg partially buried cast-in-place Graves Reservoir sited in a residential neighborhood. An existing well was re-equipped as the source of groundwater for the reservoir. The existing well pump was renovated and a new pumping station with two 1,400 GPM VFD pumps that pump from the reservoir to City water system. A new Sodium Hypochlorite Generation System, new pretreatment with state-of-the-art GAC for PCE and CCl4 removal followed by a new Ion Exchange System for removal of Nitrate as NO3, ClO4, and sulfate, was installed. NV5 provided full-service CMS, including Construction Management, Inspection, Lead and Asbestos Demolition Oversight, Public Relations, SRF Loan Reimbursement Management, Biological Monitoring, Geotechnical and Materials Testing.

CONTACT INFO
peter.salgado@nv5.com

EXPERIENCE
34 years

EDUCATION
B.S. Civil Engineering

LICENSES
Civil Engineer (CA)
No. 63159

PETER SALGADO, PE

Construction Manager

With nearly 35 years of experience, Mr. Salgado has managed and delivered a variety of public works projects, including water, sewer and storm drain improvements, street improvements, vertical construction and tenant improvements, and parks and landscaping improvements. Working with a variety of agencies, he is thoroughly familiar with local, state and federal procedures.

Project Experience

On-Call Construction Inspection Services

CITY OF SAN JUAN CAPISTRANO | SAN JUAN CAPISTRANO, CA

Project Manager. Mr. Salgado oversaw NV5's on-call inspection services of the City's water and sewer projects. He has also provided project management, construction management and oversaw construction inspection services to the City on numerous projects, including: the $9M 760 S. Zone Replacement; the $15M Terminal Reservoir No. 3 Project; the $5.4M Krum Reservoir and Pipeline Stabilization; and the $6M SC04 Pipeline Project.

Indiana Street Water Improvements

CITY OF EL SEGUNDO | EL SEGUNDO, CA

Project Manager. Mr. Salgado was the primary point of contact for our team's construction inspection services and materials testing for the Water Main Improvements on Indiana Street between E. Holly Avenue and E. Mariposa Ave. The improvements include the construction of 10-inch ductile-iron water main, and 6-inch and 4-inch ductile-iron water main or laterals; installation of gate valves and boxes; construction of new water service connections; abandoning existing water mains; providing uninterrupted water service during construction; providing traffic control; potholing; coordination with utility agencies; survey; trenching; and striping.

As-Needed Inspection Services

IRVINE RANCH WATER DISTRICT | IRVINE, CA

Project Manager. Mr. Salgado oversaw NV5's staff augmentation inspection services for domestic water, recycled water and sanitary sewer projects for the Irvine Ranch Water District. NV5 services included tracking project progress, inspection of grade and alignment of the water districts utilities, inspection of the testing and approving the installation of the water districts utilities, creating and maintaining the daily reports and project files, inspection of PCC structures such as manholes, thrust blocks and overflow, headwall, spillway, vehicle crossing and outflow PCC structures for NTS Basins. Projects include new home developments and NTS Basins.

Citywide Sewer Main Replacement

CITY OF TORRANCE | TORRANCE, CA

Construction Manager. Mr. Salgado managed the team that provided construction inspection services for this citywide sewer main improvement project. The project included rehabilitating the existing sewer system in various locations throughout the City. The scope of work included point repairs, removal and replacement, pipelining sections of sewer where damage was repaired by insertion of a plastic liner, thereby eliminating the need for trench excavation and minimizing public impacts. Where trench excavation was required, damaged sections of pipe were replaced with new vitrified clay pipe (VCP).

CONTACT INFO
jim.daly@nv5.com

EXPERIENCE
37 years

EDUCATION
B.S. Civil Engineering

LICENSES/CERTIFICATES
Civil Engineer (CA)
No. 45612

AFFILIATIONS
American Public Works Association

American Society of Civil Engineers

JIM DALY, PE

Construction Manager

Mr. Daly has more than 37 years of experience managing both horizontal and vertical capital improvement projects. As Assistant Deputy Director (Road Maintenance) for the County of Los Angeles, Mr. Daly managed approximately 500 employees responsible for the maintenance and repair of roadways, sidewalks, and parkway trees. He has experience managing myriad projects — including federally funded — for various departments, including Parks and Recreation, Beaches and Harbors, and Public Library departments, and has managed and designed numerous flood control facilities, including storm drains, debris basins and pump plants.

Project Experience

Automatic Meter Reading (AMR) Upgrade, Phase IV

CITY OF SOUTH GATE | SOUTH GATE, CA

Construction Manager. Mr. Daly provided construction management services on the City's Automatic Meter Reading (AMR) Upgrade, Phase IV project. This project was crucial for upgrading the City's water infrastructure, addressing the aging infrastructure, and enhancing overall system performance. The new AMR-based meters will provide more accurate and timely readings, reducing manual labor and improving customer service. The replacement of old meters will also help prevent leaks and inaccuracies in the billing process, leading to better resource management and water conservation. The work consisted of removing and replacing approximately 1,730 existing ¾-inch, 1-inch, 1-1/2-inch and 2-inch water meters in Route C-3 of the City of South Gate Water distribution system with new Automatic Meter Reading (AMR) based water meters. Work also included replacing and connecting piping and the valve on the customer side connection where needed. NV5's services included contract administration, construction inspection, utility coordination, labor compliance and project close-out services.

Engineering Services for AMI End Point Water Meter System Upgrades

CITY OF GLENDALE | GLENDALE, CA

Project Engineer. Mr. Daly provided engineering services for the City's replacement of its Advanced Metering Infrastructure (AMI) End Point Water Meter System. The City's AMI points had been failing and dropping offline about eight years after a new system for 35,000 meters was installed, requiring manual or drive-by meter reading. Some of the endpoints had also stopped communicating with CCUs in the field. NV5's team researched software and hardware installers and evaluated options on upgrading or replacing the AMI end points and CCUs. We prepared bid documentation, including specifications and a construction cost estimate, for the City's RFP for a contractor for the project and provided bid assistant services.

Principal Engineer

LOS ANGELES COUNTY PUBLIC WORKS

Principal Engineer. Mr. Daly managed field operations with a staff of 125 employees maintaining and improving roads, sidewalks, parkway trees, spreading grounds, debris basins, channels, pump plants, and ocean outlets. He managed Capital Project Improvement Projects for various County Departments, including Parks and Recreation, Beaches and Harbor, and Public Library. These projects included many complex projects requiring extensive coordination with local, state, and federal agencies.

CONTACT INFO
india.allen@nv5.com

EXPERIENCE
9 years

EDUCATION
M.S. Civil Engineering (Coastal Engineering)

B.S. Civil Engineering

LICENSES/CERTIFICATES
Certified Construction Manager (CCM), No. 43234

Qualified SWPPP Developer (QSD) & Qualified SWPPP Practitioner (QSP), No. 84350

Metrolink Railroad Safety Contractor Safety Trained, No. 26471E22

INDIA ALLEN, CCM, QSD/P

Construction Manager

Ms. Allen is a proactive, self-motivated Certified Construction Manager who has managed at-risk projects throughout Southern California. She is experienced in Microsoft Office, Procore, Primavera P6, Microsoft Projects, AutoCAD, and Bluebeam Revu. Her solid negotiation and communication skills along with proven project management skills allow her to effectively interact with clients as well as construction trades for a variety of public works projects.

Project Experience

Indian Canyon Drive Sewer Project

CITY OF PALM SPRINGS | PALM SPRINGS, CA

Construction Manager. Ms. Allen is serving as Construction Manager for the Indian Canyon Drive Sewer Project. NV5 is providing construction management and inspection services for the project, which will install 8,875 feet of 10-inch PVC sewer pipeline on North Indian Canyon Drive. Twenty-four manholes will be constructed along the route. Microtunneling will be used for 1,200 feet, and the remaining 7,675 feet will be installed via open-cut trenching. Installation involves excavation, pipe laying, backfilling, surface restoration, and manhole construction using precast or cast-in-place structures.

Diversion Sewer Pipes to Abandon Fox Hills Pump Station

CITY OF CULVER CITY | CULVER CITY, CA

Assistant Construction Manager. NV5 provided construction management and inspection services for the Diversion Sewer Pipes to Abandon Fox Hills Pump Station project. The project constructed 1,230 LF of 18-inch diversion sewer mains from Fox Hills pump station to Bankfield pump station. The project included constructing 18-inch FRPM (Fiberglass-reinforced pipe) in a 36-inch RCP casing by microtunneling (1,223 LF) at an average depth of 28 feet to 30 feet; constructing new manholes; pavement restoration of all existing improvements; 18-inch force main tie-in near City of Los Angeles manhole and associated temporary bypass system; 1,600 LF of abandonment of portions of the existing dual force 12-inch and 18-inch mains; 1,230 LF of CCTV inspection; and demolition of Fox Hills pump station and the Overland pump station.

Reverse Osmosis Water Treatment Plant

CITY OF BEVERLY HILLS | BEVERLY HILLS, CA

Assistant Construction Manager. NV5 served as the City's (Owner's) Representative during the design and construction of a pre-treatment system for the City's existing Reverse Osmosis Water Treatment Plant. Our team oversaw the planning and initial design to construct this project as a design-build facility for the City. Once the project was initially bid as a design-build project, the City opted instead to finalize the design and re-bid the project under a conventional design-bid-build option. NV5 continued throughout this process as the Owner's Representative to oversee the second bidding for conventional construction and continued on as Construction Manager as well as provided full-time inspection services throughout bidding, material procurement, and construction, commissioning, testing, Division of Drinking Water permitting, and training of City Operations Staff. The project included evaluation and necessary upgrades to the entire water supply system.

CONTACT INFO
haykaz.aghajanian
@nv5.com

EXPERIENCE
20 years

EDUCATION
B.S. Civil Engineering

LICENSES/CERTIFICATES
Civil Engineer (CA)
No. 53866

HAYKAZ AGHAJANIAN, PE

Construction Inspector

Mr. Aghajanian has more than 20 years of utility and civil engineering experience. His experience includes preparing plans, specifications and cost estimates; performing plan reviews; and providing construction inspection services for a variety of utility and public works projects.

Project Experience

Crowther Sanitary Sewer Pipeline Replacement

CITY OF PLACENTIA | PLACENTIA AND FULLERTON, CA

Senior Construction Inspector. Mr. Aghajanian served as Senior Construction Inspector on the Crowther Sanitary Sewer Pipeline Replacement project, which included replacement of approximately 7,400 LF of gravity sewer pipeline in Crowther Avenue, Placentia Avenue, and Orangethorpe Boulevard, located within the Cities of Placentia and Fullerton. The work involved installation of 15-inch, 18-inch, and 22-inch PVC and fused HDPE sewer pipeline and manholes. The work also included reconnection into all of the existing gravity mains and service laterals with a terminus tie-in connection at the existing Orange County Sanitation District's trunk line on State College Boulevard. The project, which included an encasement crossing underneath the 57 freeway in Caltrans right-of-way, involved coordination with multiple agencies, including Caltrans, the Orange County Sanitation District, Golden State Water, Department of Health Services, the City of Fullerton, and other utility and governmental agencies. NV5 provided construction management, inspection and materials testing services for this project.

Potable Water Valve Replacement FY 2021

CITY OF ANAHEIM PUBLIC UTILITIES DEPARTMENT | ANAHEIM, CA

Construction Inspector. Mr. Aghajanian provided construction inspection services for this design-build water valve replacement project. The work involved the standard water main valve replacements, including shutdowns, dewatering, excavation, disinfection and pressure testing, followed by final street restoration under the direction of Anaheim Public Utilities with NV5's Resident Engineering and Inspection Services.

Emergency Pearl Avenue Sewer Replacement

CITY OF COMPTON | COMPTON, CA

Construction Inspector. Mr. Aghajanian provided construction inspection services for failed Pearl Avenue sewer that was overflowing. The project consisted of the emergency replacement of 3,600 LF of failed 8-inch sewer main in a residential district with connections in a busy four-lane arterial roadway.

On-Call Inspection Services

CITY OF SEAL BEACH | SEAL BEACH, CA

Construction Inspector. Mr. Aghajanian provides on-call inspection of both CIP and developer projects for the City. Safety is a major concern for the City and in addition to our regular daytime inspectors, our inspectors have been called for night and weekend work to ensure traffic control is properly set up for items like Caltrans right-of way. Our inspectors provide inspections to document and determine the acceptability of the construction work in accordance with the City's approved plans, specifications, and standard details.

CONTACT INFO
bob.bean@nv5.com

EXPERIENCE
30 years

EDUCATION
A.A. Business Administration

Apprenticeship Program, IBEW Local 11 Los Angeles

REGISTRATIONS
Former C10 Electrical Contractor

Journeyman Electrician

Union Steward

AFFILIATIONS
IBEW Board of Trustees

NECA Board of Trustees

ROBERT BEAN

Construction Inspector/Special Inspector (Electrical)

Mr. Bean has more than 30 years of experience as an electrical inspector performing site quality control to ensure the Contractor constructs the work in accordance with the approved plans and specifications.

Project Experience

On-Call Construction Management and Inspection Services

LAS VIRGENES MUNICIPAL WATER DISTRICT | LAS VIRGENES, CA

Construction Inspector. Mr. Bean provided construction inspection for the Cold Canyon Road Pump Station, Seminole Pump Station, Twin Lakes Pump Station, and Jed Smith Pump Station emergency generator installation and underground conduit projects.

J. W. Johnson Reservoir Facility Valve Replacements & Site Improvements

LONG BEACH WATER DEPARTMENT | LONG BEACH, CA

Construction Inspector. Mr. Bean provided construction inspection for this project involving replacement of four underground water main valves, installation of five storm drain inlets, construction of a containment cell for an indoor above-ground chlorine tank, construction of a large concrete reinforced storage pad, trenching for the installation of electrical conduit, and re-paving of surface areas to allow for proper drainage.

Potable Water Valve Replacement FY 2021

CITY OF ANAHEIM PUBLIC UTILITIES DEPARTMENT | ANAHEIM, CA

Construction Inspector. Mr. Bean provided construction inspection for this design-build water valve replacement project. The work involved standard water main valve replacements, including shutdowns, dewatering, excavation, disinfection, and pressure testing, followed by final street restoration under the direction of Anaheim Public Utilities with NV5's Resident Engineering and Inspection Services.

15th Street & Cherry Avenue Sewer Replacement

LONG BEACH WATER DEPARTMENT | LONG BEACH, CA

Construction Inspector. Mr. Bean provided construction inspection for the replacement of 565 lineal feet of 8-inch cement sewer to 12-inch VCP sewer, and the reconnection of the sewer laterals. This project involved full sewer by-pass which was buried temporarily within the street that Mr. Bean constantly monitored for spill prevention. This was a high profile project that Mr. Bean was also responsible for on-going public relations as the project progressed. He was also in charge of paving inspection for the re-paving of Cherry Avenue.

Group 12 CIPP Sewer Relining Program

LONG BEACH WATER DEPARTMENT | LONG BEACH, CA

Construction Inspector. Mr. Bean provided construction inspection for the Long Beach Water Department's Group 12 CIPP sewer relining program. This project involved providing construction oversight and observation of LBWD's contractor to install almost 15,000 LF of 8-inch, 10-inch and 12-inch cured-in-place sewer cleaning, pre-lining video, lining, and post-lining video. Point repairs and manhole rehabilitations were also undertaken. Once the installation of the CIPP began, Mr. Bean coordinated with the LBWD for shutting off water services for the various residential and businesses along the sewer line routes. Once curing was completed, a post lining video was run, followed by re-installation of the laterals and top hat installation on select laterals.

CONTACT INFO
joe.chiquete@nv5.com

EXPERIENCE
40 years

EDUCATION
B.A. Urban and Regional Planning, Environmental Analysis

JOE CHIQUETE

Construction Inspector

Mr. Chiquete has more than 40 years of experience working for the City of Laguna Beach on Public Works projects, including utility underground projects. He is adept at working with residents, business owners and project stakeholders, and is excellent as a public contact and interface with project team members. Mr. Chiquete's ability to problem-solve, research techniques and write reports makes him an asset to any team. He has skillfully prepared and presented visual and oral reports before various community associations, including city councils, planning commissions, design review boards, civic associations and community groups. He has expertise in several disciplines, including Urban Planning, Architecture, Environmental Planning, Construction Techniques, Transportation and Public Policy.

Project Experience

Rural Ridge Circle and Wilshire Avenue Water Main Replacement

CITY OF ANAHEIM | ANAHEIM, CA

Construction Inspector. Mr. Chiquete provided construction inspection services for this water main replacement project. The scope of work consists of two water main improvement areas: the Rural Ridge area and Wilshire-Pearl area. The Rural Ridge improvement area includes installation of a 12-inch PVC pipe (1,560 LF) , an 8-inch PVC pipe (1,820 LF), an 8-inch PVC pipe (480 LF), and a 6-inch PVC pipe (370 LF). The Wilshire-Pearl improvement area includes installation of 12-inch Ductile-Iron pipe (1915 LF) and 8-inch Ductile-Iron pipe (825 LF).

Drilling & Equipping of New Water Wells North Long Beach 13 & North Long Beach 14

LONG BEACH UTILITIES DEPARTMENT | LONG BEACH, CA

Construction Inspector. Mr. Chiquete is providing inspection services for this project. As a subconsultant to Wood Rodgers, NV5 is providing Construction Management and Inspection Services for the drilling and equipping of two separate potable water supply wells, Wells North Long Beach 13 & 14, with a design capacity of 2,500 gallons per minute. Located within a City Park, the project requires coordination with residents and management of unhoused individuals. Final well design includes two separate wells housed within a CMU building, with a submersible turbine pump and motor, electrical and SCADA equipment, above and below grade piping, valving and appurtenances, electrical, instrumentation and control, connection to existing water distribution system, testing and disinfection, and site restoration.

Sidewalk & Curb Ramp Reconstruction (Phase 2)

CITY OF EL MONTE| EL MONTE, CA

Construction Inspector. Mr. Chiquete provided inspection services for this federally-assisted Sidewalk & Curb Ramp Reconstruction Phase 1 & 2. The scope of work includes parkway improvements along various local/residential roadways within the City and includes the reconstruction of existing PCC sidewalks, curb and gutter, driveways, and ADA curb ramps; tree root pruning; and potential tree removal/ replacement.

CONTACT INFO
mike.helma@nv5.com

EXPERIENCE
30 years

EDUCATION
B.S. Civil Engineering

LICENSES
LEED Accredited Professional

MIKE HELMA, LEED AP

Construction Inspector

Mr. Helma has more than 30 years of experience in construction management and inspection with specific expertise in sewer, water and storm drain systems, street improvements, heavy grading, concrete structures, traffic signals, paving and landscaping. He is a LEED Accredited Professional and is adept at managing and inspecting large- and small-scale projects. He has also served as augmented staff for various public works departments.

Project Experience

Septic-to-Sewer Project, Phase II

HI-DESERT WATER DISTRICT | YUCCA VALLEY, CA

Construction Inspector. NV5 is serving as the Owner's Representative and providing construction support services for Phase II of the District's Septic-to-Sewer project in Yucca Valley. Identified by the Regional Water Quality Control Board as a priority area, the Town is transitioning from septic systems to a centralized wastewater system.

Water Main Improvements on Indiana Street

CITY OF EL SEGUNDO | EL SEGUNDO, CA

Construction Inspector. Mr. Helma provided construction inspection services for the Water Main Improvements on Indiana Street between E. Holly Avenue and E. Mariposa Avenue. The improvements included the construction of 10-inch ductile-iron water main, and 6-inch and 4-inch ductile-iron water main or laterals; installation of gate valves and boxes; construction of new water service connections; abandoning existing water mains; providing uninterrupted water service during construction; providing traffic control; potholing; coordination with utility agencies; survey; trenching; trench paving; and striping.

Pressure Regulating Stations (PRS) Rehabilitation/Replacement

CITY OF ANAHEIM PUBLIC UTILITIES DEPARTMENT | ANAHEIM, CA

Construction Inspector. Mr. Helma provided construction inspection services for the Anaheim Public Utilities Department's pressure regulating stations rehabilitation/replacement project. The City replaced or relocated five pressure-regulating stations throughout the City. Mr. Helma's responsibilities included observing water main shutdowns coordinated by APU staff, ensuring traffic control plans were set up per the approved plans, observing materials sampling and testing services, preparing daily activities reports, and attending biweekly construction progress meetings.

Edgewater Sewer Lift Station Replacement

CITY OF HUNTINGTON BEACH | HUNTINGTON BEACH, CA

Construction Inspector. Mr. Helma provided construction inspection services for the replacement of the Edgewater Sewer Lift Station. The project consisted of the abandonment and demolition of an existing sewer lift station and construction and installation of a new 1,000-gpm submersible sewage lift station and force main. The project also included installation of new gravity sewer, storm drain, water main, and site restoration. The project also included the installation of sheet pile shoring for the list station. The 30-foot interlocking sheet piles were installed to allow the construction of the below grade sewer lift station and holding tank.

CONTACT INFO
kenneth.hicks@nv5.com

EXPERIENCE
18 years

LICENSES/CERTIFICATES
Qualified SWPPP Practitioner (CA) No. 27259 (CASQA)

Certified Inspector of Sediment and Erosion Control

Nuclear Gauge Certified

Railroad Safety

OSHA 30-Hour

OSHA 10-Hour

KENNETH P. HICKS, QSP

Construction Inspector

Mr. Hicks has 18 years of experience providing construction inspection services for various capital improvement projects, including water/wastewater improvements, street improvements, wet and dry utilities, grading, stormwater, and landscaping and irrigation. He has provided quality assurance testing for highways, bridges and streets, sewer and water systems, and other structures using nuclear gauge or assigned equipment. He is experienced in working with local, state and federal facilities regarding land use, including right-of-way, construction, and easements.

Project Experience

La Palma Avenue and Tustin Avenue Water Main Replacement at OCTA Railway Crossing

CITY OF ANAHEIM | ANAHEIM, CA

Construction Inspector. Mr. Hicks is providing construction inspection services for the City's La Palma Avenue and Tustin Avenue Water Main Replacement at OCTA Railway Crossing project. Metrolink, with the Orange County Transportation Authority, is expanding the Anaheim Canyon Metrolink Station, which includes the addition of a train track crossing at both La Palma Avenue and Tustin Avenue. The water main replacement project involves bore and jack installation of two new water mains underneath the OCTA railroad track in La Palma Avenue and Tustin Avenue, followed by the abandonment of the existing water mains that will now be too shallow and are not adequately reinforced to carry the load underneath the proposed train track. The project includes close coordination with the City, OCTA, Metrolink, Southern California Regional Rail Authority (SCRRA), among other agencies.

On-Call Inspection Services

CITY OF SEAL BEACH | SEAL BEACH, CA

Construction Inspector. Mr. Hicks provides on-call inspection services for the City. Safety is a major concern for the City, and in addition to our regular daytime inspectors, our inspectors have been called for night and weekend work to ensure traffic control is properly set up for items like Caltrans right-of way. Our inspectors provide inspections to document and determine the acceptability of the construction work in accordance with the City's approved plans, specifications, and standard details. Our NV5 inspectors report directly to the City's Project Manager.

Basin D Sanitary Sewer Rehabilitation

CITY OF SAN MATEO | SAN MATEO, CA

Construction Inspector. Mr. Hicks provided construction inspection services including inspecting spot and segment repairs for sanitary sewers at 315 locations; full sanitary sewer pipeline replacement by either open cut or pipe bursting the existing VCP pipe in the ground using a fused/welded HDPE pipe; manhole replacement; reconnection of sewer laterals; CCTV inspections; and site restorations.

On-Call Inspection Services

CITY OF BELLFLOWER | BELLFLOWER, CA

Construction Inspector. Mr. Hicks provides as-needed construction inspection services as part of NV5's On-Call Inspection Services contract with the City for various capital improvement projects and encroachment permits throughout the City.

CONTACT INFO
dean.jensen@nv5.com

EXPERIENCE
39 years

EDUCATION
A.A. General Education

LICENSES/CERTIFICATES
OSHA 30-Hour Safety Certificate No. 1598056

OSHA Title 28 Confined Space Training Certificate

Class A Commercial Driver's License (CA)

American Concrete Institute Certificate

Title 24 Energy Compliance Field Inspection Certificate

Americans With Disabilities Act – California Disabled Accessibility Certificate

SWPPP – Construction Site Storm Water Management Certificate

ICBO Reinforced Concrete Inspection & ACI Field Grade I Tech Certificates

International Building Code No. 0885400-01

International Residential Code No. 0885400-02

ICBO Uniform Building Code No. 088400-10

ICBO Uniform Plumbing Code Certificate

DEAN JENSEN

Construction Inspector

Mr. Jensen has more than 39 years of experience in engineering, construction management and inspection. He has provided construction management and inspection services on a wide variety of public works capital improvement projects, including water, sewer, storm drain, street, buildings/facilities, and park and landscaping improvements.

Project Experience

Reverse Osmosis Water Treatment Plant

CITY OF BEVERLY HILLS | BEVERLY HILLS, CA

Construction Inspector. Mr. Jensen provided construction inspection services for upgrades to a pre-treatment system for the City's Reverse Osmosis Water Treatment Plant. NV5 oversaw the planning and initial design to construct this project as a design-build facility for the City. Once the project was initially bid as a design-build project, the City opted instead to finalize the design and re-bid the project under a conventional design-bid-build option. NV5 continued throughout this process as the Owner's Representative to oversee the second bidding for conventional construction and continued on as Construction Manager as well as provided full-time inspection services throughout bidding, material procurement, and construction, commissioning, testing, Division of Drinking Water permitting, and training of City Operations Staff. The project included evaluation and necessary upgrades to the entire water supply system.

Diversion Pipeline

CITY OF CULVER CITY | CULVER CITY, CA

Construction Inspector. Mr. Jensen provided construction inspection services for the construction of diversion sewer pipes to abandon Mesmer and Overland Sewer Pump Stations involving conventional cut and cover as well as trenchless jack and bore underneath the Caltrans ROW in multiple jurisdictions, including the City of Los Angeles. The goal of the project was to divert flows from four of the City's sewer pump stations to a new sewage pump station, Bankfield Station.

CIP 421 Annual Sewer Improvements Phase I

CITY OF HERMOSA BEACH | HERMOSA BEACH, CA

Construction Inspector. Mr. Jensen provided construction inspection services for the City's CIP 421 Annual Sewer Improvements project. The project included the replacement or rehabilitation of multiple sewer segments throughout the City. The scope of work includes the trenchless CIPP rehabilitation of 29 sewer segments, construction of 7-point repairs, and installation of 2 new maintenance access holes throughout the City.

Pressure Regulating Stations (PRS) Rehabilitation/Replacement

CITY OF ANAHEIM PUBLIC UTILITIES DEPARTMENT | ANAHEIM, CA

Construction Inspector. Mr. Jensen provided construction inspection services for the Anaheim Public Utilities Department's pressure-regulating stations rehabilitation/replacement project. The City replaced or relocated five pressure-regulating stations throughout the City. Mr. Jensen's responsibilities included observing water main shutdowns coordinated by APU staff, ensuring traffic control plans were set up per the approved plans, observing materials sampling and testing services, preparing daily activities reports, and attending biweekly construction progress meetings.

CONTACT INFO
david.ledyard@nv5.com

EXPERIENCE
40 years

EDUCATION
A.A. Engineering

DAVID LEDYARD

Construction Inspector

Mr. Ledyard has more than 40 years of engineering and construction inspection experience. He has served as both a supervisory inspector, overseeing permit inspectors, as well as a lead inspector on various capital improvement projects, including sewer, water, storm drain, and street improvements.

Project Experience

Blandwood Road/True Avenue Sewer Lift Station Replacement

CITY OF DOWNEY | DOWNEY, CA

Construction Inspector. Mr. Ledyard provided construction inspection services for the City during the replacement of two old sewer lift stations on Blandwood Road and True Avenue with a new wet well submersible type sewer lift station. The project included construction of new sewer gravity and force main lines to deliver from and convey raw sewage to the new station. The project also included the construction of AC pavement, PCC sidewalks, driveways, and curb and gutter.

Brookshire Avenue Water System Improvement Project (Gardendale Street to Imperial Highway and Firestone Boulevard to Florence Avenue)

CITY OF DOWNEY | DOWNEY, CA

Construction Inspector. Mr. Ledyard provided construction inspection services for the Brookshire Avenue Water System Improvement Project. The scope of work included installation of 145 feet of 8-inch and 220 feet of 6-inch ductile iron water line and connection to the existing water lines, installation of 81 water meters, including bypass meters and potable water meters, removal of existing fire hydrants and installation of 17 new fire hydrants, installation of 36 new potable water services, abandonment of existing services and installation of one fire service.

Lake Avenue Water Main Replacement

CITY OF PASADENA | PASADENA, CA

Construction Inspector. Mr. Ledyard provided construction inspection services on this $1.5M water improvement project. The scope of work included the installation of approximately 1 mile of 8-inch diameter water main line; installation of all valves, hydrants and appurtenances; reconnection with existing adjacent mains; and reconnection/reconstruction of existing water services.

Forest Avenue Water Main Installation

CITY OF PASADENA | PASADENA, CA

Construction Inspector. Mr. Ledyard provided inspection services during the replacement of an aging water main along Forest Avenue. The project affected a 3,641-foot stretch of road from Del Monte Street to Lincoln Avenue. Traffic lanes were temporarily closed during construction, but at least one lane remained open in each direction for through traffic. Pasadena Water and Power also worked to place digital reader board signage near the construction areas for commuters to consider alternative routes.

CONTACT INFO
jinan.mohammed@nv5.com

EXPERIENCE
13 years

EDUCATION
B.S. Chemical Engineering (Specialized in Petroleum and Gas Refinery)

LICENSES/CERTIFICATES
ACI Concrete Field Testing Technician Grade1

CPN training course on radiation safety and use of nuclear gauge

Liquid Boot system methane mitigation installation inspector

CEE Colombia Engineering Executive Engineering Construction Project Management Certification

CSWO Construction Storm Water Operator Certification No. 24568

In the process of gaining ICC certification for Reinforced Concrete, Pre-stressed concrete, and soils

In the process of gaining the CCM Certified Construction Manager Certification

OSHA 10-hour, MSHA

HAZWOPER 40-Hour training

JINAN MOHAMMED

Construction Inspector

Ms. Mohammed is an adaptable construction professional with 13 years of experience and a proven knowledge of executive support, construction management and inspection, staff training and development, and workflow prioritization. She has experience with a wide range of public works projects and previously managed a material testing laboratory.

Project Experience

Diversion Sewer Pipes to Abandon Fox Hills Pump Station

CITY OF CULVER CITY | CULVER CITY, CA

Construction Inspector. Ms. Mohammed provided construction inspection services for the Diversion Sewer Pipes to Abandon Fox Hills Pump Station project. The project constructed 1,230 LF of 18-inch diversion sewer mains from Fox Hills pump station to Bankfield pump station. The project included constructing 18-inch FRPM (Fiberglass-reinforced pipe) in a 36-inch RCP casing by microtunneling (1,223 LF) at an average depth of 28 feet to 30 feet; constructing new manholes; pavement restoration of all existing improvements; 18-inch force main tie-in near City of Los Angeles manhole and associated temporary bypass system; 1,600 LF of abandonment of portions of the existing dual force 12-inch and 18-inch mains; 1,230 LF of CCTV inspection; and demolition of Fox Hills pump station and the Overland pump station.

Pearl Avenue Sewer Replacement

CITY OF COMPTON | COMPTON, CA

Construction Inspector. Ms. Mohammed provided field engineering services for the placement of flow metering devices within the existing sewer system on the City's Pearl Avenue Sewer Replacement project. This existing sewerline includes an additional reach of 400 LF of Pearl Avenue Sewer additions between Rosecrans Avenue and East Kay Street. The City's sanitary sewer system has experienced prolonged structural damage and capacity deficiencies for years, and this project replaces aging pipes that have impacted the carrying capacity of the aging sewer infrastructure system. Flow metering devices are assisting NV5 with the capacity to develop a preliminary hydraulic model of the sewer main in this limited area, in order to determine if certain reaches can be lined in place, or must be replaced in place due to the need to upsize the existing pipelines.

Drilling & Equipping of New Water Wells NLB 13 & 14

LONG BEACH UTILITIES DEPARTMENT | LONG BEACH, CA

Construction Inspector. Ms. Mohammed provided inspection services for the drilling and equipping of two separate potable water supply wells, Wells North Long Beach 13 & 14, with a design capacity of 2,500 gallons per minute. Located within a City Park, the project requires coordination with residents and management of unhoused individuals. Final well design includes two separate wells housed within a CMU building, with a submersible turbine pump and motor, electrical and SCADA equipment, above and below grade piping, valving and appurtenances, electrical, instrumentation and control, connection to existing water distribution system, testing and disinfection, and site restoration.

CONTACT INFO
duane.neyens@nv5.com

EXPERIENCE
30 years

EDUCATION
B.S. Organizational Management

A.S. Public Works Management

LICENSES/CERTIFICATES
Program Certificate — Public Works Management, Palomar College with MSA and APWA

Program Certificate — Construction Inspection Technology, San Diego State University

Program Certificate — Public Administration Supervisor, (San Diego) North County Supervisors' Academy

Certified Inspector of Sediment & Erosion Control (CISEC)

QSP Trained

Concrete Testing Technician (ACI)

Reinforced Concrete Special Inspector (ICC)

Structural Masonry Special Inspector (ICC)

OSHA 30-Hour

DUANE NEYENS

Construction Inspector

Mr. Neyens has more than 30 years of experience in the construction industry, including experience as a construction inspector, engineering inspections supervisor, and city construction manager having responsibility for both public works and private development projects. Mr. Neyens has worked as a consultant inspector on public works projects for the County of San Diego and in residential development as a project superintendent for Western National Contractors. He has a solid reputation for his focus on detail, his organizational skills, and an orientation toward successful project outcomes.

Project Experience

Second Street Sewer Improvements
CITY OF ENCINITAS | ENCINITAS, CA
Construction Inspector. This $1.6M sewer improvement project involved the replacement of a sewer line between Second and Third streets from J Street to north of C Street (microtunneling and boring at depth of 20 feet), and PVC pipe (deep trench at depth up to 15 feet).

Manchester Sewage Pump Station
CITY OF ENCINITAS | ENCINITAS, CA
Construction Inspector. This $4M project constructed a sewage pump station adjacent to I-5 and connecting to the San Elijo Treatment Plant (microtunneling at depth of 20 feet).

Olivenhain Dual Sewer Force Replacement
CITY OF ENCINITAS | ENCINITAS, CA
Construction Inspector. This $4.35M project consisted of replacing the Olivenhain Sewer Force Main and a portion of the Coast Highway 101 sewer force main.

Storm Drain and Infrastructure
CITY OF OCEANSIDE | OCEANSIDE, CA
Resident Construction Inspector. This $2M project consisted of installing a new RCP in the downtown core area of the city as well as undergrounding all utilities and removing and replacing the roadways.

Raceway Sewage Pump Station
CITY OF VISTA | VISTA, CA
Construction Manager/Chief Engineering Inspector. This $2.5M project constructed a replacement sewage pump station in the southeast industrial area of the city.

Roymar Sewage Pump Station
CITY OF OCEANSIDE | OCEANSIDE, CA
Construction Manager/Construction Inspector. This $1.5M project constructed a sewage pump station in the airport industrial area of the city.

CONTACT INFO
salvador.sanchez
@nv5.com

EXPERIENCE
30 years

LICENSES/CERTIFICATES
Water Utilities Science Certificate

Metrolink Railroad Safety Training for Non-Roadway Workers (SCRRA), No. M9001503

Metrolink Railroad Safety Contractor Safety Trained, No. 26481E22

Former CA Water Distribution Operator, D5 No. 08546

Former CA Water Treatment Operator, T4 No. 16793

SALVADOR SANCHEZ

Construction Inspector/Special Inspector (Electrical)

Mr. Sanchez is adept at managing and delivering a variety of public works construction projects. His skills in the development of project control procedures and methodologies for cost and schedule control have been implemented on several large-scale projects. Mr. Sanchez has accrued more than 30 years of public works experience, demonstrating his expertise in a range of responsibilities, including six years with the City of Riverside, nine years with the City of Pico Rivera and 14 years with the City of Glendale Water Department.

Project Experience

On-Call Construction Management and Inspection Services

LAS VIRGENES MUNICIPAL WATER DISTRICT | CALABASAS, CA

Construction Inspector. Mr. Sanchez provides as-needed Construction Management and Inspection Services to the District, including construction inspection and special inspection services. NV5 has completed many projects with LVMWD, including the Deer Lake Project for a 1-MG tank replacement, including electrical inspection, soils compaction and concrete testing, as well as electrical inspection services for the Stationary Emergency Generators for the Potable Water Pump Stations Project with 200 KW and 600 KW generators installed at four sites.

Rural Ridge Circle and Wilshire Avenue Water Main Replacement

CITY OF ANAHEIM | ANAHEIM, CA

Construction Inspector. Mr. Sanchez provided construction inspection services for this water main replacement and street improvements project. The work consisted of two water main improvement areas: the Rural Ridge area for 4,230 LF and the Wilshire-Pearl area for 2,750 LF of 8-inch to 15-inch potable water main, tie-ins to the existing potable water system, 142 1- and 2-inch water services and meters, existing main abandonment, and final street restoration. NV5 provided full Construction Management, Resident Engineering, and Inspection Services for this project, including coordination with the City, shop drawing and RFI review, change order analysis, and scheduling management.

La Palma Avenue and Tustin Avenue Water Main Replacement at OCTA Railway Crossing

CITY OF ANAHEIM | ANAHEIM, CA

Construction Inspector. Mr. Sanchez provided Construction Inspection Services for the City's La Palma Avenue and Tustin Avenue Water Main Replacement at OCTA Railway Crossing project. Metrolink with the Orange County Transportation Authority expanded the Anaheim Canyon Metrolink Station, which included the addition of a train track crossing at both La Palma Avenue and Tustin Avenue. The water main replacement project involved bore-and-jack installation of two new water mains underneath the OCTA railroad track in La Palma Avenue and Tustin Avenue, followed by the abandonment of the existing water mains that were now too shallow and not adequately reinforced to carry the load underneath the proposed train track. The project included close coordination with the City, OCTA, Metrolink, Southern California Regional Rail Authority (SCRRA), among other agencies.

CONTACT INFO
shane.schmidt@nv5.com

EXPERIENCE
25 years

LICENSES/CERTIFICATES
ICC Reinforced Concrete Inspector

Nuclear Gauge Radiation Safety

Radiation Safety Officer

ACI Field Testing Technician Grade 1

ACI Strength Testing Technician

Caltrans Testing Technician

ADOT Testing Technician

HAZWOPER 40 Hour

OSHA 30 Hour

SHANE SCHMIDT

Construction Inspector

Mr. Schmidt is a seasoned construction inspection professional with over 25 years of comprehensive experience in field inspection, quality control, and special inspection services across a wide range of public and private sector projects. His expertise spans stormwater and wastewater infrastructure, pool construction, structural concrete, soils and materials testing, and compliance with local, state, and federal building codes. He has worked with municipalities, engineering firms, and regulatory agencies, consistently ensuring that construction practices meet standards. His background includes specialized roles such as Radiation Safety Officer and supervision of complex testing operations for DSA schools, OSHPD hospitals, and utility infrastructure projects.

Project Experience

Indian Canyon Drive Sewer Project

CITY OF PALM SPRINGS | PALM SPRINGS, CA

Construction Inspector. Mr. Schmidt is providing construction inspection services for the Indian Canyon Drive Sewer Project. NV5 is providing construction management and inspection services for the project, which will install 8,875 feet of 10-inch PVC sewer pipeline on North Indian Canyon Drive. Twenty-four manholes will be constructed along the route. Microtunneling will be used for 1,200 feet, and the remaining 7,675 feet will be installed via open-cut trenching. Installation involves excavation, pipe laying, backfilling, surface restoration, and manhole construction using precast or cast-in-place structures.

Septic-to-Sewer Project, Phase II

HI-DESERT WATER DISTRICT | YUCCA VALLEY, CA

Construction Inspector. NV5 is serving as the Owner's Representative and providing construction support services for Phase II of the District's Septic-to-Sewer project in Yucca Valley. Identified by the Regional Water Quality Control Board as a priority area, the Town is transitioning from septic systems to a centralized wastewater system. Following Phase I, which established the initial collection and treatment infrastructure, Phase II will expand the system to serve approximately 1,900 parcels with 170,000 feet of gravity pipelines. The project, with an estimated construction cost over $64M, is expected to be completed by the end of 2025.

On-Call Inspection Services

CITY OF SEAL BEACH | SEAL BEACH, CA

Construction Inspector. Mr. Schmidt provides on-call inspection for CIP and developer projects for the City. Safety is a major concern for the City and in addition to our regular daytime inspectors, our inspectors have been called for night and weekend work to ensure traffic control is properly set up for items like Caltrans right-of way. Our inspectors provide inspections to document and determine the acceptability of the construction work in accordance with the City's approved plans, specifications, and standard details. Our NV5 inspectors report directly to the City's Project Manager.

CONTACT INFO
daniel.warren@nv5.com

EXPERIENCE
30 years

LICENSES
Water Distribution Operator Grade D3 (CA), No. 8020

Water Treatment Operator Grade 2 (CA), No. 18940

Recycled Water Users Site Supervisor Training Certificate (County Sanitation Districts of Los Angeles County)

Excavation Safety & Competent Person Training Program Certificate (National Utility Contractors Association)

Residential Water Survey Training Certificate

Trench Shoring Certified

Underground Utility Line Locator Certificate

OSHA 30-Hour Outreach Training Program Certificate

DANIEL WARREN

Construction Inspector/Special Inspector (Electrical)

Mr. Warren is a construction inspector with more than 30 years of experience in public works, including the positions Construction Inspector for the City of La Habra Heights and Grade III Water Distribution Operator and Grade II Water Treatment Operator for the Rowland Water District. Mr. Warren is extremely knowledgeable about the need for the Contractor's conformance to the approved plans and specifications, adherence to field quality control, as well as what the various heavy construction industry standards and construction principles are for water and wastewater systems. Mr. Warren has significant knowledge of all aspects of public utilities and provides expert quality control for all aspects of potable water, sewer, and recycled water works throughout his execution of his duties as an Inspector.

Project Experience

On-Call Construction Management and Inspection Services

LAS VIRGENES MUNICIPAL WATER DISTRICT | CALABASAS, CA

Construction Inspector. Mr. Warren provides as-needed Construction Management and Inspection Services to the District, including construction inspection and special inspection services. NV5 has completed many projects with LVMWD, including the Deer Lake Project for a 1-MG tank replacement, including electrical inspection, soils compaction and concrete testing, as well as electrical inspection services for the Stationary Emergency Generators for the Potable Water Pump Stations Project with 200 KW and 600 KW generators installed at four sites.

Rural Ridge Circle and Wilshire Avenue Water Main Replacement and Street Improvements

CITY OF ANAHEIM | ANAHEIM, CA

Construction Inspector. Mr. Warren provided construction inspection services for this water main replacement and street improvements project. The work consisted of two water main improvement areas: the Rural Ridge area for 4,230 LF and the Wilshire-Pearl area for 2,750 LF of 8-inch to 15-inch potable water main, tie-ins to the existing potable water system, 142 1- and 2-inch water services and meters, existing main abandonment, and final street restoration. NV5 provided full Construction Management, Resident Engineering, and Inspection Services for this project.

Arantine Hills Sewer and Water Infrastructure Projects

CITY OF CORONA | CORONA, CA

Construction Inspector. Mr. Warren provided construction inspection services for the $14.7M three-phase Arantine Hills sewer, water and street improvement projects to provide the necessary infrastructure for the Arantine Hills Development Project. The project included the construction of a new ADA-compliant buried cast-in-place sewer lift station with above-grade controls. This was connected to a second project to construct the new sewer force main with fused HDPE pipe via conventional open trench and trenchless jack-and-bore sewer construction along arterial streets and Caltrans ROW, forming 4 miles of pipeline. A third project managed simultaneously was the construction of the California Avenue Sewer at a depth of 25 feet below grade. All three projects were to be completed together for the final and finished sewer lift station to function. Construction of these improvements resulted in the need for extensive street and sidewalk improvements.

CONTACT INFO
ahmad.ahmadzai
@nv5.com

EXPERIENCE
12 years

EDUCATION
B.Sc. Civil Engineering

REGISTRATIONS
Qualified Compliance Inspector of Stormwater

Portable Nuclear Gauge Safety & U.S. D.O.T Hazmat Cert

ACI #: 01629111

ACI Concrete Field-Testing Technician – Grade I

ACI Concrete Strength Testing Technician

HAZWOPER 40-HR

AHMAD IDREES AHMADZAI

Special Inspector (Paving)/Materials Testing

Mr. Ahmadzai is a dedicated and driven professional with over a decade of experience in overseeing project management, supervision, and materials testing both in the field and laboratory settings. With a comprehensive understanding of project manager/supervisor roles and responsibilities, he possess a blend of administrative and engineering expertise. Mr. Ahmadzai's background enables him to effectively support project teams and upper management in directing and monitoring projects of various scales within specified timelines. As a collaborative team member, his reputation includes reliability, responsibility, and strong communication skills. Mr. Ahmadzai's extensive experience includes coordinating and conducting materials testing for projects ranging from large-scale infrastructure developments to smaller initiatives. Duties encompass field grading observation, compaction testing, material analysis, drilling oversight, and pile installation and testing

Project Experience

Las Virgenes Municipal Water District–Calleguas Municipal Water District Interconnection

CALLEGUAS MUNICIPAL WATER DISTRICT | AGOURA HILLS, CA

Materials Testing. The project consisted of constructing a new interconnection pipeline between Las Virgenes Municipal Water District and Calleguas Municipal Water District to improve regional water supply reliability and emergency redundancy. Mr. Ahmadzai performed compaction testing for trench backfill, aggregate base testing, concrete testing for vaults and appurtenant structures, and reinforced steel inspections. His work ensured compliance with district standards and supported the successful installation of critical water transmission infrastructure.

Saticoy Wastewater Treatment Plant Improvements

MNS ENGINEERING | SATICOY, CA

Special Inspection/Materials Testing. This wastewater treatment plant project included facility upgrades and structural improvements to enhance treatment capacity and operational efficiency. Mr. Ahmadzai conducted field density testing, structural concrete sampling and testing, reinforcing steel inspection, and anchor bolt verification. His quality assurance efforts supported long-term durability and regulatory compliance of the upgraded facility.

SCVWA Dickason Drive Water Line Project

FILIPPIN ENGINEERING, INC. | SANTA CLARA VALLEY, CA

Special Inspection/Materials Testing. This project included installation of new water pipeline infrastructure. Mr. Ahmadzai performed trench backfill compaction testing, concrete sampling for thrust blocks and appurtenant structures, and aggregate base testing to ensure agency compliance..

FY23 Watermain Replacement

FLOWERS AND ASSOCIATES | SANTA BARBARA, CA

Special Inspection/Materials Testing. This capital improvement project replaced aging water mains to improve reliability and reduce leakage. Mr. Ahmadzai performed field density testing of trench backfill, asphalt testing during roadway restoration, and concrete testing for utility structures to ensure compliance with City standards.

CONTACT INFO
chris.fernandez@nv5.com

EXPERIENCE
16 years

LICENSES/CERTIFICATES
AWS CWI

ICC S1 Structural Steel & Bolting

ICC S2 Structural Welding Inspector

ICC 86M Spray Applied Fire Proofing

ADCE/ANSI Commercial Diver

ASME SMAW 6G

ASME GTAW 6G

LADBS MANUAL/SEMI-AUTO

AWS D1.5 FCAW 3G, 4G

AWS D1.8 FCAW 1G, 4G

CHRIS FERNANDEZ

Special Inspector (Welding)/Materials Testing

Mr. Fernandez is a Certified Welding Inspector (CWI) with 16 years of professional experience in construction, welding, and inspection services. He possesses a deep knowledge of welding practices and codes, including AWS, ASME, and AISC, and is highly skilled at reading and interpreting plans to ensure projects meet quality and safety standards. Chris has extensive experience performing field inspections, creating welding procedures, and communicating quality requirements to project teams. He has also worked as a welding instructor, providing hands-on training and mentorship in shop safety, fabrication techniques, and welder qualification testing. His background spans a variety of environments, including construction sites, fabrication shops, and marine operations, highlighting his versatility and reliability. Chris holds numerous certifications, including AWS CWI, ICC Structural Welding Inspector, ASME SMAW and GTAW 6G, and ADCE/ANSI Commercial Diver, demonstrating his commitment to technical excellence and professional growth.

Project Experience

Oxnard Wastewater Treatment Plant 2021 Improvement

KENNEDY JENKS CONSULTANTS | OXNARD, CA

Special Inspection. This project involved upgrades to treatment plant structures and process equipment, including structural steel platforms, piping supports, and equipment anchorage. Mr. Fernandez performed welding inspections for structural steel framing, pipe supports, and miscellaneous metals. He ensured field welds conformed to AWS D1.1 requirements and project specifications within an active treatment facility environment.

Santa Clara River Levee Improvements

COUNTY OF VENTURA | VENTURA COUNTY, CA

Special Inspection. This project involving levee improvements along the Santa Clara River included structural steel components, reinforcement modifications, and infrastructure upgrades to enhance flood protection. Mr. Fernandez provided certified welding inspection services, including structural steel welding observation, verification of welder qualifications, review of Welding Procedure Specifications (WPS), visual inspection of field welds, and documentation of compliance with AWS D1.1 standards.

San Ricardo Well Tank Inspection

GOLETA WATER DISTRICT | GOLETA, CA

Special Inspection. This project involved inspection and maintenance of a municipal water storage tank including evaluation of welded steel components. Mr. Fernandez conducted visual inspection of welded tank seams and structural attachments, documented weld conditions, and verified repair welding met applicable standards for water infrastructure facilities.

CONTACT INFO
matthew.habberfield@nv5.com

EXPERIENCE
24 years

LICENSES/CERTIFICATES
DSA Masonry
No. 5281

ICC Fireproofing
No. 8029830

ICC Reinforced Concrete
No. 8029830

ICC Structural Steel & Bolting
No. 8029830

ICC Prestressed Concrete
No. 8029830

ICC Structural Masonry
No. 8029830

ACI Concrete Field Testing Technician Grade 1
No. 01192407

Nuclear Density Gauge Certified

MATTHEW HABBERFIELD

Special Inspector (Concrete & Structural)

Mr. Habberfield has been in the construction industry for over 23 years and has provided Public Works inspection and special inspections for over 12 years. Inspections performed have ranged from Public Works Infrastructure, DSA school house, HCAI hospital, commercial, industrial and private residential inspection. Mr. Habberfield is a multi-card inspector currently holding 8 certifications. He will collaborate closely with the project IOR and QA manager and will oversee and coordinate NV5's field inspection and testing program.

Project Experience

Waterline Replacement
CITY OF VENTURA | VENTURA, CA
Special Inspector. Mr. Habberfield performed inspection of reinforced concrete thrust blocks, vault structures, and structural appurtenances. Verified reinforcing steel installation and concrete placement for municipal waterline improvements.

D210 Project – 4180 Guardian Street
CALLEGUAS MUNICIPAL WATER DISTRICT | THOUSAND OAKS, CA
Special Inspector. Mr. Habberfield provided inspection of reinforced concrete foundations, structural slabs, and masonry site structures for water infrastructure improvements. Verified reinforcing steel placement, anchor bolt layout, embedments, and concrete placement in accordance with approved plans and specifications.

Las Virgenes Municipal Water District–Calleguas Municipal Water District Interconnection
CALLEGUAS MUNICIPAL WATER DISTRICT | WESTLAKE VILLAGE/THOUSAND OAKS AREA, CA
Special Inspector. Mr. Habberfield performed structural inspection of vaults, reinforced concrete structures, and pipeline appurtenances associated with intertie improvements. Oversaw rebar placement, formwork, concrete pours, and masonry construction for utility structures.

Lake Sherwood Pump Station
CALLEGUAS MUNICIPAL WATER DISTRICT | LAKE SHERWOOD, CA
Special Inspector. Mr. Habberfield conducted inspection of structural concrete foundations, equipment pads, and CMU block walls. Verified reinforcing steel, dowels, anchor systems, and concrete placement for pump station structural components

Fitzgerald Pump Station
H2O URBAN SOLUTIONS | VENTURA COUNTY, CA
Special Inspector. Mr. Habberfield performed inspection of reinforced concrete foundations, slabs, and masonry block structures. Confirmed compliance with structural plans and specifications.

OSR Feeder, LFP & Miscellaneous Valves
CALLEGUAS MUNICIPAL WATER DISTRICT | VENTURA COUNTY, CA
Special Inspector. Mr. Habberfield inspected reinforced concrete valve vaults, thrust blocks, and structural slabs. Confirmed proper reinforcing steel placement, embedments, and structural concrete installation for underground utility Improvements.

CONTACT INFO
james.iverson@nv5.com

EXPERIENCE
30+ years

EDUCATION
A.S. Construction Technology for Construction

LICENSES/CERTIFICATES
Portable Nuclear Gauge operator

Portable Nuclear Gauge Safety & US DOT Hazmat

Los Angeles City Deputy Grading Inspector

ACI Field Testing Technician, Grade I

ICC Reinforced Concrete

ICC Soils

City of Simi Valley ICC Concrete/Grading Inspector

40-HR 10-HR OSHA (Numerous safety courses)

Metrolink & NCTD Railroad Worker Cert

U.S. Government Anti-Terrorist Training Class

JAMES "JIM" IVERSON

Special Inspector (Concrete)/Materials Testing

Mr. Iverson has over 30 years of experience as a soil technician and special inspector. His extensive experience includes observation and monitoring of large-scale hillside grading projects, public works infrastructure, and new developments. Mr. Iverson is a multi-certified inspector of soils and reinforced concrete. He has worked on projects such as the SB County Bella Vista Low Water Crossing, City of Burbank Valley Pumping Station Upgrade, Santa Monica Debris Basin Improvement, City of Santa Barbara FY21B Watermain Replacement, Oxnard WWTP 2021 Improvement, and City of Santa Barbara Desal Conveyance Main.

Project Experience

On-Call Contract Construction Management & Inspection Services

LAS VIRGENES MUNICIPAL WATER DISTRICT | CALABASAS, CA

Construction Management/Inspection/Soils Testing. Mr. Iverson provided construction management, inspection, and soil testing services in support of the Las Virgenes Municipal Water District's on call contract. His responsibilities included coordinating field inspection activities, overseeing construction progress for compliance with project plans and specifications, and performing soil testing to support quality assurance and project documentation. Mr. Iverson worked closely with District staff, contractors, and project stakeholders to support timely issue resolution and successful project delivery

Marion Walker Pressure Improvements

CASITAS MUNICIPAL WATER DISTRICT | OAK VIEW, CA

Materials Testing/Special Inspection. Mr. Iverson provided materials testing and inspection services for the Casitas Municipal Water District's Marion Walker Pressure Improvement project. This role showcased his expertise in ensuring the quality and compliance of construction materials for critical infrastructure projects.

Various Improvement Projects

GOLETA WATER DISTRICT | GOLETA, CA

Materials Testing/Special Inspection. Mr. Iverson provided materials testing and and soil density testing services for several Goleta Water District projects. His expertise ensured the quality and compliance of construction materials, contributing to the successful completion of the District's Paving Project and Water Relocation Phase II project.

Various Projects

CALLEGUAS MUNICIPAL WATER DISTRICT | THOUSAND OAKS, CA

Materials Testing/Special Inspection. Mr. Iverson provided materials testing and inspection services for the Calleguas Municipal Water District on various projects, including:

- NPV Desalter Development – Over-Excavation
- CCNB Backfill Replacement
- LVMWD-CMWD Interconnection
- OSR Feeder, LPF, and Miscellaneous Valves
- Lake Sherwood Pump Station
- Plant Sink Hole

CONTACT INFO
scott.moors@nv5.com

EXPERIENCE
35 years

EDUCATION
B.S. Geological Sciences

LICENSES/CERTIFICATES
Professional Geologist
No. 6100

Certified Engineering
Geologist No. 1901

Certified Hydrogeologist
No. 607

AFFILIATIONS
American Concrete Institute

American Society of Civil Engineers

Association of Environmental & Engineering Geologists

American Public Works Association

California Asphalt Pavement Association

California Council of Testing and Inspection Agencies

D. SCOTT MOORS, PG, CEG, CHG

Geotechnical Engineer/Special Inspector/Materials Testing

Mr. Moors is an experienced, multidisciplinary business and project manager with notable expertise in geotechnical engineering, construction quality assurance, materials testing, seismic hazard evaluation, geotechnical review, landslide studies, groundwater studies, pavement evaluation, and environmental remediation. He has 35 years of technical expertise in municipal consulting, project management and engineering and environmental geology and has overseen construction inspection and materials testing of multistory buildings, over 18 highway bridges, more than 1.5 M tons of asphalt pavements and has presented short courses on Pavement Maintenance and Rehabilitation and Public Works Construction Inspection for APWA.

Project Experience

On-Call Construction Management and Inspection Services

LAS VIRGENES MUNICIPAL WATER DISTRICT | CALABASAS, CA

Special Inspector/Materials Testing. Mr. Moors provides as-needed Construction Management and Inspection Services to the District, including construction inspection and special inspection services. NV5 has completed many projects with LVMWD, including the Deer Lake Project for a 1-MG tank replacement, including electrical inspection, soils compaction and concrete testing.

Morro Bay Wastewater Treatment Plant Concrete Evaluation

MORRO BAY PUBLIC WORKS | MORRO BAY, CA

Project Principal/Project Manager. Mr. Moors served as Project Principal/Project Manager for non-destructive field testing and sampling concrete from various elements of the plant. Field testing included Ground Penetrating Radar, Schmidt Hammer testing, and chipping hammer survey. Lab testing included compression testing and petrographic examination per ASTM C856.

Sycamore Canyon Dam Modification Geotechnical Evaluation

COUNTY OF VENTURA, PUBLIC WORKS | SIMI VALLEY, CA

Project Manager/Principal Geologist. Mr. Moors served as Project Manager/Principal Geologist for geotechnical evaluation of proposed spillway modifications for the earth-filled dam. Also evaluated ASR-affected concrete through pertrographic examination.

Tapia Waste Water Treatment Plant Concrete Evaluation

LAS VIRGENES MUNICIPAL WATER DISTRICT

Project Principal / Project Manager for nondestructive field testing and sampling concrete from Digester No. 1. Field testing included Ground Penetrating Radar, Schmidt Hammer testing, and chipping hammer survey. Lab testing included compression testing and petrographic examination per ASTM C856.

Municipal Geotechnical Reviewer

MUNICIPAL REVIEW | 19+ CITIES AND COUNTIES IN SOUTHERN CALIFORNIA.

Principal Geologist/Geotechnical Reviewer. Mr. Moors has served as the Principal Geologist/Geotechnical Reviewer for the Cities of Malibu, Ventura, Agoura Hills, Calabasas, Camarillo, Hidden Hills, Moorpark, Oxnard, Palmdale, Palos Verdes Estates, Santa Monica, Santa Barbara, Santa Clarita, Santa Paula, Simi Valley, Thousand Oaks, West Hollywood,; and for Ventura County and Santa Barbara County. He has authored Geotechnical Review Guidelines for multiple cities.

CONTACT INFO
ed.sullivan@nv5.com

EXPERIENCE
35 years

EDUCATION
A.A. Geology

AFFILIATIONS
American Public Works Association

Coast Geological Society

ED SULLIVAN

Special Inspector/Materials Testing

With over 35 years of experience in geotechnical and materials inspection and testing, Mr. Sullivan brings a wealth of expertise to his role as Construction Services Manager. Throughout his career, he has demonstrated a strong commitment to ensuring the integrity and safety of construction projects across a diverse range of areas, including large grading operations, soldier pile walls, pipeline construction, and roadway and bridge construction. Mr. Sullivan's extensive experience also encompasses overseeing drilled pier foundations, reinforced earth walls, and firewater/process piping construction, as well as conducting hydro-testing and blast monitoring. His proven track record includes providing materials inspection and testing services to esteemed clients such as the Calleguas Municipal Water District, showcasing his dedication to delivering quality and reliability in every project he undertakes.

Project Experience

On-Call Construction Management and Inspection Services
LAS VIRGENES MUNICIPAL WATER DISTRICT | CALABASAS, CA

Construction Inspection/Materials Testing. Mr. Sullivan provides as-needed Construction Management and Inspection Services to the District, including construction inspection and special inspection services. NV5 has completed many projects with LVMWD, including the Deer Lake Project for a 1-MG tank replacement, including electrical inspection, soils compaction and concrete testing.

Salinity Management Pipeline (SMP)
CALLEGUAS MUNICIPAL WATER DISTRICT | THOUSAND OAKS, CA

Materials Testing. Mr. Sullivan provided materials testing services for the pipeline backfill and structures, and geotechnical input regarding HDD crossings for numerous phases of the SMP project. This 7-mile long, 60-inch to 30-inch diameter pipeline extends from near Camarillo to an ocean outfall offshore from Oxnard. The purpose of the pipeline is to convey poor-quality surface and groundwater (primarily high total dissolved solids and chlorides) from the Calleguas Creek drainage to the Pacific Ocean. Mr. Sullivan oversaw the technicians who performed materials testing services.

Pipeline Construction (Los Angeles Avenue)
CALLEGUAS MUNICIPAL WATER DISTRICT | MOORPARK, CA

Construction Inspection/Materials Testing. Mr. Sullivan provided construction inspection, consultation, and materials testing for the construction of a 3-mile section of a 72-inch water pipeline for the Las Posas Basin Aquifer Storage and Recovery (ASR) project including the Arroyo Simi Tunnel and four jack and bore operations.

Pipeline Construction
CALLEGUAS MUNICIPAL WATER DISTRICT | EAST VENTURA COUNTY, CA

Construction Inspection/Materials Testing. Mr. Sullivan provided construction inspection/consultation and materials testing for approximately 30 miles of pipeline within the Calleguas MWD service area. Project experience includes Grandsen Pump Station Phase 1 and Phase 2, Wellfield Emergency Generators project, Simi Valley Recycled Water System project, Las Posas Basin Aquifer Storage and Recovery (ASR) project, Lake Bard Plant Expansion and Oxygenation project, Regional Salinity Control project, several concrete and steel reservoirs, and various operation improvement projects.

CONTACT INFO
jesse.wooten@nv5.com

EXPERIENCE
35 years

LICENSES/CERTIFICATES
Caltrans Test Methods: 216, 231, 125

Radioactive Materials Operator (Nuclear Gauge)

JESSE WOOTEN

Special Inspector (Paving)/Materials Testing

Mr. Wooten has 35 years of experience in construction materials testing and inspection and geotechnical testing. He has fulfilled roles as Field Operations Manager, Radiation Safety Officer, and Senior Field Technician on a variety of grading and special inspection/materials testing projects for roadways and commercial and residential development. Mr. Wooten's responsibilities have included supervising field technicians; staff training; jobsite safety; inspection and testing related to asphalt, concrete, and soil, including grading observation, density tests on compacted fill, and retaining wall backfill observation; shoring installation monitoring; laboratory testing; and verification of constructions methods, equipment, and materials per project specifications.

Project Experience

Calleguas Grandsen Pump Station No. 2
VENTURA COUNTY, CA

Inspection/Soils Testing. Mr. Wooten provided inspection and testing of soils; grading observation; density tests on compacted fill in pipe trenches; verification of constructions methods, equipment, and materials per project specifications; monitoring of shoring installation; sampling concrete; and observation and testing for placement of aggregates and asphalt.

Phelps Road Sanitary Sewer Line
CITY OF GOLETA | GOLETA, CA

Inspection/Soils Testing. Mr. Wooten provided inspection and testing of soils; backfill observation; density tests on compacted fill; and verified constructions methods, equipment, and materials per project specifications for the 30-inch sanitary sewer upgrade system.

Calleguas 593 SMP 1A Emergency Repair
VENTURA COUNTY, CA

Mr. Wooten observed trenching, shoring installation, and backfill for the installation of a ruptured brine line pipe repair. Responsibilities also included verifying spring line flow and subgrade stabilization, inspection and testing of soils, grading observation, density tests on compacted fill, and verifying cement slurry backfill

North Pleasant Valley Water Desalter
CITY OF CAMARILLO | CAMARILLO, CA

Inspection/Soils Testing. Mr. Wooten provided inspection and testing of soils; grading observation; density tests on compacted fill; observations and verification of building and structure over excavation and backfill; sampling and casting of concrete cylinders for laboratory testing; and verification of constructions methods, equipment, and materials per project specifications.

Mason Road Sewer Line
GOLETA SANITARY DISTRICT | SANTA BARBARA COUNTY, CA

Observed trenching, shoring installation, and backfill for the installation of a 42-inch Hobas pipe force sewer main. Responsibilities also included verifying spring line flow and subgrade stabilization.

CONTACT INFO
rafael.gutierrez@nv5.com

EXPERIENCE
20 years

EDUCATION
A.A. Computer-aided Drafting & Design

RAFAEL GUTIERREZ

Construction Administrator

Mr. Gutierrez has more than 20 years of experience as a design engineer and construction administrator for various infrastructure and capital improvement projects, including water/wastewater and transportation projects. His qualifications include the ability to review and prepare plans, specifications and cost estimates; surveying; and establishing, maintaining and fostering positive working relationships with agency staff. Mr. Gutierrez is proficient in CAD and other design software. He also has extensive people skills and works well with executives, vendors, surveyors, project engineers, architects and drafters in a variety of work environments.

Project Experience

Rural Ridge Circle and Wilshire Avenue Water Main Replacement

CITY OF ANAHEIM | ANAHEIM, CA

Inspector/CADD. Mr. Gutierrez provided inspection and drafting services during the construction of this water main replacement project. The work to be undertaken consists of two water main improvement areas: the Rural Ridge area and Wilshire-Pearl area. The Rural Ridge improvement area includes installation of a 12-inch PVC pipe (1,560 LF) on Rural Ridge Drive/E. Rural Ridge Circle from Nohl Ranch Road to Westridge Pump Station, an 8-inch PVC pipe (1,820 LF) on E. Rural Ridge from S. Rural Ridge Drive to E. Willowick Drive, an 8-inch PVC pipe (480 LF) on Santiago Way from E. Rural Ridge Drive to the end of the cul-de-sac, and a 6-inch PVC pipe (370 LF) on Silverado Way to the end of the cul-de-sac. The Wilshire-Pearl improvement area includes installation of 12-inch Ductile-Iron pipe (1,915 LF) on N. Wilshire Avenue from N. Loara Street to N Pearl Street, and 8-inch Ductile-Iron pipe (825 LF) on Pearl Street from N. Wilshire Avenue to N. Dwyer Place.

Diversion Pipeline

CITY OF CULVER CITY | CULVER CITY, CA

CADD/Construction Administration. Mr. Gutierrez provided construction administration services for the construction of diversion sewer pipes to abandon Mesmer and Overland Sewer Pump Stations. The goal of the project was to divert flows from four of the City's sewer pump stations to a new sewage pump station, Bankfield Station, which is another project for which NV5 provided construction management and inspection services during construction.

Graves Reservoir Replacement

CITY OF SOUTH PASADENA | SOUTH PASADENA, CA

Construction Administration. Mr. Gutierrez assisted with construction administration for the demolition and construction of a new 1.2-mg partially buried cast-in-place reservoir sited in a residential neighborhood. An existing well was re-equipped as the source of groundwater for the reservoir. The existing well pump was renovated and a new pumping station was constructed with two 1,400-gpm VFD pumps that pump from the reservoir to the City water system. A new Sodium Hypochlorite Generation System, new pre-treatment with state-of-the-art GAC for PCE and CCl4 removal followed by a new Ion Exchange System for removal of nitrate as NO3, ClO4, and sulfate, were installed. NV5 provided full-service CMS, including Construction Management, Inspection, Lead and Asbestos Demolition Oversight, Public Relations, SRF Loan Reimbursement Management, Biological Monitoring, Geotechnical and Materials Testing for this comprehensive project.

CONTACT INFO
linda.wheeler@nv5.com

EXPERIENCE
35 years

EDUCATION
Community college coursework

LINDA WHEELER

Construction Administrator

Ms. Wheeler has more than 35 years of experience in construction administration and as an administrative assistant. She has provided support for a variety of civil engineering and capital improvement projects, including projects focused on structural design, water/wastewater, utility assessment, utility undergrounding, street improvements, and recreational facility improvements. Her responsibilities have included, but are not limited to, preparing proposals; processing invoices; recording meeting minutes; preparing budgets, payroll, and purchase orders; and supervising clerical staff. Ms. Wheeler is experienced in Microsoft Excel and Word and is proficient with Construction Management Information Systems (CMIS) software.

Project Experience

Diversion Sewer Pipes to Abandon Fox Hills Pump Station

CITY OF CULVER CITY | CULVER CITY, CA

Construction Administration. Ms. Wheeler supported the NV5 team that provided construction management and inspection services for this project, which constructed 1,230 LF of 18-inch diversion sewer mains from Fox Hills pump station to Bankfield pump station. The project included constructing 18-inch FRPM (Fiberglass-reinforced pipe) in a 36-inch RCP casing by microtunneling (1,223 LF) at an average depth of 28 feet to 30 feet; constructing new manholes; pavement restoration of all existing improvements; 18-inch force main tie-in near City of Los Angeles manhole and associated temporary bypass system; 1,600 LF of abandonment of portions of the existing dual force 12-inch and 18-inch mains; 1,230 LF of CCTV inspection; and demolition of Fox Hills pump station and the Overland pump station.

Project/Construction Management and Inspection for FY 2019-20 City Street Improvements

CITY OF SOUTH PASADENA | SOUTH PASADENA, CA

Construction Administration. Ms. Wheeler supports the NV5 team providing construction management and inspection services for street projects involving pavement rehabilitation and replacement of mains, valves, water services, meters, and other appurtenances. The work also includes repair of damaged PCC curb and gutter, sidewalks, and driveways; removal and disposal of existing asphalt roadway sections; cold milling of existing pavement; subgrade preparation and compaction; asphalt concrete pavement; removal and reconstruction of damaged PCC curb and gutter, sidewalk, driveway approaches, and ADA curb ramps; utility adjustments; installation of new water meters, services, valves, and appurtenances; sewer line repairs; traffic signing; thermoplastic striping and pavement markings; and traffic control. T

Second Bridge and Roadway Project

CITY OF LAKE HAVASU CITY | LAKE HAVASU CITY, AZ

Construction Administration. Ms. Wheeler supports the NV5 team providing complete engineering design services for this new bridge and roadway project. This vital infrastructure project will enhance connectivity from the mainland to the island in support of the growing needs of the Lake Havasu City community. Our services include bridge and roadway design, utility design, traffic engineering, geotechnical engineering, surveying, and environmental services. In addition to the design effort, NV5 will also be responsible for managing the Construction Manager at Risk (CMAR) and providing construction support services.

CONTACT INFO
bocasio@pacificresources services.com

EXPERIENCE
25+ years

EDUCATION
M.P.A. Public Affairs

B.S. Urban & Regional Planning

Valley Leadership Institute

BENJAMIN OCASIO

Labor Compliance *(Pacific Resources Services)*

Mr. Ocasio has more than 25 years of years of experience providing prevailing wage monitoring and enforcement services, Project Labor Agreement/Project Stabilization Agreement, workforce and business outreach services, and Disadvantaged Business Enterprises compliance services on numerous large public works projects throughout Southern California. He began his prevailing wage career as a Management Assistant with the City of Los Angeles Office of Contract Compliance. He also received training as a Caltrans Inspector.

Project Experience

Hacienda Road Safety Improvements

CITY OF LA HABRA HEIGHTS | LA HABRA HEIGHTS, CA

Labor Compliance. As a subconsultant to NV5, Pacific Resources Services is providing labor compliance services for the City's Hacienda Road Safety Improvement Project. Our team is providing construction management and inspection; labor compliance and wage monitoring; and materials testing and deputy inspection services for the City's Hacienda Road Safety Improvement Project. The project includes the installation of new traffic signals and ancillary equipment at Hacienda Road and Avocado Crest Road; and the installation of traffic signage and striping. The project is located on Hacienda Road between the south and north city limits. The project includes funding from a state Highway Safety Improvement Program grant.

Wilmington Avenue Safe Streets Pedestrian/Bicycle Improvements

CITY OF COMPTON | COMPTON, CA

Labor Compliance. As a subconsultant to NV5, Pacific Resources Services is providing labor compliance services for the City's Wilmington Avenue Safe Streets Pedestrian/Bicycle Improvements project from Rosecrans Avenue to the southern City boundaries. The work includes pavement rehabilitation, including full-depth AC reconstruction and AC resurfacing; PCC improvements, including ADA-compliant curb ramps, bus pads, and median, sidewalk and driveway improvements; traffic signal modifications; installation of bus shelters and other site furnishings; pedestrian lighting improvements; landscaping and irrigation; and signing & striping.

Bellflower Boulevard Rehabilitation

CITY OF BELLFLOWER | BELLFLOWER, CA

Labor Compliance and Federal Funding. As a subconsultant to NV5, Pacific Resources Services provided labor compliance and federal funding services for the federally funded Bellflower Boulevard Rehabilitation project from Artesia Boulevard to South City Limit. The scope of work included reconstruction and resurfacing of existing asphalt pavement; removal and reconstruction of PCC sidewalks, driveways, curb and gutter, cross-gutters, drain inlets, and ADA curb ramps; landscaping and irrigation; adjustment of utilities to grade; replacement of existing traffic loops; and traffic striping and signage.

HI-DESERT WATER DISTRICT

ASSISTANT RESIDENT ENGINEER'S REPORT

HDWD PHASE II SEWER COLLECTION SYSTEM | Project: 227523-0001805.00 | Print Date: 02/17/2026 Pending

LOCATION: Martinez Trail, Pinon Drive, Pinon Ct. in Yucca Valley.

DESCRIPTION OF OPERATION: Fine grading and Asphalt paving

SAFETY ISSUES: Traffic control

JOB STAMP:	HDWD PHASE II AND III SEWER COLLECTION SYSTEM PROJECT															
WSWD:	Working Day	**HOURS AND ITEM NUMBERS**								**INSPECTOR:**	Haykaz Aghajanian					
USER HOURS:	8.00 Reg, 1 OT									**DATE:**	12-10-2025					
SHIFT HOURS:	0600 to 1600 (10)									**DAY**	**S**	**M**	**T**	**W**	**TH**	**F**	**S**
O.T. HOURS:	1430 to 1600 (1.5)													X			
REPORT NO:	HA165									**WEATHER:**	Sunny **Current Temp:** 69 °F **W:** N 7 TO 10 MPH **L:** 51 °F | **H:** 69 °F						
EQUIPMENT AND / OR LABOR																

CONTRACTOR EQUIPMENT										**CONTRACTOR EMPLOYEE**	
EQ. NO.	**MAKE**	**DESCRIPTION**								**EMPLOYEE**	**TITLE**
Sukut Construction											
23533B	Chevy	Chevy-P/U-Lic-23533B4	9						9	Curtis Miller	Grade checker/operator
202393	CAT	CS11GC-CAT-Viberatory-Soil-Compactor	9						9	Brad Navario	Operator
1403	CAT	CAT-Blade-Motor-Grader	9						9	Paul Feliciano	Operator
541	Chevy	Chevy-Utility-P/U	9						9	Eric Duarte	Labor
									9	Efrain Velasquez	Laborer
250035	CAT	CAT-Skip-Loader-(ED6W43)	9						9	Paul Fraijo	Operator
									9	Jose Rodriguez	Laborer
									9	Abraham Gonzalez	Labor
C5-J5	Peterbilt	Water-truck-Lic-769635	9						9	Jack Ortez	Operator
28065F	Chevy	Chevy-P/U-Lic-28065F4								Mendenhall William	Foreman
PTI (Premier Testing and Inspection, INC.)											
									9	Mwiza Mhango	Inspector
26620F	Ford	Ford-P/U-Lic-26620F3							9	Robert Hinch	Inspector

HI-DESERT WATER DISTRICT

ASSISTANT RESIDENT ENGINEER'S REPORT

HDWD PHASE II SEWER COLLECTION SYSTEM | Project: 227523-0001805.00 | Print Date: 02/17/2026 Pending

Matich Corporation											
7-289	Ford	Ford-P/U-Lic-6949BN3	9.5						8.5	Gilbert Rodríguez	Foreman
14-141	John-Deere	Deere-Skid-Loader-(JJ7A68)	1						1	Gilbert Rodríguez	Foreman
15-159	CAT	CAT-SE60-V-Asphalt-Screed-(AE7N53)	8						9.5	John Lamas	Operator
			8						9.5	Christin Lamas	Screedman
			8						9.5	Eduardo Navarro	Screedman
16-140	CAT	CAT-Tandem-Vibratory-Rollers	8						9.5	Jim Valente	Operator
16-136	CAT	CAT-CW34-Pneumatic-Rollers	7						8.5	Mario Juarez	Operator
16-132	CAT	CAT-CB34B-Tanem Vibratory-Rollers	1						1	Mario Juarez	Operator
16-132	CAT	CAT-CB34B-Tanem Vibratory-Rollers	7						7.5	John Delgado	Operator
14-145	CAT	CAT-262D3-Skid-Steer-Loader	1						2	John Delgado	Operator
5-026	Freightliner	Sweeper-Lic-619076	7						7	Russel Follett	Operator
None1	Mikasa	MQ-Mikasa-22-Plate-Vibrator	8						9.5	Irving Reyes	Laborer
			8						9.5	Bernie Ayon	Laborer
			8						9.5	Jorge Cortez	Laborer
			8						9.5	Nolberto Gonzales	Laborer
CAL-WESTERN WEED CONTROL, INC											
02	Ford	Ford-P/U-Lic-73062W2	8						8	Guillerrao Grajeda	Spray Operator

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Sukut Construction

Project sites: Martinez Trail, Pinon Drive, Pinon Ct. in Yucca Valley.

Crew of (12) at project site approx. at 6:30 AM and off the site approx. at 4:30 PM.

Work description: Fine grading and asphalt paving

• Mendenhall William (Foreman).

• Curtis Miller (Grade Checker).

• Malcolm Driggs (Grade Checker).

• Paul Feliciano was operator of the CAT-14M Motor Grader Blade (Equipment number 1403, Gov. Code BP9K99, SUKUT Equipment, Inc.) approx. for 9.5 Hours.

• Ryan Mckenna was operator of a skip loader CAT-415 with equipment number 2500351, QUINN Rental, Gov. Code (LR9B79) approx. for 9.5 Hours.

• Paul Fraijo was operating of a skip loader CAT 415 (Equipment number 2500352, Gov. Code ED6W43, CAT QUINN Rentals) approx. for 9.5 Hours.

• Brad Nazario was operator of the CAT-CS11GC Vibratory Compactor (Equipment number 2023936, Gove. Code UN6L55, CAT QUINN Rentals) approx. for 9.5 Hours.

• Eric Duarte (laborer) and was driver of a Chevy P/U (SUKUT 541) helper approx. for 9.5 Hours.

• Jack Ortez (Teamster) of a (Peterbilt Lic-769635) water-truck with a equipment number (C5-J5, C5 EQUIPMENT Rentals) approx. for 9.5 hours.

• Efrain Velasquez, Jose Rodriguez and Abraham Gonzalez were involved in labor tasks approx. for 9.5 hours.

PTI (Premier Testing and Inspection, INC.)

Robert Hinch and Mwiza Mhango were performing "Nuclear-Density-Gauge-Testing" for the paved asphalt on Martinez Trail, Pinon Drive, Pinon Ct. approx. for 9-Hours.

Matich Corporation

Project sites: Martinez Trail, Pinon Drive, Pinon Ct. in Yucca Valley.
Work description: 3.5" of (1/2" PG 70-10 Asphalt Paving).

Crew of (12):
Contractor paved the following roads:
a)- Pinon Ct. (Cul-de-sac).
b)- Pinon Drive.
The asphalt is being laid down at temp = 275 to 301

• Gilbert Rodríguez was foreman and driver of a Ford with lic-69498N3 and a equipment number 7-289.
• Gilbert Rodríguez was operating skid-Steer for removing of debris approx. for 1-Hour.
• John Cleland was operator of a CAT-SE60 paver approx. for 8-Hours.
• Robert Diaz was a Screedman approx. for 8-Hours.
• Justin Kinzle was a Screedman approx. for 8-Hours.
• Ron Molina was operator of a CAT-CW34 (Roller) with equipment number 16-132 and Gov. Code (EU9L47) and a CAT-CB34B roller approx. for 8-Hous.
• Mario Juarez was operator of a CAT-CW34 roller with equipment number 16-136 and Gov. Code (CT4T74) approx. for 8-Hous.
• Marcos Garcia was operator of CAT-CB34B roller with equipment number 16-132 and Gov. Code (EU9L47) approx. for 8-Hours.
• Russell Follett operator (Sweeper) Freightliner Lic-619076 equipment number (5-026approx. for 7-Hours.
• Lorenzo Cortez (Laborer) was driver of a (Crew Truck) Ford pickup with Lic-64159U3 and trailer Lic-SE705317. Spraying Tac Coat on the face of gutter's approx. for 9.5-Hours.
• David Cortez (Laborer)) approx. for 9.5-Hours.
• Norberto Gonzales (Laborer) approx. for 9.5-Hours.
• Noe Hernandez was a laborer approx. for 9.5-Hours.

Number of loads: 80
Total weight of today's asphalt=1536.88 Tons

CAL-WESTERN WEED CONTROL, INC

Guillerra Grajeda (Spray Operator) Ford P/U with Lic-73062W2.

Misc / Visitors / Instructions to Contractor

ITEM #	ITEM DESCRIPTION	LOCATION	QUANTITY	
				-
INSPECTOR SIGNATURE:		Haykaz Aghajanian	**NAME:**	Haykaz Aghajanian

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T-intersection of Cardillo Trail and Pinon Drive, the photo was captured facing northwest.

T-intersection of Primavera Drive and Pinon Drive, the photo was captured facing west.

T-intersection of Primavera Drive and Pinon Drive, the photo was captured facing northeast.

T-intersection of Cardillo Drive and Pinon Drive, the photo was captured facing northwest.

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T-intersection of Pinon Ct and Pinon Drive, the photo was captured facing southwest.

T-intersection of Cardillo Trail and Pinon Drive, the photo was captured facing south.

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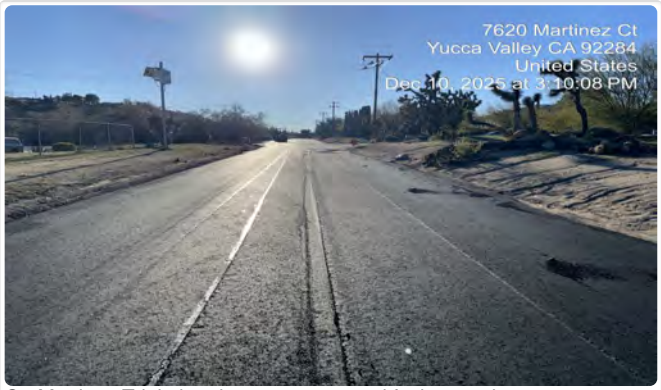
On Pinon Drive, the photo was captured facing northwest.

T-intersection of Pinon Drive and Martinez, the photo was captured facing northeast.

T-intersection of Pinon Drive and Martinez, the photo was captured facing northwest.



On Martinez Trial, the photo was captured facing southwest

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On Martinez Trial, the photo was captured facing northeast.

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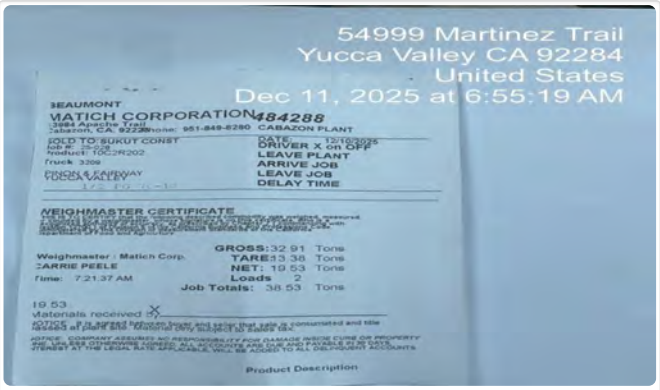

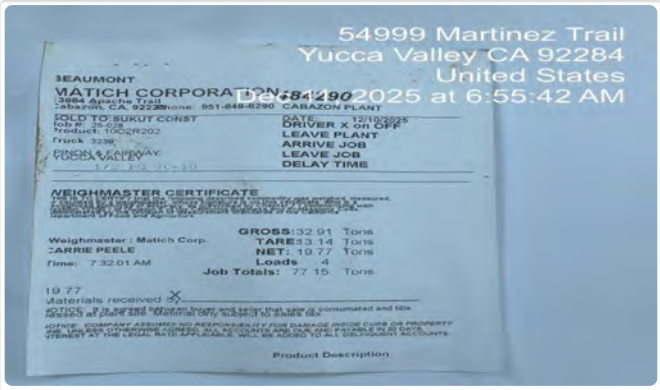

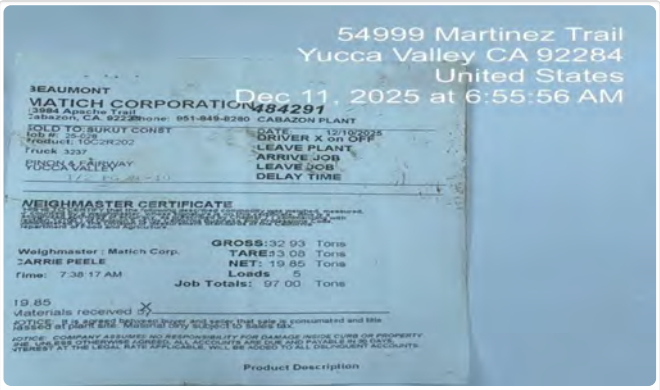

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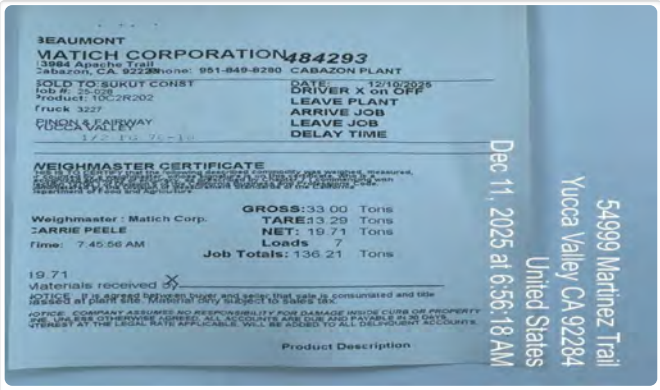

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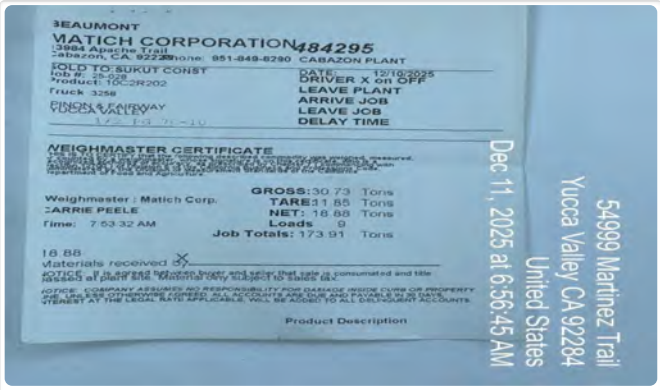

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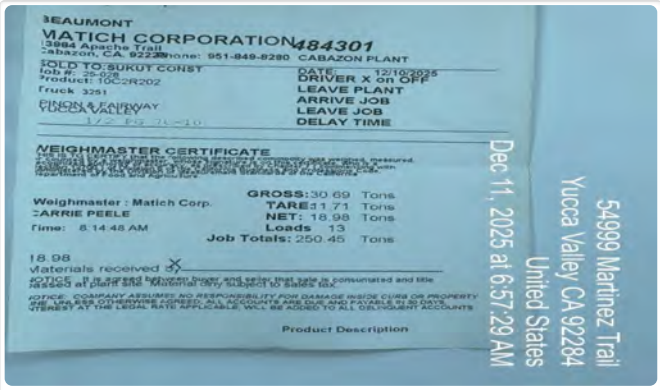

AGENDA ITEM NO. 10.C

DATE: May 4, 2026

TO: JPA Board of Directors

FROM: General Manager

SUBJECT: Climate Action and Adaptation Plan (CAAP): Annual Update

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The Las Virgenes-Triunfo Joint Powers Authority (JPA) approved funding for this matter in the JPA Budget. On April 7, 2026, the LVMWD Board, acting as Administering Agent of the JPA, received this annual report on the Climate Action and Adaptation Plan.

SUMMARY:

The Climate Action and Adaptation Plan (CAAP) was developed and adopted in October 2023 by both the Las Virgenes Municipal Water District (LVMWD) Board and the Las Virgenes-Triunfo Joint Powers Authority (JPA) to reduce greenhouse gas emissions and improve climate resilience in alignment with California's state goals. The CAAP outlines 110 actions across 22 measures to lower emissions, strengthen infrastructure against climate impacts (including wildfires), diversify water supplies, and maintain eligibility for grants and permits.

Since adoption, five actions have been completed, 51 are underway, 52 have not yet started, and two were deemed infeasible. A key project in 2025 was the substantial completion of one megawatt of solar photovoltaic at the Rancho Las Virgenes Farm Sprayfields. Ongoing efforts include water conservation programs, recycled water reductions, regional water supply partnerships, infrastructure hardening in high fire hazard zones, and development of advanced water purification facilities.

Three new actions were added to diversify and strengthen the District's water supply portfolio, including studying alternative supplies, evaluating the feasibility of seawater desalination, and securing groundwater storage agreements with the latter completed.

Staff is requesting Board feedback on continued CAAP implementation, including authorization to initiate studies for potential additional solar photovoltaic projects—such as floating solar at Las Virgenes Reservoir and solar installations at District Headquarters—to reduce long-term energy costs and greenhouse gas emissions.

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

There is no financial impact associated with this CAAP annual update.

DISCUSSION:

The State of California has enacted legislation over the past several years that aims to reduce greenhouse gas emissions to mitigate the effects of climate change. Signed into law by Governor Brown in 2016, Senate Bill (SB) 32 established a requirement to reduce statewide GHG emissions by 40% below 1990 levels by the year 2030. Executive Order (EO) B-55-18 set a longer-term target to achieve carbon neutrality by the year 2045. While the District is not directly required to meet these targets, the District should do its part to limit its carbon footprint, while simultaneously preparing for the effects of climate change that lie ahead. Future legislation and regulations may also set mandates on water and wastewater utilities because the conveyance and treatment of water accounts for a large percentage of energy demands. Additionally, most grant and low-interest loan programs now require applicants to have an adopted CAAP to be eligible and competitive for funding. The development and active implementation of CAAP will ensure that the District remains competitive for grant and low interest loans, particularly those for the Pure Water Project Las Virgenes-Triunfo. A CAAP was also necessary to renew the NPDES Permit for discharges to Malibu Creek.

On January 9, 2023, the JPA authorized the Administering Agent/General Manager to execute a professional services agreement with Rincon Consultants, Inc. for development of a Climate Action and Adaptation Plan (CAAP). Since that time, a CAAP was developed and adopted by both the JPA and LVMWD Boards. The CAAP provides a roadmap for reducing greenhouse gas (GHG) emissions in alignment with State goals. It also provides guidance for increasing the resilience of critical facilities, infrastructure, services, and resources to climate change impacts, including but not limited to wildfires. LVMWD-only facilities and operations primarily consist of those associated with the drinking water system, including pump stations and the Westlake Filtration Plant. The CAAP also incorporates JPA facilities and operations.

On October 3, 2023, the Board was presented with a final CAAP, at which time Resolution No. 2627 adopting the 2023 CAAP, was approved. On October 2, the JPA had also adopted the CAAP via Resolution No. 32 for elements of the Plan that pertain to JPA facilities and operations. The Plan requires that progress reports be provided to the Board of Directors for both LVMWD and the JPA on an annual basis. A copy of the CAAP and a matrix that provides the status of implementation measures and actions is attached.

The matrix includes a list of 22 different “measures” or categories and 110 distinct actions that fall within the measures, which were identified in the CAAP. Three new items have been added since the time of the last update. Included is a brief description of each action along with the status, scheduled start, scheduled completion, assigned lead person, and notes for each action. To date, five were completed, 51 actions have been started or substantially completed, and 52 have not been started. Two items have been deemed impractical or infeasible to pursue and therefore not being further considered for implementation.

Items completed in 2025 since the last report include:

- Action I-1.1 Install one Megawatt of solar photovoltaic at the Rancho Las Virgenes

Farm Sprayfields by 2025.

Actions that have started and/or where significant progress is being made include but are not limited to:

- Action O-5.1 Continue water conservation and recycling efforts and programs by implementing the Potable Master Plan, Integrated Regional Water Management Plan, Recycled Water Master Plan, Urban Water Management Plan, Water Shortage Contingency Plan, and Flow Restrictor Program.

- Action O-5.3 Continue to reduce recycled water use for irrigation by 25 percent and potable water by 20 percent by 2030 compared to 2020 consumption levels.

- Action O-5.12 Update rates and modify fixed fees as needed so that the majority of fixed costs for water and wastewater services continue to be captured regardless of the amount of water consumption and wastewater collection and treatment.

- Action O-7.2 Continue partnering with Calleguas Municipal Water District and LAWDP to improve connectivity with Metropolitan Water District's Colorado River Aqueduct (CRA) system via the East-West Feeder, Sepulveda Pass and other opportunities.

- Action I-9.1 Conduct an assessment to identify opportunities to upgrade or add field instrumentation hardware including sensors, actuators, relays, control units, and samplers such as for automatic leak detection throughout the distribution system. Utilize artificial intelligence (AI) and machine learning (ML) to automate SCADA data collection and analysis to provide additional operational improvements and achieve energy efficiency.

- Action I-11.1 Continue with efforts to partner with a design/build team to design, construct, test, commission, and obtain governmental approval for the Advanced Water Purification Facility.

- Action NR-4.4 Conduct hardening upgrades to structures and facilities (i.e., reservoirs, pump structures, treatment facilities, and administrative offices) that are in CAL FIRE High and Very High Fire Hazard Severity Zones.

- Action I-8.1 Partner with neighboring jurisdictions to identify opportunities to develop dry and wet weather diversions to reduce imported water.

Three new action items have been added, bringing the total number of actions in the CAAP from 107 to 110. Action O-7.5 through O-7.7 were added to the CAAP and will be included in future updates as follows:

- Action O-7.5 Study and produce a report that identifies and recommends alternative water supply sources for the purpose of diversifying the District's water supply portfolio to increase resilience to climate change and other natural disasters - (Water Supply Reliability and Diversification Study).

- Action O-7.6 Study the feasibility for implementing sea water desalination (e.g. OceanWell).

- Action O-7.7 Secure an agreement and purchase water that can be stored in a groundwater basin via a third party for use during drought and other emergencies that trigger a water shortage – completed (early 2026).

Most actions that have not been started are slated to commence in the coming year or within the next few years. The timing is based on prioritizing individual actions, completing prerequisite actions, or the availability of staff and/or financial resources. The matrix reflects a collaborative effort with CAAP Committee Members, which consists of LVMWD staff from various departments and divisions that play a role in the implementation of the CAAP.

At this time, staff is seeking confirmation on whether to continue pursuing specific items identified in the CAAP. This includes items associated with installing more solar photovoltaic systems, including floating solar at Las Virgenes Reservoir - Action Items I-1.2 through I-1.5. Over the course of the past year, incentives for solar panel installations and the savings that can be achieved have been substantially reduced or eliminated. However, despite these changes, there could still be substantial savings over time that could ultimately help to keep electrical costs down for the District, which would translate to keeping rates as low as possible for customers.

For this reason, staff is recommending pursuing Items I-1.2 and I-1.3 in 2026. Item I-1.2 would primarily focus on floating solar or a ground mounted alternative at Las Virgenes Reservoir that could eventually save the District and/or JPA millions of dollars in electricity costs over the 25 plus year life of the solar installation. Item I-1.3 would consist of studying the installation of a fixed parking canopy-style photovoltaic system behind Building No. 7 and/or roof mounted panels on one or more buildings at the District Headquarters. The electricity generated from this system would be intended to partially or completely offset costs to provide power for existing and future electricity demands at District Headquarters, including the addition of more electric fleet vehicles over time.

Not only could these projects reduce operational costs for the District, but they would also play a role in reducing greenhouse gas emissions. At this time, only studies will be conducted, and a report will be brought back to the Board along with a recommendation about whether to proceed with installations at a later date. The cost associated with these studies is anticipated to be within the General Manager's authority.

GOALS:

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

Prepared by: Joe McDermott, PE, Assistant General Manager

ATTACHMENTS:
Climate Action and Adaptation Plan: Matrix 2026

Climate Action and Adaptation Plan (CAAP)
Status of Implementation Measures and Actions for 2026

	Measure	Action Item #	Description	Status	Scheduled Start	Scheduled Completion	Assigned Lead	Notes
1	**MEASURE I-1:** Utilize carbon-free electricity for 100% of electricity needs by 2030.	Action I-1.1	Install 1 MW of solar PV at Rancho Sprayfield by 2025.	Completed	Started	2025	Korkosz, Jim	*Construction substantially completed as of December 31, 2025 - production anticipated starting February 2026*
2	**MEASURE I-1:** Utilize carbon-free electricity for 100% of electricity needs by 2030.	Action I-1.2	Conduct a feasibility study to understand the potential for installing up to 15 megawatt (MW) of floating solar photovoltaics at Las Virgenes Reservoir, including potential costs, payback periods, and resilience impacts.	Not Started	2025/2026	2027	McDermott, Joe	*Modify and expand scope to analyze potential costs and savings for installing photovoltaic and/or batteries at Las Virgenes Reservoir (floating, stationary on land, rooftop on Westlake Filtration Plant Building, PPA vs. owned, etc.)*
3	**MEASURE I-1:** Utilize carbon-free electricity for 100% of electricity needs by 2030.	Action I-1.3	Conduct an assessment to identify the solar capacity needed to support the addi-tional electricity demand for vehicle fleet and employee commuter fleet EV adoption.	Not Started	2026/2027	2027	Korkosz, Jim	*Modify and expand scope to analyze potential costs and savings for installing photovoltaic and/or batteries at District Headquarters (parking canopy structures, rooftops, PPA vs. owned, etc.)*
4	**MEASURE I-1:** Utilize carbon-free electricity for 100% of electricity needs by 2030.	Action I-1.4	Identify partners to assess and pursue floating solar photovoltaics, such as firms that specialize in power purchase agreements (PPA) and SCE. Work with partners to pursue funding opportunities and tax credits for the installation of floating solar photovoltaics such as opportunities through the Department of Energy (DOE) Solar Energy Technologies Office (SETO and the federal Investment Tax Credit and Production Tax Credit.	Not Started	2025/2026	2027	McDermott, Joe	*Coordinate with I-1.2.*
5	**MEASURE I-1:** Utilize carbon-free electricity for 100% of electricity needs by 2030.	Action I-1.5	Based on the results of the studies and if deemed feasible, install up to 15 MW of floating solar photovoltaics at Las Virgenes Reservoir and additional on-site solar generation.	Not Started	2028	2030	McDermott, Joe	*Coordinate with I-1.2 If feasible, start by 2028 and complete by 2030.*
6	**MEASURE I-1:** Utilize carbon-free electricity for 100% of electricity needs by 2030.	Action I-1.6	Incorporate design elements into the Pure Water Project Las Virgenes – Triunfo to minimize GHG emissions to the greatest extent feasible. This should include energy efficient processes, identification of alternative fuels or technologies for processes that cannot be electrified, developing the project to be electricity ready where feasible, opportunities to directly link to on-site renewables and battery storage, and identification of the energy source to offset indirect electricity emissions, such as using the Renewable Energy Self-Generation Bill Credit Transfer (RES-BCT) tariff for renewable energy generation from other District sites where on-site renewables will not offset the emissions.	Started	Started	On-going	Slosser, Oliver	*Energy efficient processes, cool roof and solar panels for the Advanced Water Purification Facility are being incorporated into the design. Off-site floating solar panels are being considered, see I-1.2. A backup diesel generator is being incorporated into the design that will use a bio diesel blend. Battery storage is not being considered due to infeasibility.*
7	**MEASURE I-1:** Utilize carbon-free electricity for 100% of electricity needs by 2030.	Action I-1.7	Identify if the JPA/LVMWD can source electricity from Clean Power Alliance (CPA) and conduct an annual return on investment (ROI) analysis of carbon-free electricity packages available from SCE and CPA to determine which would be more cost-effective. Analysis should include a cost evaluation of switching all electricity accounts to 100 percent carbon-free electricity to ensure electricity consumption not covered by on-site solar will be 100 percent carbon-free.	Not Started	2026/2027	2030	Korkosz, Jim	*Tentatively scheduled to conduct analysis in 2026/2027 after electricity demands for the AWPF are determined.SCE will provide a spreadsheet to compare. Initiallty the cost will increase 30%.*
8	**MEASURE I-1:** Utilize carbon-free electricity for 100% of electricity needs by 2030.	Action I-1.8	Depending on the results of the ROI analysis and if deemed feasible, switch some or all electricity accounts to 100 percent carbon-free electricity from with SCE “Green Rate” or to a CPA “100% Green Power”.	Not Started	2026/2027	2030	Korkosz, Jim	*To be pursued if feasible after analysis is conducted in 2026/2027.*
9	**MEASURE I-1:** Utilize carbon-free electricity for 100% of electricity needs by 2030.	Action I-1.9	Conduct a study to identify what amount of pumping that can be scheduled utilizing a high level of renewable energy and offset the remaining amount with battery stored solar energy.	Not Started	2026/2027	2028	Korkosz, Jim	*Tentatively scheduled to conduct study in 2026/2027 in coordination with I-1.7.*
10	**MEASURE I-10:** Require the incorporation and identification of mitigation and adaptation features into new capital projects.	Action I-10.1	Develop a process to prioritize when to apply and implement climate change-in-formed design criteria for flooding, extreme heat, landslides, wildfire and liquefaction.	Not Started	2026	2026	McDermott, Joe	
11	**MEASURE I-10:** Require the incorporation and identification of mitigation and adaptation features into new capital projects.	Action I-10.2	Integrate and regularly update best available climate science and projections into relevant planning documents and pro-grams including the Urban Water Management Plan, Infrastructure Investment Plan, Hazard Mitigation Plan, Potable Water Master Plan, Recycled Water Mast Plan, Integrated Master Plan, and Sanitation Master Plan.	Started	On-going	On-going	All	*Discussion topics are included/considered in the early project phases when developing the scope of work for studies, planning, design and CIP related activities related to District facilities and infrastructure*
12	**MEASURE I-10:** Require the incorporation and identification of mitigation and adaptation features into new capital projects.	Action I-10.3	Develop protocols to improve monitoring capabilities to ensure ongoing iden-tification of vulnerable critical District assets in need of upgrades or retrofits.	Not Started	2026	2027	McDermott, Joe	
13	**MEASURE I-11:** Implement the Pure Water Project Las Virgenes-Triunfo.	Action I-11.1	Continue with efforts to partner with a design/build team to design, construct, test, commission, and obtain gov-ernmental approval for the Advanced Water Purification Facility.	Started	On-going	2029	Slosser, Oliver	*60% complete with design efforts to date - construction slated to start in early 2026*
14	**MEASURE I-11:** Implement the Pure Water Project Las Virgenes-Triunfo.	Action I-11.2	Require the consultant team to review and integrate future climate projections and potential impacts into the design of the Advanced Water Purification Facility.	Started	On-going	2029	Slosser, Oliver	on schedule

15	**MEASURE I-11:** Implement the Pure Water Project Las Virgenes-Triunfo.	Action I-11.3	Obtain funding for additional advising services to study and mitigate climate risks and GHG emissions specifically to the Pure Water Project Las Virgenes - Triunfo, through the EPA's Water Infrastructure Finance and Innovation Act, State of California's Clean Water and Drinking Water State Revolving Fund (SRF) programs, and Metropolitan's Local Resources Program (LRP).	Not Started	2026/2027	2027	McDermott, Joe	*Coorindate with I-1.2. Funding source lkely not through the listed programs.*
16	**MEASURE I-11:** Implement the Pure Water Project Las Virgenes-Triunfo.	Action I-11.4	Conduct a feasibility study to identify the future energy needs of the Pure Water Project Las Virgenes – Triunfo and identify opportunities to minimize GHG emissions through energy effi-ciency, on-site renewables, and low-carbon and carbon-free electricity procurement.	Not Started	2026/2027	2027	McDermott, Joe	*Coordinate with I-1.2.*
17	**MEASURE I-2:** Electrify new and existing stationary equipment to reduce natural gas consumption 75% by 2030 and 100% by 2045.	Action I-2.1	Conduct a survey of existing natural gas operated equipment and identify operationally and financially viable electric alternatives. By 2025, establish a schedule to replace existing natural gas-consuming equipment with electric or carbon neutral alternatives (i.e., e-fuels).	Not Started	2026	2026	Korkosz, Jim	*There are two natural gas engines at Cornell Pump Station that are utilized very infrequently (during power outages) and insufficient space to accommodate a backup emergency generator or battery storage. Staff will conduct a survey and develop a schedule in 2026 to replace equipment in future years.*
18	**MEASURE I-2:** Electrify new and existing stationary equipment to reduce natural gas consumption 75% by 2030 and 100% by 2045.	Action I-2.2	Develop and implement a policy requiring new equipment to be electric or carbon neutral. Require an infeasibility waiver to be submitted and approved when new equipment cannot be electrified. The infeasibility waiver process shall identify other opportunities to decarbonize the new stationary equipment (e.g., use of renewable diesel/e-fuel).	Not Started	2026	2026	Korkosz, Jim	*Coordinate with I-2.1.*
19	**MEASURE I-2:** Electrify new and existing stationary equipment to reduce natural gas consumption 75% by 2030 and 100% by 2045.	Action I-2.3	Explore rebate, grant, or partnership opportunities to fund the replacement of natural gas-consuming equipment like HVAC and hot water heaters with electric-powered equivalents like heat pumps.	Not Started	2026	2045	Korkosz, Jim	*Coordinate with I-2.1.*
20	**MEASURE I-2:** Electrify new and existing stationary equipment to reduce natural gas consumption 75% by 2030 and 100% by 2045.	Action I-2.4	Educate staff of the electrification requirement and implement the schedule to replace non-emergency use natural gas-consuming equipment with electric-powered equivalents to reduce natural gas consumption.	Not Started	2026	2045	Korkosz, Jim	*Coordinate with I-2.1.*
21	**MEASURE I-3:** Utilize renewable diesel and alternative fuels to bridge the technology gap and decarbonize stationary equipment to reduce diesel consumption by stationary equipment 100% by 2030.	Action I-3.1	Conduct a feasibility study to assess opportunities to decarbonize LVMWD's and the JPA's existing back-up generators using drop-in renewable diesel. As part of the assessment, determine a timeline for the renewable diesel transition, the quantity of renewable diesel needed, and any additional costs incurred from the transition. Include potential impacts of new renewable diesel equipment.	Not Started	2025	2026	Engineering	*Study as described unnecessary. All back-up generators are currently running on a bio-diesel blend. Currently investigating the feasibility of a higher bio-diesel blend ratio.*
22	**MEASURE I-3:** Utilize renewable diesel and alternative fuels to bridge the technology gap and decarbonize stationary equipment to reduce diesel consumption by stationary equipment 100% by 2030.	Action I-3.2	Identify partners for a reliable source of renewable diesel and fuel (e.g., Diamond Green Diesel).	Not Started	2025	2026	Korkosz, Jim	*Coordinate with I-3.1*
23	**MEASURE I-3:** Utilize renewable diesel and alternative fuels to bridge the technology gap and decarbonize stationary equipment to reduce diesel consumption by stationary equipment 100% by 2030.	Action I-3.3	Based on the feasibility study, develop a policy to transition all generators to renewable fuels.	Not Started	2026	2026	Korkosz, Jim	*Coordinate with I-3.1*
24	**MEASURE I-3:** Utilize renewable diesel and alternative fuels to bridge the technology gap and decarbonize stationary equipment to reduce diesel consumption by stationary equipment 100% by 2030.	Action I-3.4	Develop and distribute educa-tional materials to relevant staff members on the renewable diesel policy requirement and associated air quality and health benefits of the transition outlines in Action I-3.3.	Not Started	2026	2026	Korkosz, Jim	*Coordinate with I-3.1*
25	**MEASURE I-3:** Utilize renewable diesel and alternative fuels to bridge the technology gap and decarbonize stationary equipment to reduce diesel consumption by stationary equipment 100% by 2030.	Action I-3.5	Pursue and monetize LCFS credits associated with renewable fuel conversions in vehicles.	Not Started	2026	2026	Korkosz, Jim	*Coordinate with I-3.1*
26	**MEASURE I-4:** Increase energy storage at LVWMD and JPA facilities and buildings.	Action I-4.1	Conduct an assessment to identify existing battery storage capacity and priority locations for battery storage installation.	Not Started	2026/2027	2026/2027	Korkosz, Jim	
27	**MEASURE I-4:** Increase energy storage at LVWMD and JPA facilities and buildings.	Action I-4.2	Conduct a feasibility study to evaluate the opportunities for charging on-site batteries with on-site solar. Based on the study, require the design of the Pure Water Project Las Virgenes – Triunfo to identify battery storage solutions to mitigate impacts from power outages in addition to back-up generators powered by renewable fuel.	Not Started	2026/2027	2026/2027	Korkosz, Jim	*Deleting requirement for AWPF. Running the AWPF continuously and during occassional power outages has been deemed unecessary.*
28	**MEASURE I-4:** Increase energy storage at LVWMD and JPA facilities and buildings.	Action I-4.3	Explore funding opportunities to obtain and install a combined total of 5 MW battery storage at critical facilities. Identify opportunities through the Inflation Reduction Act of 2022 incentives including Energy Infrastructure Reinvestment Financing and the Solar Investment Tax Credit.	Not Started	2026/2027	2026/2027	Korkosz, Jim	*To be pursued after completion of I-4.2.*
29	**MEASURE I-4:** Increase energy storage at LVWMD and JPA facilities and buildings.	Action I-4.4	Continue time of use program that identifies and establishes permanent shifts of high-electricity use to times when renewable energy is plentiful through educational programs on energy and thermal storage, load timing/controls, pre-cooling/pre-heating, and other time-energy demand measures.	Started	On-going	2045	Korkosz, Jim	*On-going*

30	**MEASURE I-5:** Improve energy efficiency at LVMWD and JPA facilities and buildings.	Action I-5.1	Identify aging equipment due for replacement throughout JPA and LVMWD facilities and identify energy efficient alter-natives to use for the replacement (e.g., EnergyStar certifications). Prioritize energy efficient electric equipment over natural gas and diesel equipment, where feasible. Include a return on an investment analysis as part of the replacement process that evaluates the capital investment for an energy efficient alternative piece of equipment, cost savings associated with improved energy efficiency, and identifies any grants or rebates associated with such equipment replacement. For equipment iden-tified in Action I-2.2 that received the infeasibility waiver, ensure energy efficiency alternatives are selected.	Not Started	2026/2027	2026/2027	Korkosz, Jim	*Assessment tentatively scheduled for 2026/2027.*
31	**MEASURE I-5:** Improve energy efficiency at LVMWD and JPA facilities and buildings.	Action I-5.2	Develop and implement a policy requiring new equipment to achieve EnergyStar Certification, where feasible.	Not Started	2026/2027	2026/2027	Korkosz, Jim	
32	**MEASURE I-5:** Improve energy efficiency at LVMWD and JPA facilities and buildings.	Action I-5.3	Conduct energy audits every 5 years and implement top energy recommenda-tions. As part of CAAP monitoring, track energy improvements due to implementation of energy audit recommendations annually.	Not Started	2026/2027	2026/2027	Korkosz, Jim	*Coordinate with I-5.1*
33	**MEASURE I-5:** Improve energy efficiency at LVMWD and JPA facilities and buildings.	Action I-5.4	Expand the utilization of automated lighting controls for indoor/outdoor lighting for JPA and LVMWD facilities pursuant to the current CEC Building Energy Efficiency Standards (Title 24, Part 6 and 11).	Started	On-going	2045	Korkosz, Jim	*Most facilities have been convertedto LED already.*
34	**MEASURE I-5:** Improve energy efficiency at LVMWD and JPA facilities and buildings.	Action I-5.5	Pursuant to the CEC 2022 Building Energy Efficiency Standards (Title 24, Part 6 and 11), require all new construction and building upgrades utilize light emitting diode (LED) lighting technology only.	Started	2026/2027	On-going	Korkosz, Jim	*To be integrated into policy under I-5.2*
35	**MEASURE I-5:** Improve energy efficiency at LVMWD and JPA facilities and buildings.	Action I-5.6	Continue to explore opportunities to employ artificial intelligence (AI) and machine learning (ML) to better optimize treatment processes and to increase energy efficiency.	Started	On-going	On-going	Korkosz, Jim	
36	**MEASURE I-5:** Improve energy efficiency at LVMWD and JPA facilities and buildings.	Action I-5.7	Require the implementation of cool roofs in the construction of all new and upgraded JPA and LVMWD facilities, to minimize absorption of solar energy and reduce building energy use.	Started	On-going	On-going	Korkosz, Jim	*Incorporating into the design for the Advanced Water Purification Facility. Incorporated into roof replacement for Headquarters Building #1.*
37	**MEASURE I-6:** Reduce process and fugitive GHG emissions associated with wastewater treatment.	Action I-6.1	Conduct a feasibility and cost analysis on the pathways to eliminate emissions associated with the biogas generated at Tapia Water Reclamation Facility through either biogas utilization, disposal or sale. The study should include an assessment evaluating the cost for upgrading the anaerobic digesters, opportunities for upgrading the biogas to pipeline quality biomethane, and opportunities for partnerships with other nearby biogas producers to sell the biogas to entities such as SCG looking to meet SB 1440.	Not Started	2030+	2045	Hurtado, Veronica	*Currently pursuing adding an enclosed low-emissions flare with hydrogen sulfide (H2S) scrubbing vessels to dispose of methane and address H2S emissions. This is a much more economically feasible solution in the near term. Will tentatively schedule a study for a longer-term solution after 2030.*
38	**MEASURE I-6:** Reduce process and fugitive GHG emissions associated with wastewater treatment.	Action I-6.2	Investigate potential partnerships with entities looking to obtain biogas for fuel production for which LVMWD and the JPA could be a source.	Not Started	2030+	2045	Hurtado, Veronica	*To coincide with schedule for I-6.1*
39	**MEASURE I-6:** Reduce process and fugitive GHG emissions associated with wastewater treatment.	Action I-6.3	In alignment with the implemen-tation of the Pure Water Project Las Virgenes - Triunfo, evaluate and track reductions in total Nitrogen to identify the amount of reduced fugitive emissions.	Not Started	2028/2029	On-going	Hurtado, Veronica	*Initiate after commissioning Advanced Water Purification Facility in 2028/2029*
40	**MEASURE I-7:** Maximize backup power facilities for all critical assets.	Action I-7.1	Catalogue fixed and mobile backup power requirements for all LVMWD and JPA facilities and develop design criteria/minimum requirements.	Substantially Completed	2025	2026	Korkosz, Jim	*This effort was substantially completed and a formalized document is currently being developed.*
41	**MEASURE I-7:** Maximize backup power facilities for all critical assets.	Action I-7.2	Establish backup power policy/requirements that cover fixed and mobile solutions, staging, and procurement.	Started	2025	2026	Korkosz, Jim	*Started. To coincide with schedule for I-7.1.*
42	**MEASURE I-7:** Maximize backup power facilities for all critical assets.	Action I-7.3	Secure Hazard Mitigation Grant Program, California Governor's Office of Emergency Services (CAL OES), and other grant funding for battery energy storage solutions and renewable diesel.	Not Started	2028	On-going	Korkosz, Jim	*To be pursued after completion of I-3.1 and I-4.2*
43	**MEASURE I-7:** Maximize backup power facilities for all critical assets.	Action I-7.4	If deemed feasible, secure battery energy storage systems and new generators that use renewable fuel (e.g., renewable diesel, biodiesel, etc.) for Tapia Reclamation Facility, the Westlake Filtration Plant, Rancho Composting Facility, and future facilities such as the Advanced Water Purification Facility.	Not Started	2028	On-going	Korkosz, Jim	*To be pursued after completion of I-3.1 and I-4.2*
44	**MEASURE I-8:** Support the regional development of dry and wet weather stormwater diversions as a supplementary source for recycled potable water.	Action I-8.1	Partner with neighboring jurisdictions to identify opportunities to develop dry and wet weather diversions to reduce imported water.	Started	On-going	On-going	Hurtado, Veronica	*Currently working with the City of Agoura Hills on a pilot program and began conversations with the City of Thousand Oaks. Phase III of a whitepaper study is also underway in collaboration with LA County Sanitation, LA Flood Control District, Metropolitan Water District, Inland Empire Utilities Agency, City of Los Angeles, City of Santa Monica, Dept. of Public Works, with JACOBS as the consulting agency developing the study and pilot programs.*
45	**MEASURE I-8:** Support the regional development of dry and wet weather stormwater diversions as a supplementary source for recycled potable water.	Action I-8.2	Position for funding programs, such as LA County Measure W, to fund design work to increase dry and wet weather diversions.	Started	On-going	On-going	s, Craig/Jessica Forte	*Submitted multiple applications in July 2024 as study collaborators for grant funding to investigate dry weather diversions and the feasibility of large scale, distributed stormwater capture and storage program. M6 was chosen/awarded Measure W funding from NSMB subregion to move forward with dry weather diversion scientific study- Jessica Forte - Engineering will be Lead*

46	**MEASURE I-8:** Support the regional development of dry and wet weather stormwater diversions as a supplementary source for recycled potable water.	Action I-8.3	Conduct an assessment to identify developing regulatory compliance issues asso-ciated with wet weather diversions and outline potential solutions.	Started	On-going	On-going	Hurtado, Veronica	
47	**MEASURE I-9:** Improve the Supervisory Control and Data Acquisition (SCADA) System.	Action I-9.1	Conduct an assessment to identify opportunities to upgrade or add field instrumentation hardware including sensors, actuators, relays, control units, and samplers such as for automatic leak detection throughout the distribution system. Utilize artificial intelligence (AI) and machine learning (ML) to automate SCADA data collection and analysis to provide additional operational improvements and achieve energy efficiency.	Started	On-going	On-going	Nkwenji, Ivo	*Staff has upgraded the SCADA systems at Tapia and Rancho with the latest controls and Human Machine Interfaces (HMI). The Tapia Reclamation Facility's data has been incorporated into the District's iGreen Water Data Management platform (iGreen). This platform, among other functionalities, provides the ability to analyze energy consumption along with the use of AI, ML, and Large Language Models (LLM). Plans to upgrade the Potable Water Distribution and Water Treatment SCADA systems are underway, with completion slated for 2026. Other enhancements will be on-going.*
48	**MEASURE I-9:** Improve the Supervisory Control and Data Acquisition (SCADA) System.	Action I-9.2	Based on the assessment, procure field instrumentation hardware to adequately monitor and control all water system processes.	Started	On-going	On-going	Nkwenji, Ivo	*IT and Facilities staff will continue to evaluate and implement field instrumentation as necessary. This is an on-going effort.*
49	**MEASURE I-9:** Improve the Supervisory Control and Data Acquisition (SCADA) System.	Action I-9.3	Explore potential funding oppor-tunities to finance SCADA system upgrades and improvements.	Started	On-going	On-going	Nkwenji, Ivo	*None identified to date.*
50	**MEASURE I-9:** Improve the Supervisory Control and Data Acquisition (SCADA) System.	Action I-9.4	Establish procedures to regularly conduct maintenance of SCADA systems to identify potential improvements and operational inefficiencies.	Completed	Completed	Completed	Nkwenji, Ivo	*The District's Technology Master Plan assessed the SCADA system and provided a roadmap for personnel and system improvements.Technology Master Plan Report was presented to the board in 2025.*
51	**MEASURE I-9:** Improve the Supervisory Control and Data Acquisition (SCADA) System.	Action I-9.5	Implement setpoint optimization techniques using AI and ML at Tapia Water Reclamation Facility, Lift Stations 1 and 2, and Rancho Las Virgenes Composting Facility.	Not Started	2025+	2045	Nkwenji, Ivo	
52	**MEASURE NR-1:** Investigate and implement carbon sequestration opportunities to offset all Water Reclamation Facility fugitive emissions by 2045	Action NR-1.1	Conduct an assessment to identify the potential capacity for planting new trees, identify a timeframe for implementation, outline a management plan for existing trees, and establish a tracking system to assess progress towards an annual benchmark.	Started	2026/2027	2026/2027	Jones, Craig	Initial work is focused on AWPF site mitigation and Woolsey fire impacted asset areas. Focus will continue to be driven by "as need" project basis for tree planting. - Examples: Morrision Tank screening (Woolsey Fire) - replacing burned trees - planting scrub oaks and toyons (natives) to take place Spring/Summer 2026; Twin Lakes Tank screening to mitigate impacts of construction- with Ironwoods is in design phase. Future assessment (2027-28) will look at optimal district sites/assets that have existing/available irrigation for optimal establishment.
53	**MEASURE NR-1:** Investigate and implement carbon sequestration opportunities to offset all Water Reclamation Facility fugitive emissions by 2045	Action NR-1.2	Partner with TreePeople or other organizations to develop and host an annual employee tree planting day.	Not Started	2026/2027	2026/2027	Jones, Craig	To occur after Measure NR-1.1 - assesment is completed
54	**MEASURE NR-1:** Investigate and implement carbon sequestration opportunities to offset all Water Reclamation Facility fugitive emissions by 2045	Action NR-1.3	Increase carbon sequestration by planting and supporting 25 new trees annually through 2030 to sequester carbon and create shade to reduce heat island effect.	Not Started	2026/2027	2030	Jones, Craig	*90 new trees plus 30 replacement oak trees (120 total) will be planted within the LVMWD service area by 2028 as part of 4:1 replacement requirements for the removal of 30 trees at the Advanced Water Purification Facility site. The timing and location for planting additional trees will be coordinated with NR-1.1 and NR-1.2.*
55	**MEASURE NR-1:** Investigate and implement carbon sequestration opportunities to offset all Water Reclamation Facility fugitive emissions by 2045	Action NR-1.4	Explore grant funding opportunities for tree planting. Identify and apply for applicable federal (e.g., USDA) and state (e.g., California ReLeaf, Affordable Housing and Sustainable Communities Program [AHSC], Urban and Community Forestry Program) available grants for Tree Planting projects.	Not Started	2025	2030	Jones, Craig	*Explore partnership opportunities with SAMO fund and other local partners (2026-2028)*
56	**MEASURE NR-1:** Investigate and implement carbon sequestration opportunities to offset all Water Reclamation Facility fugitive emissions by 2045	Action NR-1.5	As part of the Landscape Transformation Initiative, develop landscape guidance materials that include information regarding flora CO_2 sequestration potential to promote the incorporation of landscape plants that are both climate resilient and CO_2 sequestering. Climate resilient species have characteristics of drought tolerance, low water use, pest and disease resistance, fire-retardant or fire-resistance, and salinity tolerance. Consider vegetative options with higher CO_2 sequestration potential for JPA and LVMWD facilities landscaping.	Started	2024	On-going	Jones, Craig	*Currently exploring grass alternatives that can be incorporated into guidance materials - ongoing!*
57	**MEASURE NR-2:** Catalog and improve the stability of hillside monitoring and stabilization efforts after heavy rain events in areas at risk of landslides and debris flows to minimize impacts to infrastructure and equipment.	Action NR-2.1	Conduct a landslide risk vulnerability assessment of critical assets to identify which assets are most vulnerable to damage from landslides and debris flows.	Started	On-going	On-going	Schlagater, Eric	*Action not required as described. The District actively monitors known landslide and expansive soil areas within the District that have historically caused pipeline failures. We continue to monitor these areas and document these locations to be included when considering infrastructure rehab/replacement as well as consideration of pipeline materials to mitigate against soil instability.*
58	**MEASURE NR-2:** Catalog and improve the stability of hillside monitoring and stabilization efforts after heavy rain events in areas at risk of landslides and debris flows to minimize impacts to infrastructure and equipment.	Action NR-2.2	Install landslide monitoring equipment in landslide susceptibility areas that are adjacent to critical assets.	Started	On-going	On-going	Schlagater, Eric	*This is being done already in one known location and is being monitored to capture trends over time to allow us to proactively respond if necessary to protect our infrastructure. More locations may be added if deemed necessary.*
59	**MEASURE NR-2:** Catalog and improve the stability of hillside monitoring and stabilization efforts after heavy rain events in areas at risk of landslides and debris flows to minimize impacts to infrastructure and equipment.	Action NR-2.3	Based on the vulnerability assessment, conduct hardening upgrades to critical JPA and LVMWD assets that are most vulnerable to damage from landslides and debris flows.	Not Started	2030+	2045	Schlagater, Eric	*Action not required as described. Flooding assessment was conducted for Tapia in 2022. Other facilities not subject to landslides and flooding. Future facilities will be assessed during design.*

60	**MEASURE NR-3:** Protect Las Virgenes Reservoir from sedimentation associated with extreme climate events.	Action NR-3.1	Develop procedures to regularly measure reservoir sedimentation volume to determine the varying rates and patterns of potential storage loss.	Not Started	2026/2027	2028	Johnson, Darrell	
61	**MEASURE NR-3:** Protect Las Virgenes Reservoir from sedimentation associated with extreme climate events.	Action NR-3.2	Implement strategies to mitigate reservoir sedimentation including sediment removal by dredging or flushing.	Not Started	2026/2027	2028	Johnson, Darrell	
62	**MEASURE NR-3:** Protect Las Virgenes Reservoir from sedimentation associated with extreme climate events.	Action NR-3.3	Develop a vegetation and erosion management strategy to mitigate fire risk around Las Virgenes Reservoir to minimize potential post-fire soil erosion impacts on reservoir sedimentation.	Not Started	2026/2027	2028	Johnson, Darrell	
63	**MEASURE NR-3:** Protect Las Virgenes Reservoir from sedimentation associated with extreme climate events.	Action NR-3.4	Increase wastewater treatment capabilities to manage potential future sediment levels from future stormwater, landslide, wildfire, and erosion impacts.	Not Started	2030+	On-going	Hurtado, Veronica	
64	**MEASURE NR-4:** Develop and implement a wildfire abatement and response policy.	Action NR-4.1	In the development of a wildfire abatement and response policy, develop strategies to mitigate risk from wildfire through defensible space, fire-safe landscaping, reduction of structural ignition, fire resistant retrofitting, fire suppression water flow, and vegetation management, in alignment with CAL FIRE guidance, standards, and building codes.	Started	On-going	On-going	Schlagater, Eric	*We have made improvements to firescape the Westlake Filter Plant and as CIP projects are planned we will evaluate opportunities to fire harden existing facilities as well as consider fire hardening when planning new facilities.*
65	**MEASURE NR-4:** Develop and implement a wildfire abatement and response policy.	Action NR-4.2	Develop criteria for future structure and facility developments to reduce vulnerability to ember ignition.	Started	On-going	On-going	Schlagater, Eric	*Started as part of the design development for the Advanced Water Purification Facility. Improvements have been made to Westlake Filtration Plant.*
66	**MEASURE NR-4:** Develop and implement a wildfire abatement and response policy.	Action NR-4.3	Dedicate staff time to identify funding (e.g., CAL FIRE or FEMA) to implement upgrades or retrofits to mitigate wildfire risk.	Started	On-going	On-going	Schlagater, Eric	*We maintain a Hazard Mitigation Plan and update it every 5-years for eligibility for FEMA/Cal-OES funding and have dedicated staff assigned to plan, budget and implement mitigation projects as necessary*
67	**MEASURE NR-4:** Develop and implement a wildfire abatement and response policy.	Action NR-4.4	Conduct hardening upgrades to structures and facilities (i.e., reservoirs, pump structures, treatment facilities, and administrative offices) that are in CAL FIRE High and Very High Fire Hazard Severity Zones.	Started	On-going	On-going	Schlagater, Eric	*Completed fire wise landscape at Westlake Filter Plant in 2025. Awarded a contract to Dudek to study and recommend fire hardening improvements.*
68	**MEASURE NR-4:** Develop and implement a wildfire abatement and response policy.	Action NR-4.5	When retrofits and upgrades are not adequate or feasible, develop plans to relocate critical assets outside of CAL FIRE High and Very High Fire Hazard Severity Zones to the extent practicable.	Delete Action	2026/2027	2028	Schlagater, Eric	*This action has been deemed infeasible since nearly the entire service area is within a High and Very High Fire Hazard Zone.*
69	**MEASURE NR-4:** Develop and implement a wildfire abatement and response policy.	Action NR-4.6	Develop a schedule and monitor vegetative management efforts and defensible space relative to critical assets at risk.	Completed	Completed	Completed	Jones, Craig	*Completed and ongoing with annual brush clearance/weed abatement program. Update schedule as needed. 2025/26 - looking to prioritize and implement fire hardening around district facilities - initiated Phase 1 at HQ.*
70	**MEASURE NR-4:** Develop and implement a wildfire abatement and response policy.	Action NR-4.7	Coordinate with CAL Fire, Los Angeles County Fire Department, and surrounding property owners to ensure adequate fire road access to critical JPA and LVMWD facilities.	Started	On-going	On-going	Johnson, Darrell	Coordination is on-going.
71	**MEASURE O-1:** Electrify or otherwise decarbonize the vehicle fleet such that 75% of the vehicle fleet are zero-emission vehicles (ZEV) by 2030 and 100% of the vehicle fleet are ZEV by 2045.	Action O-1.1	Conduct a study of the existing vehicle fleet to develop a schedule and policy to replace existing vehicles with EV/ZEV alternatives such that 75 percent of vehicles are replaced with EV/ZEV's by 2030 and 100 percent by 2045. Consider vehicle function, associated costs, available incentives, and ROI from potential fuel and maintenance savings when identifying vehicles for replacement and their EV/ZEV alternatives.	Started	2026/2027	2027	Korkosz, Jim	*Began switching F-250 and equivalent trucks to F-150 or equivalent where practicle (not zero emission but better fuel mileage). The large horsepower utility truck market still has not produced a feasible electric version for utility trucks. For example, replacement of an F-250 requires a special order purchase for an electric version at a cost of more than $220k (compared to $60k for a traditional internal combusion enginer truck). Staff is pursuing a waiver for F-250 and larger trucks until such time that a feasible electric version is available.*
72	**MEASURE O-1:** Electrify or otherwise decarbonize the vehicle fleet such that 75% of the vehicle fleet are zero-emission vehicles (ZEV) by 2030 and 100% of the vehicle fleet are ZEV by 2045.	Action O-1.2	For vehicles not identified for replacement by 2030 and/or vehicles that do not have EV/ZEV options available: (a) Evaluate options to reduce the weight of vehicles and integrate technology that monitors vehicle idleness, integrating efficient, smaller diesel engines before they can be electrified or otherwise decarbonized. (b) Consider partnering with heavy-duty EV companies to conduct pilots and facilitate advancements in technology for such vehicles. Not Started. (c) Continue monitoring EV/ZEV availability and updating the vehicle replacement schedule to transition such vehicles by 2045.	(a) Started, (b) Not Started, (c) Started	(a) On-going, (b) 2026/2027, (c) On-going	On-going	Korkosz, Jim	
73	**MEASURE O-1:** Electrify or otherwise decarbonize the vehicle fleet such that 75% of the vehicle fleet are zero-emission vehicles (ZEV) by 2030 and 100% of the vehicle fleet are ZEV by 2045.	Action O-1.3	Complete an EV infrastructure plan to analyze charging needs through 2045 and beyond. As part of plan, create a prioritized list of EV charging/fueling infrastructure at specific locations.	Started	2025	2026/2027	Korkosz, Jim	
74	**MEASURE O-1:** Electrify or otherwise decarbonize the vehicle fleet such that 75% of the vehicle fleet are zero-emission vehicles (ZEV) by 2030 and 100% of the vehicle fleet are ZEV by 2045.	Action O-1.4	Partner with SCE's Charge Ready Program to plan and fund electric vehicle charger installations and panel upgrades at JPA and LVMWD facilities in alignment with the EV infrastructure plan.	Started	2025	2026/2027	Korkosz, Jim	*Completed*
75	**MEASURE O-2:** Increase employee commute ZEV adoption to 25% by 2030 and 50% by 2045.	Action O-2.1	Install 30 additional EV chargers to support at least a 25 percent transition of employee-owned commuter vehicles to EV's or ZEV's (i.e., hydrogen fuel cell) by 2030. Locations should best serve commuters that report to different JPA and LVMWD facilities and optimize use of on-site solar generation.	Not Started	2026	2045	Korkosz, Jim	*As of 2024, there are 4 charging stations at Headquarters, two at Tapia, and currently none at Rancho or Westlake Filtration Plant. An installation schedule will be developed in 2026 and additional installations will be made in the coming years.*

76	**MEASURE O-2:** Increase employee commute ZEV adoption to 25% by 2030 and 50% by 2045.	Action O-2.2	Identify partnerships and funding opportunities such as enrollment in the LCFS program for credit generation, federal tax credit under 30C Alternative Fuel Infrastructure Tax Credit, and SCE rebates and partnerships to offset the costs to install EV charging infrastructure for commuters.	Not Started	2026	2045	Korkosz, Jim	*Coorindate with O-2.1.*
77	**MEASURE O-2:** Increase employee commute ZEV adoption to 25% by 2030 and 50% by 2045.	Action O-2.3	When feasible, incentivize employee conversion to ZEVs by offering discounted vehicle charging or fueling for commuters (charge for electricity only and not capital recovery for charging stations).	Started	On-going	On-going	Korkosz, Jim	*Employees pay for market rate electricity costs only (District covers the capital cost for installing stations).*
78	**MEASURE O-2:** Increase employee commute ZEV adoption to 25% by 2030 and 50% by 2045.	Action O-2.4	Promote employee use of EV's or ZEVs by providing educational materials on the benefits of EV's and ZEVs, available federal and state tax credits, and ROI for employees given ~~free~~ discounted workplace charging.	Not Started	2025	On-going	Korkosz, Jim	*To be implementing prior to installing additional stations*
79	**MEASURE O-3:** Reduce employee commute Vehicle Miles Traveled (VMT) by 15% by 2030 and 30% by 2045.	Action O-3.1	Allow for continued benefits of a full or partial work-from-home policy where employees telecommute or utilize flexible schedule to reduce transit time, VMT, and GHG emissions.	Started	On-going	On-going	Crocker, Sophia	
80	**MEASURE O-3:** Reduce employee commute Vehicle Miles Traveled (VMT) by 15% by 2030 and 30% by 2045.	Action O-3.2	Identify opportunities to fund rideshare incentives to employees who carpool. Offer other incentives to employees to use an alternative mode of transportation to commute (e.g., public transportation, bikes).	Not Started	2025/2026	2027/2028	Crocker, Sophia	*To be evaluated and implemented if deemed feasible.*
81	**MEASURE O-3:** Reduce employee commute Vehicle Miles Traveled (VMT) by 15% by 2030 and 30% by 2045.	Action O-3.3	Provide preferred parking for carpooling vehicles to incentivize carpooling by employees. Evaluate opportunities for other incentives to offer to employees for carpooling or lower VMT.	Delete Action	N/A	N/A	Crocker, Sophia	*Analyzed and deemed impractical. District garage and lots are small and most parking spots are already convenient. No further action required.*
82	**MEASURE O-3:** Reduce employee commute Vehicle Miles Traveled (VMT) by 15% by 2030 and 30% by 2045.	Action O-3.4	Promote employee use of carbon-free and low carbon transportation by providing educational materials on the benefits of commute options including public transportation, EV/ZEV options, and vanpools.	Not Started	2025/2026	2027/2028	Crocker, Sophia	*To be coordinated with O-3.2*
83	**MEASURE O-4:** Develop a net zero waste program such that waste sent to the landfill is reduced by 90% by 2030 and maintain through 2045.	Action O-4.1	Implement a program to separate organic waste from other materials. Contract with local waste disposal companies to route organic waste to food recovery centers, anaerobic digestion, or composting facilities such that 75 percent of organics generated from JPA and LVMWD operations is collected and diverted from the landfill by 2025.	Not Started	2026	2027	Hurtado, Veronica	*Under consideration but not implemented. The District lunchrooms are being considered (Headquarters, Tapia and Rancho), which are the only significant source of organic wastes that would be eligible for the Waste Management Organics Recycling program. Food collections bins could be added, but depending on pick-up schedule, they could become an odor nuisance.*
84	**MEASURE O-4:** Develop a net zero waste program such that waste sent to the landfill is reduced by 90% by 2030 and maintain through 2045.	Action O-4.2	Conduct a waste assessment, including records examinations, facility walk-throughs, and waste sorting, across all facilities to identify waste sources generated, identify purchasing and management practices, examine current waste reduction practices and their effectiveness, and prioritize the most effective waste reduction efforts on an area and materials-focused basis.	Not Started	2026/2027	2026/2027	Hurtado, Veronica	Staff will continue to explore opportunities. None identified yet.
85	**MEASURE O-4:** Develop a net zero waste program such that waste sent to the landfill is reduced by 90% by 2030 and maintain through 2045.	Action O-4.3	Investigate funding opportunities to develop an organics program and deploy organic waste bins at all JPA and LVMWD facilities.	Not Started	2026	2026	Hurtado, Veronica	*To be coordinated with O-4.1*
86	**MEASURE O-4:** Develop a net zero waste program such that waste sent to the landfill is reduced by 90% by 2030 and maintain through 2045.	Action O-4.4	Pursuant to AB 901, report the quantity and destination of disposed biosolids from wastewater treatment plants to CalRecylcle quarterly.	Started	On-going	On-going	Hurtado, Veronica	Biosolids/Compost volumes get reported quarterly to CalRecycle. This began in January 2020.
87	**MEASURE O-4:** Develop a net zero waste program such that waste sent to the landfill is reduced by 90% by 2030 and maintain through 2045.	Action O-4.5	Host staff training sessions to provide educational information on waste reduction practices to increase waste diversion at JPA and LVMWD facilities.	Not Started	2026	2026	Hurtado, Veronica	*To be coordinated with O-4.1*
88	**MEASURE O-5:** Increase water conservation by reducing demands by at least 20% by 2030 and maintain through 2045.	Action O-5.1	Continue water conservation and recycling efforts and programs by implementing the Potable Master Plan, Integrated Regional Water Management Plan, Recycled Water Master Plan, Urban Water Management Plan, Water Shortage Contingency Plan, and Flow Restrictor Program.	Started	On-going	On-going	Jones, Craig	*Ongoing - UWMP will be completed June 2026; RC staff working with consultant - to model UWUO regulation impacts and develop strategy/goals/options for maintaining compliance and optimizing conservation program efforts, water loss, etc.*
89	**MEASURE O-5:** Increase water conservation by reducing demands by at least 20% by 2030 and maintain through 2045.	Action O-5.10	Explore methods such as the deployment of a floating solar array to reduce the rate of evaporation from water storage facilities (e.g., Las Virgenes Reservoir).	Not Started	2025/2026	2026	McDermott, Joe	*Not Started and will be coordinated with Action Item I-1.2.*
90	**MEASURE O-5:** Increase water conservation by reducing demands by at least 20% by 2030 and maintain through 2045.	Action O-5.11	Investigate new advanced tech-nology systems to maximize the ground-water recovery wells in Westlake Village to maintain local water supply. Invest in such technology as it becomes feasible and cost-effective. Consider other innovative ideas such as maximizing the storage potential of the Russel Valley Basin by installing injection wells to store excess water for later extraction.	Not Started	2028/2029	2045	McDermott, Joe	*Not Started. To be pursued in 2028/2029.*
91	**MEASURE O-5:** Increase water conservation by reducing demands by at least 20% by 2030 and maintain through 2045.	Action O-5.12	Update rates and modify fixed fees as needed so that the majority of fixed costs for water and wastewater services continue to be captured regardless of the amount of water consumption and wastewater collection and treatment.	Started	On-going	On-going	Patterson, Don	*Implemented in new rates with 2025 Cost of Service Study.*
92	**MEASURE O-5:** Increase water conservation by reducing demands by at least 20% by 2030 and maintain through 2045.	Action O-5.2	Implement the Pure Water Project Las Virgenes – Triunfo (Measure I-11) to reduce dependence on imported water and help ensure long-term water supply reliability.	Started	On-going	2030	Slosser, Oliver	*Design efforts nearing completion and construction is pending*

93	**MEASURE O-5:** Increase water conservation by reducing demands by at least 20% by 2030 and maintain through 2045.	Action O-5.3	Continue to reduce recycled water use for irrigation by 25 percent and potable water by 20 percent by 2030 compared to 2020 consumption levels.	Started	On-going	On-going	Jones, Craig	*Potable water reduction was 20% in 2025 (meets target). Recycled water reduciton was 23% in 2025. Additional reductions will be necessary to meet new State Mandates. New targets are under development.*
94	**MEASURE O-5:** Increase water conservation by reducing demands by at least 20% by 2030 and maintain through 2045.	Action O-5.4	Continue outreach and engagement efforts to increase registration to 80 percent and use of the WaterSmart Portal to aid customers in managing usage and identifying leaks.	Started	On-going	On-going	Bosson, Ursula	*Started and ongoing. Currently at 35.91% registration rate through December, 2025 - up from 33.1% from the end of 2024.*
95	**MEASURE O-5:** Increase water conservation by reducing demands by at least 20% by 2030 and maintain through 2045.	Action O-5.5	Expand programs which educate customers on water conservation initiatives through workshops and speaking engagements. Continue to host and expand participation in the LVMWD Landscape Workshop Series providing information on drought-tolerant landscaping, available rebates for water irrigation retrofits, and water efficiency strategies in new and existing single-family residences and commercial/multi-family accounts.	Started	On-going	On-going	Jones, Craig	*Held 11 Public workshops _Sustainable Landscape Workship Series in 2023 and 6 workshops in 2024; 7 workshops in 2025*
96	**MEASURE O-5:** Increase water conservation by reducing demands by at least 20% by 2030 and maintain through 2045.	Action O-5.6	Continue with efforts to implement a landscape management plan for the JPA and LVMWD that consolidates and expands upon the goals and policies for landscaping at JPA and LVMWD properties. Identify whether and where there are additional resource-consumptive landscapes on property that can be changed out to more water-conserving, slower growth plants that require less maintenance. Continue to implement potable water conservation strategies in landscape design and maintenance (such as replacing water intensive areas with drought-resilient native plants. using low-flow water fixtures, installing sophisticated irrigation software to control water, investing in systems to monitor pipe leakage, and limiting turf development).	Started	On-going	On-going	Jones, Craig	*Started and ongoing. Landscaping/Firescaping at Westlake Filtration Plant completed Fall 2025. District Landscape Policy developed and implemented. LVMWD Bark Park - butterfly garden - completed 2025 - partnership with City of Calabasas and Malibu Foundation.*
97	**MEASURE O-5:** Increase water conservation by reducing demands by at least 20% by 2030 and maintain through 2045.	Action O-5.7	Require new and redeveloped LVMWD/JPA owned properties to be low water use through landscaping with climate appropriate plants, permeable paving, green infrastructure, and incorporating other low-impact development design features to allow for increased infiltration, even in heavy rains.	Started	On-going	On-going	Jones, Craig	*Started and ongoing. Climate Appropriate Landscape Policy – Administrative Handbook complete. Design efforts underway for the landscaping at the Advanced Water Purification Facility are incorporating these requirements. Additionally, incorporating fire hardening design and maintenance into landscapes to protect and harden district facilities from widlfires.*
98	**MEASURE O-5:** Increase water conservation by reducing demands by at least 20% by 2030 and maintain through 2045.	Action O-5.8	Continue to implement and expand on successful water conservation rebate programs (e.g., high efficiency toilets and clothes washers, weather-based irrigation controller, etc.) with a focus on providing opportunities for outdoor water efficiency improvements such as rotating sprinkler heads, in alignment with the current Statewide water conservation goals.	Started	On-going	On-going	Jones, Craig	*Started and ongoing. Irrigation Retrofit Pilot Program was launched in September 2023 and completed March 2024. The Full scale Irrigation Retrofit program that includes smart controllers launched in August of 2024 and is on-going. Planning stages underway for launching additional "turf transformation" programs to encourage water efficient landscapes - through design assistance, etc. Yoursmartyard.org launched October 2025 - partnership with Yardzen - offering customers discounted packages for custom landscape design consultations (IRWM DRWCP). Other opportunities to be considered for development and implementation in future years.*
99	**MEASURE O-5:** Increase water conservation by reducing demands by at least 20% by 2030 and maintain through 2045.	Action O-5.9	Develop and adopt a schedule for installation of water meters in existing buildings and irrigation zones to establish a water consumption baseline at JPA and LVMWD owned properties with the Facilities Division. Reduce JPA and LVWMD water consumption per capita at facilities in alignment with the current statewide goals.	Not Started	2026/2027	2030	Jones, Craig	*Not Started.*
100	**MEASURE O-6:** Develop resource programs and protocols to protect staff from climate extremes.	Action O-6.1	Develop and distribute a survey to staff to identify climate change impacts that pose health and safety risks to employees. As part of the survey, ask employees which existing policies and programs adequately provide them with resources to mitigate impacts and ask what potential programs and policies may provide additional resources to limit health and safety concerns associated with climate hazards.	Not Started	2026	2026	Crocker, Sophia	
101	**MEASURE O-6:** Develop resource programs and protocols to protect staff from climate extremes.	Action O-6.2	Develop internal protocols for employees working under extreme heat conditions and air quality emergencies, in alignment with Cal/OSHA heat illness and prevention guidance.	Completed	N/A	N/A	Crocker, Sophia	*Update as needed*
102	**MEASURE O-6:** Develop resource programs and protocols to protect staff from climate extremes.	Action O-6.3	Develop protocols for wildfire emergencies and host annual practice/drills to ensure service continuity and employee safety.	Started	On-going	On-going	Crocker, Sophia	*Coordinate with Water Operations Director*
103	**MEASURE O-6:** Develop resource programs and protocols to protect staff from climate extremes.	Action O-6.4	Provide employees with educational materials on relevant climate hazards and associated health and safety impacts (i.e., extreme heat induced health impacts) to increase awareness of risks and share best practices to increase adaptive capacity.	Started	On-going	On-going	Crocker, Sophia	*We currently administer Heat Illness Prevention Training to affected staff.*
104	**MEASURE O-7:** Maximize operational flexibility and redundancies, including new alternative water supplies, water transfer agreements, interties, flexible exchanges, additional system interconnections, and points of delivery.	Action O-7.1	Partner with neighboring water providers, starting with District 29, to develop additional emergency water system interties to ensure water service continuity and reliability.	Started	On-going	2045	McDermott, Joe	*Plans and designs are currently underway for two interties with District 29. Conceptual planning for adding ocean desalination to the water supply portfolio via a connection with District 29 or an in-lieu exchange agreement is also underway.*

105	**MEASURE O-7:** Maximize operational flexibility and redundancies, including new alternative waer supplies, water transfer agreements, interties, flexible exchanges, additional system interconnections, and points of delivery.	Action O-7.2	Continue partnering with Calleguas Municipal Water District and LAWDP to improve connectivity with Metropolitan Water District's Colorado River Aqueduct (CRA) system via the East-West Feeder, Sepulveda Pass and other opportunities.	Started	On-going	2045	McDermott, Joe	*Ongoing. Sepulveda Pass Feeder Phase 1 design/build efforts are underway, which can bolster LVMWD supply by ~700 acre-feet annually during droughts. Continuing to advocate for Sepulveda Pass Feeder Phase 2, which can bolster LVMWD supply by another 2,000 acre-feet per year (2,700 acre-feet total).*
106	**MEASURE O-7:** Maximize operational flexibility and redundancies, including new alternative water supplies, water transfer agreements, interties, flexible exchanges, additional system interconnections, and points of delivery.	Action O-7.3	Continue to coordinate with neighboring jurisdictions to ensure adequate water availability and peak load water supply for fire suppression efforts in alignment with CAL FIRE's recommendations.	Started	On-going	On-going	Johnson, Darrell	*Ongoing. All water storage tanks are "topped off" pending red flag warnings*
107	**MEASURE O-7:** Maximize operational flexibility and redundancies, including new alternative water supplies, water transfer agreements, interties, flexible exchanges, additional system interconnections, and points of delivery.	Action O-7.4	As necessary, increase storage capacity where feasible at water system facilities to prepare for wildfire and drought periods.	Started	On-going	On-going	Johnson, Darrell	*Ongoing. All water storage tanks are "topped off" pending red flag warnings and additional sources of water supply are being explored as part of the Water Supply Reliability and Diversification Study.*
108	**MEASURE O-7:** Maximize operational flexibility and redundancies, including new alternative water supplies, water transfer agreements, interties, flexible exchanges, additional system interconnections, and points of delivery.	Action O-7.5	Study and produce a report that identifies and recommends alternative water supply sources for the purpose of diversifying the District's water supply portfolio to increase resiliency to climate change and other natural disasters - (Water Supply Diversification Study)	Started	2025	2026	McDermott, Joe	*To date, 3 workshops have been conducted with stakeholders and a report is scheduled to be presented to the Board of Directors by summer 2026.*
109	**MEASURE O-7:** Maximize operational flexibility and redundancies, including new alternative water supplies, water transfer agreements, interties, flexible exchanges, additional system interconnections, and points of delivery.	Action O-7.6	Study the feasibility for implementing sea water desalination (e.g. OceanWell)	Started	2024	2026	McDermott, Joe	*The Study for on shore infrastructure improvements has been completed, offshore requirements are being studied, pilot testing in Las Virgenes Reservoir has been completed and a demonstration test in the ocean is scheduled for 2026.*
110	**MEASURE O-7:** Maximize operational flexibility and redundancies, including new alternative water supplies, water transfer agreements, interties, flexible exchanges, additional system interconnections, and points of delivery.	Action O-7.7	Secure an agreement and purchase water that can be stored in a groundwater basin via a third party for use during drought and other emergencies that trigger a water shortage	Completed	2024	2025	Pedersen, David	*The District purchased 6,000 acre-feet of water and storage rights with the ability to extract and deliver up to 850 acre-feet in any single year from a groundwagter basin in Central Valley via an Agreement with Irvine Ranch Water District. Pending completion of the Water Supply Diversification Study, additional water banking may b e desirable.*

AGENDA ITEM NO. 10.D

DATE: May 4, 2026

TO: JPA Board of Directors

FROM: Water Operations

SUBJECT: Contractual Laboratory Services: Award

The Las Virgenes-Triunfo Joint Powers Authority (JPA) approved funding for this matter in the JPA Budget. On April 6, 2026, the LVMWD Board, acting as Administering Agent of the JPA, authorized accepting a proposal from Eurofins Drinking Water and Wastewater West, LLC, and executing a one-year professional services agreement, in an amount not to exceed $530,158, with four one-year renewal options including 3% annual inflationary adjustments for contractual laboratory services.

SUMMARY:

The District operates and maintains a state-certified water quality laboratory at the Tapia Water Reclamation Facility (Tapia). The District's laboratory technicians conduct analytical work for 49 daily, weekly and monthly parameters; however, it is not feasible for staff to maintain the necessary instrumentation, supplies, or certifications required to analyze all the constituents for regulatory compliance. Therefore, the services of contract laboratories are necessary to complete the analytical work and reporting that are beyond in-house capabilities. A request for proposals was posted to OpenGov from February 9 to February 27, 2026, for the solicitation of proposals from qualified contract laboratories. Six proposals were received with the lowest responsive bid coming from Eurofins Drinking Water and Wastewater West, LLC (Eurofins).

Eurofins proposed to perform analytical work for annual regulatory compliance and a two-year special sampling plan at a cost of $481,962.43. To capture costs for unexpected state and federal regulatory requirements, duplicate analyses, disaster (i.e. fire) analyses, and preliminary testing related to the Advanced Water Purification Facility, an additional 10% contingency is recommended. The recommendation is to accept the proposal from Eurofins, authorize the General Manager to execute a one-year professional services agreement, in an amount not to exceed $530,158, with four one-year renewal options including 3% annual inflationary adjustments, for contractual laboratory services.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

Sufficient funding for this work is available in adopted Fiscal Year 2025-26 Budget and will be recommended in proposed future fiscal year budgets. No additional appropriation is required.

GOALS:

Provide Safe and Quality Water with Reliable Services

Prepared by: Veronica Hurtado, Water Reclamation Manager

AGENDA ITEM NO. 10.E

DATE: May 4, 2026

TO: JPA Board of Directors

FROM: Water Operations

SUBJECT: Contract Laboratory Services: Contract Increase and Extension

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The Las Virgenes-Triunfo Joint Powers Authority (JPA) approved funding for this matter in the JPA Budget. On March 3, 2026, the LVMWD Board, acting as Administering Agent of the JPA, authorized execution of a contract amendment to extend the term of the professional services agreement with Weck Laboratories, Inc., from January 18, 2026, to April 15, 2026; and approved an increase, in the amount of $87,900, for contract laboratory services.

SUMMARY:

The contractual laboratory services agreement with Weck Laboratories, Inc., expired on January 18, 2026, with no remaining renewal options. An extension to the contract and increase is needed to cover the solicitation period for a new laboratory services contract. A request for proposals was posted to OpenGov from February 9, through February 27, 2026, for the solicitation of proposals from qualified contract laboratories. Award of a new contract is anticipated to be recommended to the JPA Board on April 6, 2026.

Regulatory monitoring cannot be interrupted; therefore, a contract extension for Weck's on-going services is recommended through April 15, 2026. The extension would provide overlap with the execution of a new contract for laboratory services and any on-boarding procedures needed to set-up a new service provider. An increase to the contract is also recommended, in the amount of $87,900, to cover expenses through April 15, 2026.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

Sufficient funds are available in the adopted Fiscal Year 2025-26 JPA Budget. No additional appropriation is required.

GOALS:

Ensure Effective Utilization of the Public's Assets and Money

Prepared by: Veronica Hurtado, Water Reclamation Manager