LAS VIRGENES - TRIUNFO JOINT POWERS AUTHORITY AGENDA

4232 Las Virgenes Road, Calabasas, CA 91302

July 5, 2022, 5:00 PM

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

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

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

Webinar ID:

To join by telephone, please dial (669) 900-6833 or (346) 248-7799 and enter Webinar ID: 860 9758 8946

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

Members of the public can also access and request to speak at meetings live on-line, with audio and limited video, a t www.LVMWD.com/JPALiveStream. In addition, members of the public can submit written comments electronically for consideration at www.LVMWD.com/JPALiveStream. To ensure distribution to the members of the Las Virgenes - Triunfo Joint Powers Authority Board of Directors prior to consideration of the agenda, please submit comments 24 hours prior to the day of the meeting. Those comments, as well as any comments received after 5:00 P.M., will be distributed to the members of the Board of Directors and will be made part of the official public record of the meeting. Contact Josie Guzman, Executive Assistant/Clerk of the Board at (818) 251-2123 or jguzman@lvmwd.com with any questions.

ACCESSIBILITY: If requested, the agenda and backup materials will be made available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and the federal rules and regulations adopted in implementation thereof. Any person who requires a disability-related modification or accommodation, in order to observe and/or offer public comment may request such reasonable modification, accommodation, aid, or service by contacting the Executive Assistant/Clerk of the Board by telephone at (818) 251-2123 or via email to jguzman@lvmwd.com no later than 8:00 AM on the day of the scheduled meeting.

Members of the public wishing to address the Las Virgenes-Triunfo Joint Powers Authority (JPA) 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.

The <u>Public Comments</u> agenda item is presented to allow the public to address the Board on matters not on the agenda. The public may also present comments on matters on the agenda; speakers for agendized items will be recognized at the time the item is called up for discussion.

Materials prepared by the JPA in connection with the subject matter on the agenda are available for public inspection at 4232 Las Virgenes Road, Calabasas, CA 91302. Materials prepared by the JPA and distributed to the Board during this meeting are available for public inspection at the meeting or as soon thereafter as possible. Materials presented to the Board by the public will be maintained as part of the records of these proceedings and are available upon request to the Clerk of the Board.

PLEDGE OF ALLEGIANCE

- 1 CALL TO ORDER AND ROLL CALL
- 2 <u>APPROVAL OF AGENDA AND APPROVAL OF FINDINGS OF RESOLUTION NO.</u> 18 (AB 361)
- 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.

- A Minutes: Special Meeting of June 13, 2022 (Pg. 4) Approve.
- B Statement of Revenues, Expenses and Changes in Net Position: May 2022 (Pg. 10)
 Receive and file the Statement of Revenues, Expenses and Changes in Net Position for the period ending on May 31, 2022.
- C Hach WIMS Software Training, Maintenance and Support: Approval (Pg. 13)
 Authorize the Administering Agent/General Manager to execute a contract with Data

Clarifier Solutions, in the amount of \$44,900, for additional WIMS training and programming support, including an option to extend support services annually at a 3% rate increase.

5 <u>ILLUSTRATIVE AND/OR VERBAL PRESENTATION AGENDA ITEMS</u>

- A State and Federal Legislative Update (Pg. 18)
- B Pure Water Project Las Virgenes-Triunfo: Update (Pg. 106)
- C Update on Project Financing Environment by Greg Swartz, Piper Sandler (Pg. 111)

6 **ACTION ITEMS**

A Tapia Water Reclamation Facility Flood Protection Evaluation: Award (Pg. 125)

Authorize the Administering Agent/General Manager to execute a professional services agreement with Stetson Engineers, Inc., in the amount of \$105,100, to perform a flood protection evaluation for the Tapia Water Reclamation Facility.

- 7 BOARD COMMENTS
- 8 ADMINISTERING AGENT/GENERAL MANAGER REPORT
- 9 FUTURE AGENDAITEMS
- 10 PUBLIC COMMENTS

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

11 ADJOURNMENT

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

LAS VIRGENES – TRIUNFO JOINT POWERS AUTHORITY MINUTES SPECIAL MEETING

5:00 PM June 13, 2022

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance to the Flag was led by Brian Richie.

1. CALL TO ORDER AND ROLL CALL

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

Present: Directors Lewitt, Lo-Hill, Nye, Orkney, Polan, Renger, Shapiro,

Tjulander, and Wall.

Absent: Caspary

2. APPROVAL OF AGENDA

<u>Director Polan</u> moved to approve the agenda and approve the findings of Resolution No. 18 (AB 361). Motion seconded by <u>Director Renger</u>. Motion carried by the following roll call vote:

AYES: Lewitt, Lo-Hill, Nye, Orkney, Polan, Renger, Shapiro, Tjulander, Wall

NOES: None ABSTAIN: None ABSENT: Caspary

3. PUBLIC COMMENTS

None.

4. CONSENT CALENDAR

- A Minutes: Special Meeting of May 9, 2022 and Special Meeting of May 18, 2022: Approve
- B Statement of Revenues, Expenses, and Changes in Net Position: April 2022

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

<u>Director Renger</u> moved to approve the Consent Calendar. Motion seconded by <u>Director Polan</u>. Motion carried by the following roll call vote:

AYES: Lewitt, Lo-Hill, Nye, Orkney, Polan, Renger, Shapiro, Tjulander, Wall

NOES: None ABSTAIN: None ABSENT: Caspary

5. ILLUSTRATIVE AND/OR VERBAL PRESENTATION AGENDA ITEMS

A State and Federal Legislative Update

Syrus Devers, state lobbyist for the JPA with Best Best & Krieger LLP (BBK), reported that the Senate presented a \$21 billion budget package for climate change, drought, and wildfire prevention. He also reported that the Assembly Committee on Water, Parks, and Wildlife would hold a hearing on June 14th regarding SB 1157 (Hertzberg), which proposes to lower the existing indoor gallons per capita daily (GPCD) water use efficiency standard. He noted that the Association of California Water Agencies (ACWA), California Municipal Utilities Association (CMUA), WateReuse, and California Association of Sanitation Agencies (CASA) were working to oppose this bill unless amended; however, it was anticipated that the Chair of the Assembly Committee would favor passing the bill out of Committee with no amendments. He also noted that Administering Agent/General Manager David Pedersen would provide testimony at the hearing. He provided an update regarding AB 2639 (Quirk) related to the Bay Delta Plan and water rights, and stated that ACWA led opposition unless amended to ensure that this bill would fail to pass out of the Assembly. He commented that opposition to this bill might lead to a discussion to amend to SB 1157.

Administering Agent/General Manager David Pedersen noted that the JPA had taken an oppose unless amended position on SB 1157; however, this bill was likely to pass due to the drought and due to the study prepared by the California Department of Water Resources and the State Water Resources Control Board. He stated that amendments to this bill would be helpful to address issues important to the JPA, which would involve preparing studies to consider the impacts to wastewater, recycled water, and potable water systems, and potentially give more time to achieve the proposed 2030 standards. He stated that this could require

changing the JPA's oppose unless amended position to a neutral position.

A discussion ensued regarding the possibility of additional funding for water conservation through the state budget process, the study to consider the impacts and costs for implementing SB 1157, and development of a specified variance for the use of additional recycled water.

Ana Schwab, federal lobbyist for the JPA with BBK, reported that the House Appropriations Committee would hold hearings regarding appropriation bills. She also reported that the Senate released its Congressionally-directed spending requests; however, no timeline was released. She stated it was expected that the U.S. Environmental Protection Agency would announce a polyfluoroalkyl substances (PFAS) levels health advisory. She noted that the Senate Committee on Energy and Natural Resources held a hearing to consider the Support to Rehydrate the Environment, Agriculture, and Municipalities (STREAM) Act. She stated that a drought package would be prepared this summer, and it was likely that the STREAM Act would be included in this package. She also reported that meetings would be scheduled prior to the ACWA Washington DC Conference to highlight the severity of the drought for the JPA, discuss how the JPA was taking a leadership role in managing drought, and how the JPA would use technology in managing drought with the Pure Water Project Las Virgenes-Triunfo. She noted that an announcement was expected from the U.S. Bureau of Reclamation (USBR) regarding the Title XVI application, and the U.S. Environmental Protection Agency (EPA) had released the Water Infrastructure Finance and Innovation Act (WIFIA) loan process. She stated that the USBR would accept Letters of Interest until September, and if the letter is accepted, the application may be submitted for review and processing. She noted that there was concern regarding provisions related to the Build America, Buy America Act (BABAA), and that the EPA was seeking a waiver from the Office of Management and Budget and the Executive Office of the President for the WIFIA Program.

Lowry Crook, federal lobbyist for the JPA with BBK, noted that the Senate held a hearing regarding calling for stronger support for the drought He noted that conversations were taking place at the White House and water-focused agencies regarding coordination on an Administration response to drought and wildfires for short-term response and long-term water and drought resilience.

B Pure Water Project Las Virgenes-Triunfo: Update

Oliver Slosser, Engineering Program Manager, presented the report. He noted that the WIFIA funding notice was released, and staff would discuss next steps for submitting a Letter of Interest for WIFIA funding. He responded to a question regarding feedback received from the Los Angeles County Fire Department by stating that the initial discussion was to provide an overview of the Pure Water Project Las Virgenes-Triunfo with no specific details. He also responded to question regarding the availability of the list of attendees to the Pure Water Coffee

Brew event, the upcoming Project Team meeting to discuss feedback from technical workshops, and the Water Code Section 1211 process for the wastewater change petition.

6. ACTION ITEMS

A Proposed Two-Year JPA Budget Plan for Fiscal Years 2022-24

Approve the proposed two-year JPA Budget Plan for Fiscal Years 2022-24 and adopt the proposed Fiscal Year 2022-23 JPA Budget.

Debbie Rosales, Finance Analyst II, presented the report and a PowerPoint presentation.

<u>Director Lo-Hill</u> moved to approve Item 6A. Motion seconded by <u>Director Nye</u>.

Ms. Rosales responded to questions regarding addressing inflation in the proposed budget, impacts to recycled water costs due to drought conditions, and the amounted budgeted for the Pure Water Demonstration Facility.

John Zhao, Director of Facilities and Operations, responded to questions regarding costs for compost odor control and maintenance of the equipment for the Reactor Building.

Motion carried by the following roll call vote:

AYES: Lewitt, Lo-Hill, Nye, Orkney, Polan, Renger, Shapiro, Tjulander, Wall

NOES: None ABSTAIN: None ABSENT: Caspary

7. BOARD COMMENTS

Director Lo-Hill reported that she attended the Association of Water Agencies of Ventura County (AWAVC) Annual Water Symposium on May 26th, where a presentation was provided regarding the City of Ventura treating the water released to Santa Clara River Estuary and Ventura County Growers Fox Canyon water market. She also reported that she attended the MWD Committee Meetings earlier in the day where they discussed displaying "Save Water" on Caltrans sign boards, and approved \$4 per square foot rebate for turf replacement. She noted that the City of Calabasas recently discussed converting medians irrigated by potable water to recycled water.

A discussion ensued regarding the medians along Mulholland Highway that were currently irrigated using potable water, and reconsidering whether installing a recycled water pipeline would be practical.

Director Orkney reported that she also attended the AWAVC Annual Water Symposium, and she commended Administering Agent/General Manager David Pedersen on his presentation regarding water shortage impacts. She stated that she was interested in the VenturaWaterPure Project's two-phase program and the effect on the Santa Clara River Estuary.

8. ADMINISTERING AGENT/GENERAL MANAGER REPORT

Administering Agent/General Manager David Pedersen reported that the flow in Malibu Creek measured 8.4 cubic feet per second (CFS), and there was no need for potable water supplement. He noted that recycled water demand had decreased and wells were shut off as they were not needed for potable water supplement. He also reported that there was increased interest in the recycled water fill station, which had increased three to four times the usual number of customer, and approximately 50 people recently enrolled in recycled water fill station training. He noted that the ACWA Washington DC Conference would be held July 12th through 14th. He also noted that the City of Thousand Oaks City Council would consider approval of the Memorandum of Understanding (MOU) for Water Resources Collaboration. He stated that he would attend the City Council meeting to speak in support of the MOU. He responded to a question regarding the status of branding and messaging signage for LVMWD vehicles by stating that he would follow-up with staff.

9. FUTURE AGENDA ITEMS

None.

10. PUBLIC COMMENTS

None.

11. ADJOURNMENT

Seeing no further business to come before the Board, the meeting was duly adjourned at <u>5:50 p.m</u>.

_	
J	ay Lewitt, Chair
ATTEST:	
Leon E. Shapiro, Vice Chair	

July 5, 2022 JPA Board Meeting

TO: JPA Board of Directors

FROM: Finance & Administration

Subject: Statement of Revenues, Expenses and Changes in Net Position: May 2022

SUMMARY:

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

RECOMMENDATION(S):

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

FISCAL IMPACT:

No

ITEM BUDGETED:

No

FINANCIAL IMPACT:

There is no financial impact associated with this report.

DISCUSSION:

JPA operating revenues year-to-date through May 31, 2022 of Fiscal Year 2021-22 were \$5.1 million, which were significantly above the prior year's revenues of \$2.4 million and the \$2.6 million annual budget for the fiscal year. The increase in revenues for the JPA as compared to the prior year and budget was due to a one-time "indifference payment" received from Southern California Edison for \$2.8 million. The indifference payment compensates the JPA

for the effects of the "peak hour shift" costs that were approved by the California Public Utilities Commission and result in a decrease to the projected cost-savings associated with the Rancho Phase 2 Solar Generation Project.

Wholesale recycled water revenues through May 2022 were \$2.2 million, which is in-line with prior year revenues of \$2.3 million.

JPA operating expenses year-to-date through May 31, 2022 were \$18.1 million, which were \$1.5 million (or 7.4%) below the prior year's operating expenses of \$19.6 million, and encompass 98.3% of the \$18.5 million annual operating budget for the fiscal year. Decreases in operating expenses versus the prior year were primarily due to lower general and administrative (G&A) costs, which were down \$1.1 million, along with reduced direct wastewater treatment labor costs of \$0.2 million.

G&A costs were lower than the prior year primarily due to reduced allocated labor costs from staff vacancies in the Finance Division during the current year. Cost-savings from vacancies resulted in lower support service costs allocated to the JPA. Two factors contributed to the drop in direct labor costs versus the prior year. The first factor stems from lower overtime costs for the JPA versus the prior year when a COVID surge resulted in a larger-than-normal increase in overtime costs. The second factor that increased costs last year was related to the retirement of two long-tenured employees, resulting in the one-time cash-out/disbursement of accrued leave benefits.

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

Prepared by: Brian Richie, Finance Manager

ATTACHMENTS:

Statement of Revenues, Expenses, and Changes in Net Position - May 2022

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





				Throug of fisca		;		ance with or Year
		urrent		Actual Year-to-Date		Positive		
		udget					(Negative)	
	20	021/22	20	21/22	20	020/21	2021/22	2 to 2020/21
OPERATING REVENUES:	•		•	2215	•		Φ.	(101)
Wholesale recycled water sales	\$	2,528	\$	2,245	\$	2,366	\$	(121)
Other income		80		2,886		48		2,838
Total operating revenues		2,608		5,131		2,414		2,717
OPERATING EXPENSES:								
Treatment Plant		4,542		3,763		3,947		(184)
Recycled water transmission and distribution		1,965		2,001		2,144		(143)
Compost Plant		2,737		2,473		2,554		(81)
Sewer		94		241		205		36
General and administrative		8,894		9,460		10,555		(1,095)
Other operating expenses		224		209		184		25
Total operating expenses		18,456		18,147		19,589		(1,442)
OPERATING INCOME (LOSS) BEFORE		(15,848)	((13,016)		(17,175)		4,159
BILLING TO PARTICIPANTS			·	` '		,		
Billing to Participants		15,848		12,926	_	16,948		(4,022)
OPERATING INCOME (LOSS)		-		(90)		(227)		137
NONOPERATING REVENUES (EXPENSES):								
Interest income (expense)		20		25		50		(25)
Other revenues (expenses)		-		14		178		(164)
Total nonoperating revenues (expenses)		20		39		228		(189)
CHANGES IN NET POSITION		20		(51)		1		(52)
NET POSITION:								
Beginning of fiscal year	-	98,362		98,362		97,123	-	1,239
Ending Net Position	\$	98,382	\$	98,311	\$	97,124	\$	1,187

July 5, 2022 JPA Board Meeting

TO: JPA Board of Directors FROM: Facilities & Operations

Subject: Hach WIMS Software Training, Maintenance and Support: Approval

SUMMARY:

Staff is preparing to convert to the exclusive use of the Water Information Management System (WIMS) software developed by the Hach Company to perform regulatory reporting of NPDES permit data. Permit compliance information is reported electronically to the Regional Water Quality Control Board through their California Integrated Water Quality System Project (CIWQS) system.

For years, staff have been working to fully implement the WIMS system for reporting but found it difficult due to internal staffing issues and finding specialized programming support. Last year, a former Hach programmer reached out to staff to offer WIMS programming support services through his company, Data Clarifier Solutions. A purchase order was approved to provide programming support for regulatory reports and to improve the functionality of the WIMS interface.

Programming has now been completed and intensive training of staff is needed to fully implement Hach WIMS to generate the reports. Data Clarifier Solutions has provided a proposal that consists of a three-day in-person training session for all staff and a full year of support services, which includes report work, graphing, calculations, dashboards, variable creation/modification, and interfacing to data sources. Attached are copies of two proposals for the work: a one-time training session, in the amount of \$6,500, and on-going maintenance and support, in the amount of \$38,400. The maintenance and support proposal also includes four one-year renewal options with a 3% annual escalation factor. Staff recommends authorization for the execute a contract with Data Clarifier Solutions, in the amount of \$44,900, for Hach WIMS software training, maintenance and support.

RECOMMENDATION(S):

Authorize the Administering Agent/General Manager to execute a contract with Data Clarifier Solutions, in the amount of \$44,900, for additional WIMS training and programming support, including an option to extend support services annually at a 3% rate increase.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

The adopted Fiscal Year Budget includes funding for this item. The total cost of the work is \$44,900, with 70.6% allocated to LVMWD and 29.4% allocated to TWSD.

DISCUSSION:

To complete the required regulatory reporting to the Los Angeles Regional Water Quality Control Board and U.S. Environmental Protection Agency (EPA), staff uses a combination of purchased and self-developed software. Currently, the JPA's laboratory uses Laboratory Information Management System (LIMS) software developed by LabWorks, LLC. LIMS provides a database of sample tracking, analytical results, and quality control data. LIMS has been used by the JPA since 2000 and provides an excellent archivable database, allowing data to be stored on the district's servers. Due to limitations for report customization directly from the LIMS software, the JPA's laboratory staff developed an interface to extract data for results entered into LIMS.

Hach's WIMS software was previously purchased and performed basic programming in 2017 to produce electronic CIWQS and eSMR reporting. The WIMS software has the capability to import SCADA and LIMS data further integrating multiple platforms leading to automatic report generation to complete all of the JPA's NPDES reporting requirements. Staff has not been able to fully implement the WIMS software for regulatory reporting due to internal staffing changes and software programming support issues.

Staff has been working to fully implement the WIMS system for reporting, but found it difficult due to internal staffing issues and finding external specialized programming support. Recently, a former Hach programmer reached out to staff to offer programming support services through his company, Data Clarifier Solutions. A purchase order was approved for Data Clarifier Solutions in December 2021 and April 2022 to perform regulatory reporting programming in WIMS in the amount of \$51.700.

The programming of all NPDES reports has been completed by Data Clarifier Solutions, and staff need to be properly trained in the full usage of the Hach WIMS system, including the reports. Data Clarifier Solutions has provided a quote to train in-person for three full working days for any amount of employees that will eventually use this software for inputting data and/or reviewing reports for transfer into the CIWQS system. The total amount for this task is \$6,500.

After the training is complete, there is an option for an annual support services agreement. Annual support services includes up to 16 hours of remote support and programming services on the WIMS system per month for 12 months. Support services consist of report work, graphing, calculations, dashboards, variable creation/modification and interfacing to data sources. The total amount for this service is \$38,400 with four one-year renewal options based on a 3% annual escalator. Support services through Data Clarifier Solutions will be needed with the anticipated new programming to implement the requirements of the new NPDES permit.

GOALS:

Ensure Effective Utilization of the Public's Assets and Money

WIMS reporting will reduce the staff effort for regulatory reporting.

Prepared by: Brett Dingman, Water Reclamation Manager and Kourtney Haynie, Management Analyst

ATTACHMENTS:

Training Proposal
On-going Support Proposal



6,500



Tel: 505-506-5221

Email: Phil@dataclarifiers.com

Address: 7008 Christy Ave, Albuquerque, NM 87109

Customer:		
Kourtney Haynie	Quotation #	LVOT3DV2
Las Virgenes Municipal Water District	Date	5/26/2022
Email: Khaynie@LVMWD.com		

Description of Work

Item 1: 3 Day Onsite WIMS Training.

3 consecutive days of up to 8 hours daily.

Review of the WIMS System and interfaces.

Training from basics to advanced functionality including:

- -Data Entry (using and designing)
- -Reports (using and designing)
- -Graphs (using and designing)
- -Security and Permissions
- -Variable setup and attributes
- -Best practices
- -No limit to amount of trainees

Terms and Conditions: Total \$ 6,500

Pricing valid for 30 days from date of quote. Invoicing to occur after services performed, terms of payment are net 30 from invoice date. Applicable sales tax will be added to the invoice and paid by the customer. If applicable, provide an exemption certificate.

We trust you find the quote satisfactory and look forward to your business. Please contact us with any questions.





Tel: 505-506-5221

Email: Phil@dataclarifiers.com

Address: 7008 Christy Ave, Albuquerque, NM 87109

Customer:		
Kourtney Haynie	Quotation #	LVWSSV1
Las Virgenes Municipal Water District	Date	6/8/2022
Fmail: Khavnie@LVMWD.com		

Description of Work

Item 1: Annual Support Services - Up to 16 hours of remote support and services on the WIMS system per month for 12 months. Includes report work, graphing, calculations, dashboards, variable creation/modification, and interfacing to data sources. VPN access to WIMS system required.

QTY: 1 38,400

Tax

\$ **Total** 38,400 **Terms and Conditions:**

Pricing valid for 30 days from date of quote. Invoicing to occur at the start of support coverage, terms of payment are net 30 from invoice date. LVMWD may renew this Agreement for up to four additional term(s) of one year on the same terms and conditions set forth in this Agreement, including a 3% higher rate for each additional year, by providing written notice to Consultant (Data Clarifier Solutions) at any time prior to the initial Expiration Date. The Effective date of a Renewal Term shall be the Expiration Date of the prior term, and the Expiration Date of the Renewal Term shall be the date one year after the Effective Date of the Renewal Term. Applicable sales tax will be added to the invoice and paid by the customer. If applicable, provide an exemption certificate.

We trust you find the quote satisfactory and look forward to your business. Please contact us with any questions.



To: Las Virgenes-Triunfo JPA Board of Directors and Staff

From: John Freshman, Ana Schwab, and Lowry Crook

Date: June 28, 2022 RE: Federal Report

Legislation

Water Efficiency, Conservation, and Sustainability Act of 2022

The Water Efficiency, Conservation, and Sustainability Act of 2022 (H.R.7847 and S.4279), sponsored by Senator Padilla (D-CA) and Congressman McNerney (D-CA), would create three grant programs administered by EPA. The programs would provide grants and technical assistance for water efficiency, water loss, and plumbing codes. The legislation would benefit states, local governments, tribes, and water and waste water systems. The Water Efficiency and Conservation Grant Program would provide grants to carry out water efficiency incentive and direct installation programs. The bill authorizes \$50 million each year for 5 years. The second program is the Sustainable Water Loss Control Program, which would provide funding and technical assistance to conduct annual water audits, implement controls to address losses, and establish water loss control programs. It would be authorized \$40 million each year for 5 years. The Assistance for Water Efficient Plumbing Code Adoption would provide funding to assist in the voluntary adoption and implementation of model water-efficient plumbing codes. It would be authorized \$20 million each year for 5 years.

Congressional Leadership Negotiations Stalled Prior to 2-Week Recess

Congress will be on recess for the next two weeks. The Senate will return on July 11 and the House has no votes scheduled until July 12. This past weekend, President Biden signed into law the Bipartisan Safer Communities Act, which was passed in a bipartisan manner in the House and Senate. The law aims to reduce gun-related deaths and violence by closing loopholes and implementing more robust background checks.. The law will encourage states to adopt red flag laws by creating a grant program that would be used by states to implement crisis intervention programs that empower family members or police officers to request a court to temporarily prevent people exhibiting violent behavior from owning a firearm.

In the past several weeks, Congressional leadership has focused on the U.S. Innovation and Competition Act (USICA) and the House-passed America COMPETES Act. The USICA would authorize more than \$100 billion over five years to support breakthrough scientific discovery and technological innovation. Due to the upcoming midterm elections, major legislation that is not passed in August is unlikely to be passed during the 117th session.

Senator Joe Manchin (D-WV) and Senate Majority Leader Schumer are closely negotiating on the long-stalled climate and tax reform bill. The legislation would also include prescription drug reforms. Similar to the other big legislative packages, they have limited time to introduce and



vote on the bill prior to the midterms. The negotiated bill is expected to be much slimmer than the previous \$1.75 trillion plan and would likely be passed by a party-line vote.

House Appropriations Committee Introduces FY2023 Bills

The House Appropriations Committee began full committee and subcommittee markups for the fiscal 2023 spending bills. So far, the Committee has successfully passed the Agriculture-FDA, Defense, Homeland Security, Legislative Branch, and Military Construction-Veterans Affairs bills. Last week, the Energy and Water Development Subcommittee and the Interior-Environment Subcommittee passed their respective bills. These bills are expected to pass during the full committee markups scheduled for this week. Both the Environment Protection Agency and the Department of Interior received increases in funding compared to the enacted fiscal year 2022 levels. The Senate Appropriations Committee will most likely introduce their fiscal bills later in the summer.

Energy-Water Bill Highlights

- The Bureau of Reclamation would receive \$1.9 billion, an increase of about \$476.7 million compared with the president's request.
- \$451 million in additional funding for water resources projects, including those authorized in the Water Infrastructure Improvements for the Nation (WIIN) Act.
- \$189.3 million for WaterSMART programs, an increase of \$49.8 million above the fiscal year 2022 level and \$126.9 million above the request, to assist with drought responses and mitigation efforts.
- \$54 million above the request is provided for rural water projects.
- The Army Corps of Engineers would receive about \$8.9 billion for fiscal 2023, nearly \$2.3 billion more than the president's request and \$545 million more than in fiscal 2022.

Interior-Environment Bill Highlights

- The Environmental Protection Agency would receive \$11.5 billion, \$2 billion more than the enacted fiscal 2022 level and \$400 less than President Biden's request.
- Department of Interior would receive \$16.6 billion, an increase of \$2.1 billion above fiscal year 2022.
- \$5.18 billion for State and Tribal Assistance Grants, an increase of \$826 million above the FY 2022 enacted level. Of the STAG funding, \$1.75 billion for Clean Water State Revolving Fund and \$1.13 billion for Drinking Water State Revolving Fund.
- \$65 million for ten new grant programs authorized in the Drinking Water and Wastewater Infrastructure Act.
- \$301 million for Environmental Justice activities, an increase of \$201 million above the FY 2022 level.
- \$72.1 million for WIFIA.



BB&K is closely following the appropriations process and will continue to provide analysis to Las Virgenes-Triunfo JPA on key funding programs and agencies.

Bureau of Reclamation Commissioner Supports Western Water Bills

This past month, the Senate Energy and Natural Resources Water and Power Subcommittee held a legislative hearing on 16 western water-related bills. The legislative hearing provided Senators the opportunity to introduce their bills and ask the Bureau's Commissioner, Camille C. Touton, about the Bureau's position and progress. They did not vote on the bills. Overall, Commissioner Touton expressed support of the legislation, especially those that advance water supply and technology advancements, which are direly needed in western states experiencing drought.

Senator Feinstein did not question Commissioner Touton on her legislation, S.4231 "The STREAM Act." She did offer an opening statement that emphasized the necessity for western states to modernize its water infrastructure. Exasperated water levels in California and Arizona need efficient, advanced water technologies to meet water supply needs. Feinstein stated that her legislation will provide 1 million additional acre feet of water per year on average.

Commissioner Touton stated the Bureau understands immediate action is needed to address water supply issues. Reclamation is prioritizing and accelerating infrastructure project that are going to increase water supplies and address water scarcity. Reclamation's WaterSMART program received \$160 million in the Bipartisan Infrastructure Law, and currently, there is about \$100 million in available funding. The Bureau is dedicated to using those funds in the best way possible.

WIFIA FY2022 Funding Availability

This month, the Environmental Protection Agency announced the 2022 notices of funding availability for the agency's Water Infrastructure Finance and Innovation Act (WIFIA) program and the State Infrastructure Financing Authority WIFIA (SWIFIA) program. This year's funding will provide up to \$6.5 billion in total funding to support \$13 billion in water infrastructure projects.

The funding includes \$5.5 billion for the WIFIA program and an additional \$1 billion for the SWIFIA program. This round of funding will prioritize funding in four areas:

- Increasing investment in economically stressed communities.
- Making rapid progress on lead service line replacement.
- Addressing PFAS and emerging contaminants.
- Supporting one water innovation and resilience.

EPA will consider prospective WIFIA borrowers consistent with the goals of President Biden's Justice40 initiative. This initiative intends to ensure that federal agencies deliver at least 40% of



benefits from certain investments, including water and wastewater infrastructure, to underserved communities.

Environmental Protection Agency Issues New Drinking Water Health Advisories

Below is a legal alert written by BB&K on the new health advisories issues by EPA.

The Environmental Protection Agency (EPA) released new drinking water health advisories for four of the most common per- and polyfluoroalkyl substances (PFAS):

- Perfluorooctanoic acid (PFOA)
- Perfluorooctane sulfonate (PFOS)
- Hexafluropopropylene oxide dimer acid and its ammonium salt (GenX)
- Perfluorobutane sulfonic acid and its potassium salts (PFBS)

In this June 15 health advisory, the EPA recommends an interim lifetime exposure limit of 0.004 parts per trillion (ppt) for PFOA and 0.02 ppt for PFOS. The health advisory also recommends a final exposure limit of 10 ppt for Gen X and 2,000 ppt for PFBS.

Public water agencies in particular should monitor PFAS updates carefully, as they may be subject to new limits for PFAS entering their water or treatment biosolids.

Brief History of PFAS Federal Regulation

Under the Obama administration, the EPA set a 2016 health advisory for both PFOA and PFOS at a combined 70 ppt per day. In the fall of 2021, the EPA released the PFAS Strategic Roadmap (Roadmap). This multi-year plan contained EPA's goals and priorities for addressing PFAS. The Roadmap drew out a plan for addressing PFAS from the beginning of the lifecycle of PFAS by reviewing and utilizing the science of PFAS. In this Roadmap, the EPA committed to providing updated health advisories in early 2022.

The EPA published toxicity assessments for GenX chemicals in late 2021. These assessments stated that oral ingestion of no more than 3 ppt per day would not impact the health of most people. Further, the toxicity assessments led the EPA to re-examine the standards set for PFOS, PFOA and PFBS. Following the release of the toxicity assessment, the EPA stated that oral ingestion of no more than 0.0015 ppt per day of PFOA and 0.0079 ppt per day of PFOS would not impact the health of most people. Because the EPA used an oral ingestion rate of 20 ppt per day to create the 70 ppt health advisory limit for both PFOA and PFOS, the EPA created a new lower health advisory limit.



New Standards

EPA set the new interim health advisories for PFOA and PFOS at 0.004 ppt and 0.02 ppt respectively. These advisories are only interim because the EPA may update or remove them once the National Primary Drinking Water Regulation is finalized. The advisories are primarily based on epidemiological studies of seven-year-old human children with decreased immunity caused by PFOA and PFOS. This benchmark was selected because it was the most sensitive non-carcinogenic effect from the over 400 studies the EPA examined. These advisories assume that only 20% of lifetime exposure from PFOA and PFOS will come from drinking water.

EPA also set the final health advisories for GenX and PFBS at 10 ppt and 2,000 ppt respectively. These advisories are based on animal toxicity studies following oral exposure. The GenX advisory is based on data relating to adverse liver effects, while the PFBS advisory is based on thyroid issues in newborn mice. These advisories assume that only 20% of lifetime exposure to PFOA and PFOS will come from drinking water.

Impact

EPA's new health advisories are not legally binding. But they signal that very low maximum contaminant levels (MCLs) may be coming for PFOA, PFOS, GenX and PFBS. The MCLs in PFOA and PFOS may be close to the lowest detectable range with current technology, at approximately 5 ppt. The EPA has stated that it expects to propose MCLs this fall.

EPA also stated that in the coming weeks it will issue a proposed rule to designate PFOA and PFOS as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), which will enable EPA to leverage the full range of Superfund authorities, including requiring reporting of PFOA and PFOS releases. It will also hold polluters accountable for clean-up costs. Public water agencies have raised concerns that such a designation could subject them to potential liability for PFAS found in water or treatment biosolids.

LAS VIRGENES-TRIUNFO - HIGH PRIORITY LEGISLATION IN THE 117TH CONGRESS THROUGH JUNE 26, 2022

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

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.613 SALT Deductibility Act	This bill repeals the temporary restrictions in taxable years 2018 through 2025 on the deductibility of state and local taxes. Companion bill to S.85	Introduced by Rep. Thomas Suozzi (R-NY) – January 28, 2021	
S.101 Environmental Justice Mapping and Data Collection Act of 2021	This bill establishes an interagency Environmental Justice Mapping Committee that must create a tool to identify environmental justice communities. Environmental justice communities are communities with significant representation of communities of color, low-income communities, or tribal and indigenous communities that experience, or are at risk of experiencing, higher or more adverse human health or environmental effects, as compared to other communities. The Environmental Protection Agency (EPA) must establish an environmental justice data repository to maintain the data collected by the committee. The EPA must make the repository available to regional, state, local, and tribal governments. Companion bill to H.R.516	Introduced by Sen. Edward Markey (D-MA) – January 28, 2021	
H.R.516 Environmental Justice Mapping and Data Collection Act of 2021	This bill establishes an interagency Environmental Justice Mapping Committee that must create a tool to identify environmental justice communities. Environmental justice communities are communities with significant representation of communities of color, low-income communities, or tribal and indigenous communities that experience, or are at risk of experiencing, higher or more adverse human health or environmental effects, as compared to other communities. The Environmental Protection Agency (EPA) must establish an environmental justice data repository to maintain the data collected by the committee. The EPA must make the repository available to regional, state, local, and tribal governments. Companion bill to S.101	Introduced by Rep. Cori Bush (D-MO) – January 28, 2021	
H.R.535 Special District Provide Essential Services Act	The bill would require the state's to direct at least five percent of future Coronavirus Relief Fund (CRF) allocations to special districts within their state. Companion bill to S.91	Introduced by Rep. John Garamendi (D-CA) – January 28, 2021	SUPPORT

LEGISLATION	SUMMARY	STATUS	POSITION
S.91 Special Districts Provide Essential Services Act	This bill makes special districts eligible for the Coronavirus Relief Fund and the Municipal Liquidity Facility program. Specifically, the bill makes special districts eligible for payments from amounts paid to states from any new appropriations to the fund. A special district must submit a request for payment to the state with information demonstrating that the special district has experienced or is likely to experience during the COVID-19 (i.e., coronavirus disease 2019) emergency	Introduced by Sen. Kyrsten Sinema (D-AZ) – January 28, 2021	SUPPORT
	 reduced revenue or operational funding derived from provided services, taxes, fees, or other sources of revenue; reduced indirect funding from the federal government, the state, or a unit of general government below the state level; or as a result of the COVID-19 emergency, increased expenditures necessary to continue operations. The Board of Governors of the Federal Reserve System shall include special districts as eligible issuers in the Municipal Liquidity Facility program, which was created in response to the COVID-19 emergency to buy municipal securities. 		
H.R.737 RENEW WIIN Act	Companion bill to H.R. 535 This bill extends the authority of certain federal agencies to provide support for western water infrastructure and extends consultation requirements concerning projects in California. Specifically, the bill extends through 2031 the authority of the Bureau of Reclamation to provide support for federal or state-led water storage projects in certain western states. It also extends provisions specific to California, including drought relief and the operations of the Central Valley Project (a hydropower and water management project in California that is operated by Reclamation). Further, the bill extends through 2036 consultation requirements concerning biological assessments and the coordinated operations of the Central Valley Project and the State Water Project in California.	Introduced by Rep. David Valadao (R-CA) – February 2, 2021	SUPPORT

LEGISLATION	SUMMARY	STATUS	POSITION
H.R. 692 Recognition of Local Interests in NEPA Decision Making	This bill sets forth requirements for determining the venue for judicial review of an agency action under the National Environmental Policy Act of 1969 (NEPA). Specifically, the bill requires a proceeding for judicial review of an agency's compliance with NEPA to be brought in the U.S. district court for a district in which the authorized activity is proposed to be carried out or the U.S. District Court for the District of Columbia.	Introduced by Rep. Liz Cheney (R- WY) – February 2, 2021	
H.R.848 GREEN Act of 2021	This bill provides tax incentives for investment in renewable energy resources and energy efficiency programs.	Introduced by Rep. Mike Thompson (D-CA) – February 4, 2021	
H.Res.104 Recognizing the duty of the Federal Government to implement an agenda to Transform, Heal, and Renew by Investing in a Vibrant Economy ("THRIVE")	This resolution expresses the sense of the House of Representatives that the federal government has a duty to develop a holistic agenda to respond to racial injustice, unemployment, the COVID-19 (i.e., coronavirus disease 2019) pandemic, and climate change. The resolution further outlines the goals of this agenda to build a society with greater racial, economic, and gender justice; dignified work; healthy communities; and a stable climate. Additionally, the resolution identifies efforts to support these goals. Companion bill to S.Res.43.	Introduced by Rep. Debbie Dingell (D-MI) – February 5, 2021	
S.Res.43 A resolution recognizing the duty of the Federal Government to implement an agenda to Transform, Heal, and Renew by Investing in a Vibrant Economy ("THRIVE")	This resolution expresses the sense of the Senate that the federal government has a duty to develop a holistic agenda to respond to racial injustice, unemployment, the COVID-19 (i.e., coronavirus disease 2019) pandemic, and climate change. The resolution further outlines the goals of this agenda to build a society with greater racial, economic, and gender justice; dignified work; healthy communities; and a stable climate. Additionally, the resolution identifies efforts to support these goals. Companion bill to H.Res. 104.	Introduced by Rep. Edward Markey (D-MA) – February 8, 2021	

EGISLATION	SUMMARY	STATUS	POSITION
H.R.946 SALT Act	This bill repeals the limitation on the deductibility of state and local taxes during 2018-2025. It also increases from \$250 to \$1,000 the tax deduction for certain expenses of elementary and secondary school teachers and allows a deduction from gross income (above-the-line) for certain training and uniform expenses of first responders (i.e., individuals who are law enforcement officers, firefighters, paramedics, or emergency medical technicians for at least 1,000 hours during a taxable year). The bill expands individual income tax brackets and increases the top income	Introduced by Rep. Bill Pascrell (D-NJ) – February 8, 2021	
H.D. 1015	tax rate for individual taxpayers to 39.6%.	T. 1 11 D	
H.R.1015 Water Recycling Investment and Improvement Act	This bill makes permanent, and otherwise revises, the Bureau of Reclamation's grant program for the funding of water recycling and reuse projects. Specifically, the bill removes priority under the program for projects in areas that, in the preceding four-year period, have been (1) identified as experiencing severe, extreme, or exceptional drought; or (2) designated as a disaster area by a state.	Introduced by Rep. Grace Napolitano (D-CA) – February 11, 2021	SUPPORT
	Additionally, the bill increases through FY2025 the authorization of appropriations for the program and otherwise revises provisions related to program funding.		
H.R.988 Recreational Lands Self- Defense Act of 2021	This bill requires the U.S. Army Corps of Engineers (USACE) to allow an individual to possess a firearm at a USACE water resources development project as long as the individual's possession of the firearm is in compliance with federal and state law.	Introduced by Rep. Bob Gibbs (R-OH) – February 11, 2021	
H.R.1066 Wildfire Recovery Act	This bill makes changes with respect to the federal cost share for Fire Management Assistance Grants and provides that the federal share shall be not less than 75% of the eligible cost.	Introduced by Rep. Joe Neguse (D-CO) – February 15, 2021	
	Specifically, the bill directs the Federal Emergency Management Agency (FEMA) to conduct and complete a rulemaking to develop guidelines and a rule that establishes thresholds for cases in which the federal cost share for such grants may be increased. Such thresholds shall use a fire-specific metric to determine fire damage and recommend a federal share adjustment for fire damage that meets the established thresholds.		

LEGISLATION	SUMMARY	STATUS	POSITION
S.421 Western Tribal Water Infrastructure Act of 2021	This bill reauthorizes through FY2024, and expands, the Indian Reservation Drinking Water Program. Specifically, the bill directs the Environmental Protection Agency to connect, expand, or repair existing public water systems that are on Indian reservations or off-reservation sites that serve tribes in the Columbia River Basin or its adjacent coastal river basins. Currently, only projects that are on Indian reservations in the Upper Missouri River Basin or the Upper Rio Grande Basin	Introduced by Sen. Ron Wyden (D-OR) – February 24, 2021 Placed on the Senate Legislative Calendar – April	
H.R.1319 American Rescue Plan Act of 2021	are eligible for the program. This bill provides additional relief to address the continued impact of COVID-19 (i.e., coronavirus disease 2019) on the economy, public health, state and local governments, individuals, and businesses.	28, 2021 Introduced by Rep. John Yarmuth (D- KY) – February 24, 2021	SUPPORT
H.R.1352 Water Affordability, Transparency, Equity, and Reliability Act of 2021	This bill increases funding for water infrastructure, including funding for several programs related to controlling water pollution or protecting drinking water. Specifically, it establishes a Water Affordability, Transparency, Equity, and Reliability Trust Fund. The fund may be used for specified grant programs. The bill increases the corporate income tax rate to 24.5% to provide revenues for the fund. In addition, the bill revises requirements concerning the clean water state revolving fund (SRF) and the drinking water SRF. It also creates or	Became Public Law No: 117-2 – March 11, 2021 Introduced by Rep. Brenda Lawrence (D-MI) – February 25, 2021	
S.479 Lifting Our Communities through Advance Liquidity for Infrastructure (LOCAL Infrastructure) Act of 2021	reauthorizes several grant programs for water infrastructure. This bill reinstates tax provisions relating to advance refunding bonds. An advance refunding bond is a tax-exempt bond issued by a state or municipality to refinance or consolidate existing bond obligations.	Introduced by Sen. Roger Wicker (R-MS) – February 25, 2021	SUPPORT

LEGISLATION	SUMMARY	STATUS	POSITION
H. R. 1438 FLOODS Act	This bill addresses forecasting and the communication of flood, tornado, and hurricane events by the National Oceanic and Atmospheric Administration (NOAA). Among other provisions, the bill • requires NOAA to estimate and communicate the frequency of precipitation; • establishes an Interagency Coordinating Committee on Water Management to ensure that federal agencies that engage in water-related matters, including water storage and supplies, water quality and restoration activities, water infrastructure, transportation on rivers and inland waterways, and water forecasting, work together where such agencies have joint or overlapping responsibilities; and • directs NOAA to conduct an analysis of gaps in the availability of snow-related data to assess and predict floods and flood impacts.	Introduced by Rep. Mikie Sherrill (D-NJ) – February 26, 2021	TOSTION
S.498 A bill to amend title 54, United States Code, to limit the authority to reserve water rights in designating a national monument	Companion bill to S.558. This bill prohibits the President, in designating a national monument, from reserving any implied or expressed water rights associated with it. Water rights for an associated national monument may only be acquired in accordance with the laws of the state in which the water rights are to be located.	Introduced by Sen. Mike Lee (R-UT) – March 1, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.558 FLOODS Act	This bill addresses forecasting and the communication of flood, tornado, and hurricane events by the National Oceanic and Atmospheric Administration (NOAA). Among other provisions, the bill • requires NOAA to estimate and communicate the frequency of precipitation; • establishes an Interagency Coordinating Committee on Water Management to ensure that federal agencies that engage in water-related matters, including water storage and supplies, water quality and restoration activities, water infrastructure, transportation on rivers and inland waterways, and water forecasting, work together where such agencies have joint or overlapping responsibilities; and directs NOAA to conduct an analysis of gaps in the availability of snow-related data to assess and predict floods and flood impacts.	Introduced by Sen. Roger Wicker (R-MS) – March 3, 2021 Passed the Senate; Received in the House - October 1, 2021	
H.R.1563 To extend the authorities under the Water Infrastructure Improvements for the Nation Act of 2016 providing operational flexibility, drought relief, and other benefits to the State of California	Companion bill to H.R.1438. This bill extends the authority of certain federal agencies to provide support for western water infrastructure and extends consultation requirements concerning projects in California. Specifically, the bill extends through 2028 the authority of the Bureau of Reclamation to provide support for projects in certain western states related to federal or state-led water storage, water desalination, and water recycling and reuse. It also extends provisions specific to California, including drought relief and the operations of the Central Valley Project (a hydropower and water management project in California that is operated by Reclamation). Further, the bill extends through 2033 consultation requirements concerning biological assessments and the coordinated operations of the Central Valley Project and the State Water Project in California.	Introduced by Rep. Mike Garcia (R-CA) – March 3, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.1679	This bill prohibits the Departments of the Interior and Agriculture from	Introduced by Rep.	
To prohibit the Secretary	 conditioning the issuance, renewal, amendment, or extension of any 	Lauren Boebert (R-	
of the Interior and the	permit, approval, license, lease, allotment, easement, right-of-way, or	CO) – March 9,	
Secretary of Agriculture	other land use or occupancy agreement (permit) on the transfer of any	2021	
from conditioning any	water right to the United States or on any impairment of title granted or		
permit, lease, or other	otherwise recognized under state law by federal or state action; or		
use agreement on the	 requiring any water user (including a federally recognized Indian tribe) 		
transfer of any water	to apply for or acquire a water right in the name of the United States		
right to the United	under state law as a condition of the issuance, renewal, amendment, or		
States, and for other	extension of such a permit.		
<u>purposes</u>			
	When developing any rule or similar federal action relating to the issuance,		
	renewal, amendment, or extension of any permit, such departments (1) shall		
	recognize the longstanding water use authority of the states and coordinate with		
	the states to ensure that any federal action is consistent with applicable state		
	water law, and (2) shall not adversely affect the authority of a state in		
77 77 100 1	permitting the beneficial use of water or adjudicating water rights.	·	
H.R.1804	This bill expands existing notice and publication requirements related to	Introduced by Rep.	
Community Cleanup	remedial action plans for Superfund sites (sites contaminated with hazardous	Earl Carter (R-GA)	
Act	substances).	– March 11, 2021	
	Specifically, the bill requires the notice and analysis of a proposed plan to be transmitted to the highest ranking official of the local government with		
	jurisdiction over the facility subject to the plan. During the public comment period, written and oral comments may be submitted regarding the use of the		
	, ,		
	facility at issue after the remedial action is taken.		
	Notice of the final remedial action plan must be transmitted to the local		
	government officials with jurisdiction over the facility at issue.		
	government officials with jurisdiction over the facility at issue.		
	Finally, the bill expands the minimum publication requirements for proposed		
	and final plans to include (1) an announcement via a radio or television station		
	in the broadcast area surrounding the facility at issue, (2) digital or social media		
	publications, and (3) a posting to the website of the person proposing to adopt a		
	plan for remediation.		
	Press to temperation	l	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.1844 STOP CSO Act of 2021	This bill revises the National Pollutant Discharge Elimination System permit program to require certain publicly owned water treatment facilities to monitor, report on, and notify the public of sewer overflows. For example, the facilities must notify the public within a specified number of hours after (1) sewer overflows that have the potential to affect human health, and (2) sewer overflows that may imminently and substantially endanger human health.	Introduced by Rep. Seth Moulton (D-MA) – March 11, 2021	
S.715 NEPA Data Transparency and Accountability Act	This bill requires federal agencies to annually report on their environmental review activities under the National Environmental Policy Act of 1969 (NEPA). The agencies must also include the cost of their NEPA activities in the annual reports after the Council on Environmental Quality and the Office of Management and Budget have developed a methodology to assess the comprehensive costs of the NEPA process.	Introduced by Sen. Mike Lee (R-UT) – March 11, 2021	
S.716 NEPA Legal Reform Act	This bill establishes requirements concerning the judicial review of cases about the environmental review process required under the National Environmental Policy Act of 1969 (NEPA). Specifically, the bill establishes standing requirements for NEPA claims, including a requirement that a plaintiff must personally suffer, or will likely personally suffer, a direct, tangible harm. In addition, the bill sets a statute of limitations for all claims related to NEPA. The bill also provides statutory authority for certain evidentiary standards concerning motions for temporary restraining orders, preliminary injunctions, and permanent injunctions. In addition, the bill limits fees that may be awarded to environmental attorneys.	Introduced by Sen. Mike Lee (R-UT) – March 11, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.717 UNSHACKLE Act	 This bill revises the environmental review process required under the National Environmental Policy Act of 1969 (NEPA), including by establishing deadlines for federal agencies to complete reviews of the environmental effects of proposed major federal actions; establishing penalties for agencies that do not comply with these deadlines; limiting the number of assessment documents required for proposed major federal actions, requiring agencies to reuse certain research or documents, and allowing agencies to adopt environmental documents prepared by states or third parties; requiring agencies to only consider alternatives to proposed actions that are technically and economically feasible; prohibiting agencies from considering whether proposed actions or alternatives to those actions will have an effect on climate change; and establishing requirements concerning the judicial review of NEPA cases 	Introduced by Sen. Mike Lee (R-UT) – March 11, 2021	
S.718 NEPA Agency Process Accountability Act	This bill revises the environmental review process required under the National Environmental Policy Act of 1969 (NEPA), including by limiting the number of assessment documents required for proposed major federal actions, requiring agencies to reuse certain research or documents in the NEPA process, and allowing agencies to adopt environmental documents prepared by states or third parties as specified under the bill. In addition, the bill requires agencies to only consider alternatives to proposed major federal actions that are technically and economically feasible. Agencies must track and report on specified NEPA data, such as the comprehensive costs of the NEPA process.	Introduced by Sen. Mike Lee (R-UT) – March 11, 2021	
S.719 NEPA State Assignment Expansion Act	This bill allows certain states to enter into agreements with federal agencies to assume federal responsibilities regarding the environmental review of proposed major federal actions under the National Environmental Policy Act of 1969.	Introduced by Sen. Mike Lee (R-UT) – March 11, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.722 Wastewater Efficiency and Treatment Act of 2021	This bill requires the Department of Energy (DOE) to establish a Water and Energy Efficiency Program. Under the program, DOE must award grants to certain small public wastewater treatment facilities that serve disadvantaged communities or populations that do not exceed 10,000. The facilities must use the grants to conduct energy efficiency audits of the facilities and update equipment based on the audits. In addition, DOE must provide loan guarantees to eligible municipalities and Indian tribes for (1) projects that convert waste in the treatment process of wastewater treatment facilities into renewable fuels, biosolids, or other byproducts; and (2) projects that will assist in transitioning facilities towards the use of energy-efficient technologies. In carrying out the program, DOE must establish a small-scale extension services program to provide assistance to rural communities through grants, outreach, training, and technical assistance regarding energy-efficient technologies at wastewater treatment facilities in eligible municipalities and tribes.	Introduced by Sen. Jeff Merkley (D- OR) – March 11, 2021	
H.R.1820 RETROACTIVE Policy Act	This bill limits the period during which the Environmental Protection Agency may prohibit the specification, or restrict the use, of an area as a disposal site for discharges of dredged or fill materials into waters of the United States.	Introduced by Rep. Bob Gibbs (R-OH) – March 11, 2021	
H.R. 1821 RURAL Act	This bill modifies requirements governing the use of pesticides in or near navigable waters. Specifically, the bill prohibits the Environmental Protection Agency or states from requiring permits under the National Pollutant Discharge Elimination System for discharges of pesticides into navigable waters if the pesticides are (1) registered, (2) used for their intended purposes, and (3) used in compliance with their pesticide label requirements. The bill establishes exemptions from this prohibition.	Introduced by Rep. Bob Gibbs (R-OH) – March 11, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.1848 Leading Infrastructure for Tomorrow's America Act	This bill establishes several programs and incentives to modernize the nation's communications, drinking water, energy, transportation, health care, and other related infrastructure. In addition, it supports drinking water programs, including the drinking water state revolving fund program. Further, it provides grants to treat perfluoroalkyl or polyfluoroalkyl substances (commonly referred to as PFAS) in drinking water and to replace lead service lines. The bill establishes a variety of programs to support clean energy infrastructure and address climate change, including efforts to (1) modernize the electric grid and make it more resilient, efficient, and secure; (2) increase energy efficiency in buildings; and (3) support renewable energy infrastructure. Further, it provides incentives for vehicle infrastructure, such as incentives to develop infrastructure for electric vehicles and grants to reduce air pollution at ports by electrifying port infrastructure. Additionally, the bill establishes grants and programs for health care infrastructure, including by providing support for the Centers for Disease Control and Prevention, laboratories, and state, local, tribal, and territorial health departments. Finally, the bill reauthorizes grant programs to remediate brownfield sites (i.e., sites contaminated with hazardous substances) through FY2026.	Introduced by Rep. Frank Pallone (D-NJ) – March 11, 2021 Committee on Energy and Commerce held a hearing – March 22, 2021	POSITION
H.R.1881 To amend the Federal Water Pollution Control Act with respect to permitting terms, and for other purposes	This bill revises the National Pollutant Discharge Elimination System (NPDES) program. Under the program, the Environmental Protection Agency issues permits to discharge pollutants into waters of the United States. The bill extends the maximum term for NPDES permits issued to states or municipalities from 5 to 10 years.	Introduced by Rep. John Garamendi (D-CA) – March 12, 2021	SUPPORT

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.1889 Environmental Justice for Coronavirus Affected Communities Act H.R.1915 Water Quality Protection and Job Creation Act of 2021	This bill reauthorizes through FY2022 (1) the Environmental Justice Small Grants Program; (2) the Environmental Justice Collaborative Problem-Solving Cooperative Agreement Program, which provides financial assistance to address local environmental or public health issues; and (3) the Community Action for a Renewed Environment grant program, which assists communities address multiple sources of toxic pollutants. This bill creates, reauthorizes, and revises several grant programs for infrastructure to treat water pollution, such as wastewater or stormwater. Specifically, the bill reauthorizes through FY2026 and revises the Clean Water State Revolving Fund program, which provides communities low-cost financing for water quality infrastructure projects. It also reauthorizes through FY2026 grants for • programs to control water pollution; • pilot projects related to watershed management of wastewater discharges (e.g., sewer overflows or stormwater discharges) during wet weather; • alternative water source projects, including projects to reclaim stormwater; or • measures to manage, reduce, treat or recapture stormwater, such as sewer overflows. In addition, the Environmental Protection Agency must award grants to owners of publicly owned treatment works (i.e., sewage treatment plants) for the treatment of contaminants of emerging concern, such as perfluoroalkyl or polyfluoroalkyl substances, commonly referred to as PFAS. These substances	Introduced by Rep. Raul Ruiz (D-CA) – March 12, 2021 Introduced by Rep. Peter DeFazio (D-OR) – March 16, 2021 Passed via legislative vehicle H.R. 3684 – July 1, 2021	POSITION
	are man-made and may have adverse human health effects. A variety of products contain the compounds, such as nonstick cookware or weatherproof clothing.		
S.804 SALT Deduction Fairness Act	This bill increases the limitation on the deduction for state and local taxes to \$20,000 for individuals filing a joint tax return. The limitation applies to taxable years 2018 through 2025.	Introduced by Rep. Susan Collins (D-ME) – March 17, 2021	

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

LEGISLATION S	SUMMARY	STATUS	POSITION
S.855 Water Rights Protection Act of 2021 If reference to the second se	 conditioning the issuance, renewal, amendment, or extension of any permit, approval, license, lease, allotment, easement, right-of-way, or other land use or occupancy agreement (permit) on the transfer of any water right to the United States or on any impairment of title granted or otherwise recognized under state law by federal or state action; requiring any water user (including a federally recognized Indian tribe) to apply for or acquire a water right in the name of the United States under state law as a condition of the issuance, renewal, amendment, or extension of such a permit; or conditioning or withholding the issuance, renewal, amendment, or extension of such a permit on limiting the date, time, quantity, location of diversion or pumping, or place of use of a state water right beyond any limitations under state water law, or on the modification of the terms and conditions of groundwater withdrawal, guidance and reporting procedures, or conservation and source protection measures established by a state. In developing any rule or similar federal action relating to the issuance, renewal, amendment, or extension of any permit, such departments (1) shall recognize the longstanding water use authority of the states and coordinate with the states to ensure that any federal action is consistent with applicable state water law, and (2) shall not adversely affect the authority of a state in permitting the beneficial use of water or adjudicating water rights. 	Introduced by Sen. John Barrasso (R- WY) – March 18, 2021	

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

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

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

SUMMARY Sp. 17 In is bill establishes a funding source for certain water resources development projects in western states. The bill also reauthorizes and expands existing water resources development projects in western states. The bill also reauthorizes and expands existing water resources development programs, as well as establishes new programs. Specifically, the bill establishes the Bureau of Reclamation Infrastructure Fund to fund water-related programs, including water reclamation and reuse projects, dam safety projects, and the WatersMART program (which provides assistance to eligible government entities to increase water supply). Each year from FY2031-FY2061, the Department of the Treasury must deposit \$300 million of revenues into this fund that would otherwise be deposited into the Reclamation Fund (which currently funds irrigation works in western states). The bill also expands the allowable uses for grants under the WaterSMART program. Next, the bill revises the Reclamation Climate Change and Water program (which assesses the impact of climate change on water supplies) by requiring Reclamation to develop a strategy to address sustaining native biodiversity during periods of drought. The bill also reauthorizes through FY2028 the Fisheries Restoration and Irrigation Mitigation program (which funds fish passage projects in certain areas that drain into the Pacific Ocean). Finally, the bill establishes new programs directed at western states to provide assistance to agricultural producers to create and maintain waterbird and shorebird habitats, award grants to eligible government entities and nonprofit conservation organizations for habitat restoration projects that improve watershed health, and prepare plans to sustain the survival of critically important fisheries during periods of drought.

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

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

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

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.2442	This bill requires the Environmental Protection Agency to establish a grant	Introduced by Rep.	
Climate Justice Grants	program to assist tribal governments, local governments, nonprofits, or	Nanette Diaz	
Act	community-based organizations in addressing issues relating to climate justice	Barragan (D-CA) –	
	and carrying out activities that address climate justice concerns of	April 12, 2021	
	environmental justice communities. Environmental justice communities refers		
	to any population of color, community of color, indigenous community, or low-		
	income community that experiences a disproportionate burden of the negative		
	human health and environmental impacts of pollution or other environmental		
H D 2465	hazards.	T 4 1 11 D	
H.R.2467	This bill establishes requirements and incentives to limit the use of	Introduced by Rep.	
PFAS Action Act of 2021	perfluoroalkyl and polyfluoroalkyl substances, commonly referred to as PFAS, and remediate PFAS in the environment. PFAS are man-made and may have	Debbie Dingell (D-MI) – April 13,	
2021	adverse human health effects. A variety of products contain PFAS, such as	2021	
	nonstick cookware or weatherproof clothing.	2021	
	nonstick cookware of weatherproof clothing.	Passed by the	
	The bill directs the Environmental Protection Agency (EPA) to designate the	House; received in	
	PFAS perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS)	the Senate – July	
	as a hazardous substances under the Comprehensive Environmental Response,	22, 2021	
	Compensation, and Liability Act of 1980, thereby requiring remediation of		
	releases of those PFAS into the environment. Within five years, the EPA must		
	determine whether the remaining PFAS should be designated as hazardous		
	substances.		
	The EPA must also determine whether PFAS should be designated as toxic		
	pollutants under the Clean Water Act. If PFAS are designated as toxic, then the		
	EPA must establish standards to limit discharges of PFAS from industrial		
	sources into waters of the United States. In addition, the EPA must issue a		
	national primary drinking water regulation for PFAS that, at a minimum,		
	includes standards for PFOA and PFOS.		
	Among other requirements, the EPA must also issue a final rule adding PFOA		
	and PFOS to the list of hazardous air pollutants, test all PFAS for toxicity to		
	human health, and regulate the disposal of materials containing PFAS.		
	Finally, the bill provides incentives to address PFAS, such as grants to help		
	community water systems treat water contaminated by PFAS.		

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

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

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

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

LEGISLATION	SUMMARY	STATUS	POSITION
H.Res.332 Recognizing the duty of the Federal Government to create a Green New Deal	This resolution calls for the creation of a Green New Deal with the goals of	Introduced by Rep. Alexandria Ocasio- Cortez (D-NY) – April 21, 2021	
S.1239 A bill to amend the Internal Revenue Code of 1986 to provide an exclusion from gross income for certain waste water management subsidies	This bill excludes from gross income, for income tax purposes, a taxpayer subsidy provided by a state or local government to a resident for the purchase or installation of any wastewater management measure intended solely for the taxpayer's principal residence	Introduced by Sen. Kirsten Gillibrand (D-NY) – April 20, 2021	

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

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

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

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

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.3112 Western Water Recycling and Drought Relief Act of 2021	This bill authorizes the Department of the Interior to participate in the design, planning, and construction of specified recycled water system facilities in California.	Introduced by Rep. Jerry McNerney (D-CA) – May 11, 2021	
H.R.3113 MAPLand Act	This bill directs the Department of the Interior, the Forest Service, and the U.S. Army Corps of Engineers to jointly develop and adopt interagency standards to ensure compatibility and interoperability among federal databases for the collection and dissemination of outdoor recreation data related to federal lands. Interior, the Forest Service, and the Corps of Engineers must digitize and publish geographic information system mapping data that includes • federal interests, including easements and rights-of-way, in private land; • status information as to whether roads and trails are open or closed; • the dates on which roads and trails are seasonally opened and closed; • the types of vehicles that are allowed on each segment of roads and trails; • the boundaries of areas where hunting or recreational shooting is regulated or closed; and the boundaries of any portion of a body of	Introduced by Rep. Blake Moore (R-UT) – May 11, 2021 Ordered to be Reported – July 17, 2021	
H.R.3218 Wastewater Infrastructure Improvement Act of 2021	water that is closed to entry, is closed to watercraft, or has horsepower limitations for watercrafts. This bill sets forth requirements and establishes incentives to control water pollution. Specifically, the bill reauthorizes and revises several existing grant programs that address water pollution, including grants concerning implementing state water quality improvement programs, increasing the resilience of public wastewater utilities to man-made or natural disasters, recycling wastewater or stormwater, constructing sewer overflow and stormwater management projects, and supporting the clean water state revolving fund. In addition, the bill revises requirements concerning the National Pollutant Discharge Elimination System (NPDES) permit program of the Environmental Protection Agency (EPA).	Introduced by Rep. David Rouzer (R-NC) – May 13, 2021	
	The bill allows the EPA to issue certain NPDES permits to states or municipalities for up to 10 years (currently, 5 years).		

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

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

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

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

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.3473	This bill imposes various requirements on certain federally assisted	Introduced by Rep.	
Build Local, Hire Local	infrastructure projects. The bill also creates infrastructure-related grant	Karen Bass (D-CA)	
Act	programs and establishes the Buy America Bureau.	– May 25, 2021	
	Such federally assisted infrastructure projects must (1) employ a certain percentage of local workers to the maximum extent practicable; and (2) prioritize hiring certain individuals, such as veterans and those facing barriers to employment. A certain percentage of funds for these projects must be used for contracts with small businesses that have fewer than 10 employees. When applying for a contract, grant, or loan related to a project, the applying entity must disclose whether there are any rulings, such as a civil judgment, finding that the entity has violated certain federal labor and occupational safety laws in the last three years. In addition, the Department of Transportation must award grants to entities in disadvantaged and underserved communities for infrastructure projects that create connected, economically prosperous, and environmentally healthy communities. Further, the Department of Labor must provide grants to workforce development boards and industry partnerships for job training programs to train certain groups, such as individuals with barriers to employment, for jobs in targeted infrastructure industries. The bill also establishes the Buy America Bureau within the Department of Commerce to oversee project compliance with existing laws that require the use of U.Smade materials in certain federally funded projects.	- May 23, 2021	
	Companion bill to S.1827.		

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

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

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

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

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

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

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

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

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

LEGISLATION	SUMMARY	STATUS	POSITION
<u>S.2361</u>	To reauthorize the budget-neutral demonstration program for energy and water	Introduced by Sen.	
Green Retrofits Act	conservation at multifamily residential units, to establish a green retrofit	John Reed (D-RI) –	
	program, and for other purposes.	July 15, 2021	
H.R.4502	This bill provides FY2022 appropriations to the Departments of Labor, Health	Introduced by Rep.	
Labor, Health and	and Human Services, and Education; and related agencies.	Rosa DeLauro (D-	
Human Services,		CT) – July 19, 2021	
Education, Agriculture,			
Rural Development,		Passed the House;	
Energy and Water		received in the	
Development, Financial		Senate – August 3,	
Services and General		2021	
Government, Interior,			
Environment, Military			
Construction, Veterans			
Affairs, Transportation,			
and Housing and Urban			
<u>Development</u>			
Appropriations Act,			
<u>2022</u>			
<u>H.R.4549</u>	This bill provides FY2022 appropriations for U.S. Army Corps of Engineers	Introduced by Rep.	
Energy and Water	civil works projects, the Department of the Interior's Bureau of Reclamation,	Marcy Kaptur (D-	
Development and	the Department of Energy (DOE), and independent agencies such as the	OH) – July 20.	
Related Agencies	Nuclear Regulatory Commission.	2021	
Appropriations Act,		D 1 :	
<u>2022</u>		Passed via	
		legislative minibus	
		H.R.4502 – August	
TX D. 4880		3, 2021	
H.R.4570	This bill describes which bodies of water fall under federal jurisdiction for	Introduced by Rep.	
Define WOTUS Act of	purposes of the Clean Water Act. Specifically, the bill redefines navigable	Mary Miller (R-IL)	
<u>2021</u>	waters and establishes a process for the U.S. Army Corps of Engineers to	– July 20,2021	
	determine, upon request, whether certain waters are navigable waters.		
	Communication hill to C 2160		
	Companion bill to S.2168		

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

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

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

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

This bill requires agencies to address and mitigate the disproportionate impact of environmental and human health hazards on communities of color, indigenous communities, and low-income communities resulting from agencies programs and policies. The bill also requires agencies to address cumulative impacts of pollution in permitting decisions and expands the types of legal actions available to individuals regarding charges of federal discriminatory practices. Specifically, the bill provides statutory authority for a variety of existing programs, executive orders, federal guidance, and committees concerning environmental justice, including Executive Order 12898; a guidance issued in 1997 by the Council on Environmental Quality titled Environmental Plustice Guidance Under the National Environmental Plustice Guidance Under the National Environmental Plustice Guidance Under the National Environmental Plustice Guidance of Discussing Tribal Treaty Rights; a guidance issued in 2016 by the Environmental Protection Agency titled EPA Policy on Consultation and Coordination with Indian Tribes: Guidance for Discussing Tribal Treaty Rights; a the National Environmental Justice Advisory Council; the Environmental Justice Small Grants Program; and the Environmental Justice Collaborative Problem-Solving Cooperative Agreement Program. In addition, the bill requires agencies renewing or issuing specified permits under the Clean Water Act or the Clean Air Act to consider the cumulative impacts of pollution.

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

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.5305 Extending Government Funding and Delivering Emergency Assistance	This bill provides continuing FY2022 appropriations for federal agencies, provides supplemental appropriations, and extends several expiring programs and authorities.	Introduced by Rep. Rosa DeLauro (D- CT) – September 21, 2021	
Act	Specifically, the bill provides continuing FY2022 appropriations to federal agencies through the earlier of December 3, 2021, or the enactment of the applicable appropriations act. It is known as a continuing resolution (CR) and prevents a government	Became Public Law No: 117-43 – September 30, 2021	
	shutdown that would otherwise occur if the FY2022 appropriations bills have not been enacted when FY2022 begins on October 1, 2021. The CR funds most programs and activities at the FY2021 levels with several exceptions that provide funding flexibility and additional appropriations for various programs. In addition, the bill provides supplemental appropriations to several federal agencies for activities related to natural disasters and the evacuees from Afghanistan.		
S. 2792 National Defense Authorization Act for Fiscal Year 2022	This bill authorizes Department of Defense (DOD) activities for FY2022 and addresses related issues.	Introduced by Sen. Jack Reed (D-RI) – September 22, 2021	
H.R.5438 Water Advanced Technologies for Efficient Resource Use Act of 2021	To provide incentives for the purchase of water-efficient products, and for other purposes.	Introduced by Rep. Matt Cartwright (D-PA) – September 30, 2021	
H.R.5376 Build Back Better Act	This bill provides funding, establishes programs, and otherwise modifies provisions relating to a broad array of areas, including education, labor, child care, health care, taxes, immigration, and the environment.	Introduced by Rep. John Yarmuth (D- KY) – September 27, 2021	
		Passed the House – November 19, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
S.3031 Clean Water Allotment Modernization Act of 2021	To amend the Federal Water Pollution Control Act to modify certain allotments under that Act, and for other purposes. Companion bill to H.R.5653.	Introduced by Sen. Marco Rubio (R-FL) – October 20, 2021	
S.3034 Department of the Interior, Environment, and Related Agencies Appropriations Act, 2022	This bill provides FY2022 appropriations for the Department of the Interior, the Environmental Protection Agency (EPA), and several related agencies.	Introduced by Sen. Jeff Merkley (D- OR) – October 20, 2021	
H.R.5653 Clean Water Allotment Modernization Act of 2021	To amend the Federal Water Pollution Control Act to modify certain allotments under that Act, and for other purposes.	Introduced by Rep. Michael Waltz (R-FL) – October 20, 2021	
H.R.5716 Securing Access for the central Valley and Enhancing (SAVE) Water Resources Act	Companion bill to S.3031. To promote water supply reliability and improved water management for rural communities, the State of California, and the Nation, and for other purposes.	Introduced by Rep. Josh Harder (D- CA) – October 25, 2021	
S.3156 Federal Agency Climate PREP Act of 2021	To require Federal agencies to maintain plans for responding to, mitigating, and adapting to climate change, and for other purposes.	Introduced by Sen. Amy Klobuchar (D-MN) – November 3, 2021	
S.3169 Keep Food Containers Safe from PFAS Act of 2021	To amend the Federal Food, Drug, and Cosmetic Act to prohibit the introduction or delivery for introduction into interstate commerce of food packaging containing intentionally added PFAS, and for other purposes.	Introduced by Sen. Maggie Hassan (D- NH) – November 4, 2021	
	Companion bill to H.R.6026.		

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.5987 PFAS Definition Improvement Act	This bill broadens the definition of perfluoroalkyl or polyfluoroalkyl substances, commonly referred to as PFAS, in relation to the reporting requirement under the Toxic Substances Control Act. PFAS are man-made and may have adverse human health effects. A variety of products contain the compounds, such as nonstick cookware or weatherproof clothing.	Introduced by Rep. Deborah Ross (D-NC) – November 16, 2021	
	Specifically, the bill provides that PFAS include those substances that contain at least one fully fluorinated carbon atom.		
H.R.6010 Protect Our Workers Act of 2021	To ensure that contractor employees on Army Corps projects are paid prevailing wages as required by law, and for other purposes.	Introduced by Rep. Christopher Smith (R-NJ) – November 17, 2021	
H.R.6026 Keep Food Containers Safe from PFAS Act of 2021	To amend the Federal Food, Drug, and Cosmetic Act to prohibit the introduction or delivery for introduction into interstate commerce of food packaging containing intentionally added PFAS, and for other purposes. Companion bill to S.3129.	Introduced by Rep. Debbie Dingell (D-MI) – November 18, 2021	
H.R.6058 PFAS Health Study Act of 2021	This bill extends through FY2023 the authority of the Department of Defense to transfer funds for the required study on the human health implications of perfluoroalkyl and polyfluoroalkyl substances (PFAS) contamination in drinking water, groundwater, and any other sources of water and relevant exposure pathways, including the cumulative human health implications of multiple types of PFAS contamination at levels above and below health advisory levels. PFAS are man-made and may have adverse human health effects. A variety of products contain the compounds, such as nonstick cookware or weatherproof clothing.	Introduced by Rep. Madeleine Dean (D-PA) – November 19, 2021	
S.3277 Section 401 Certification Act	To enact the Section 401 Certification Rule, and for other purposes.	Introduced by Sen. Shelley Moore Capito (R-WV) – November 30, 2021	
S.3282 Water Infrastructure Modernization Act of 2021	To amend the Federal Water Pollution Control Act and the Safe Drinking Water Act to authorize grants for smart water infrastructure technology, and for other purposes. Companion bill to H.R.6088.	Introduced by Sen. Mark Kelly (D-AZ) – November 30, 2021	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.6088 Water Infrastructure Modernization Act H.R.6119	To amend the Federal Water Pollution Control Act and the Safe Drinking Water Act to authorize grants for smart water infrastructure technology, and for other purposes. Companion bill to S.3282. This bill provides continuing FY2022 appropriations for federal agencies,	Introduced by Rep. Ruben Gallego (D-AZ) – November 30, 2021 Introduced by Rep.	
Further Extending Government Funding Act	provides supplemental appropriations, and extends several expiring authorities. Specifically, the bill provides continuing FY2022 appropriations to federal agencies through the earlier of February 18, 2022, or the enactment of the applicable appropriations act. It is known as a continuing resolution (CR) and prevents a government shutdown that would otherwise occur if the FY2022 appropriations bills have not been enacted when the existing CR expires on December 3, 2021. The CR funds most programs and activities at the FY2021 levels with several exceptions that provide funding flexibility and additional appropriations for various programs.	Rosa DeLauro (D-CT) – December 2, 2021 Became Public Law No: 117-70 – December 3, 2021	
S.3371 Land and Water Conservation Fund Amendments Act of 2021	To amend title 54, United States Code, to authorize the Secretary of the Interior to make financial assistance to States under the Land and Water Conservation Fund available for water quality projects, and for other purposes. Companion bill to H.R.6229.	Introduced by Sen. Marco Rubio (R-FL) – December 9, 2021	

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

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.6336 Western Wildfire Support Act of 2021	The bill requires the Department of Agriculture (USDA) and the Department of the Interior to establish spatial fire management plans before the end of FY2024.	Introduced by Rep. Joe Neguse (D-CO) – December 20, 2021	
	 The bill establishes: accounts in the Treasury for addressing wildfires, a program to train and certify citizens who wish to be able to volunteer to assist USDA or Interior during a wildland fire incident, a program to award grants to eligible states or units of local government to acquire slip-on tank and pump units for a surge capacity of resources for fire suppression, the Theodore Roosevelt Genius Prize for the management of wildfire-related invasive species, and the Management of Wildfire-Related Invasive Species Technology Advisory Board. 		
H.R.6591 PIPES Act	To require the Administrator of the Environmental Protection Agency to publish a rule that establishes standards for the flushability of disposable nonwoven wipes, and for other purposes.	Introduced by Rep. Lisa McClain (R-MI) – February 3, 2022	
S.3539 Watershed Results Act	To authorize the Secretary of the Interior to carry out watershed pilots, and for other purposes.	Introduced by Sen. Ron Wyden (D-OR) – February 1, 2022	
H.R.6617 Further Additional Extending Government Funding Act	This bill provides continuing FY2022 appropriations for federal agencies and extends several expiring authorities. Specifically, the bill provides continuing FY2022 appropriations to federal agencies through the earlier of March 11, 2022, or the enactment of the applicable appropriations act. It is known as a continuing resolution (CR) and prevents a government shutdown that would otherwise occur if the FY2022 appropriations bills have not been enacted when the existing CR expires on February 18, 2022.	Introduced by Rep. Rosa DeLauro (D-CT) – February 7, 2022 Passed in the House and Senate – February 17, 2022	

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

LEGISLATION	SUMMARY	STATUS	POSITION
S.3893 WASH Sector Development Act of 2022	To collect information regarding water access needs across the United States, to provide grants for decentralized drinking water systems, and for other purposes.	Introduced by Sen. Ron Wyden (D-OR) – March 22, 2022	
S.3956 WIPPES Act	This bill requires the Federal Trade Commission to issue regulations requiring entities responsible for the labeling or retail packaging of certain premoistened, nonwoven wipes (e.g., baby wipes, cleaning wipes, or personal care wipes) to label such products clearly and conspicuously with the phrase Do Not Flush and accompanying symbol as depicted under specified industry guidelines. The commission is authorized to enforce this requirement. Additionally, the Environmental Protection Agency must award competitive grants to states, local or tribal governments, nonprofit organizations, or public-private partnerships to increase community outreach about such labels.	Introduced by Sen. Jeff Merkley (D-OR) – March 30, 2022	
H.R.7289 Federal PFAS Research Evaluation Act	Companion bill to H.R.4602. This bill requires various studies and reports on the exposure, hazards, and management of perfluoroalkyl and polyfluoroalkyl substances, commonly referred to as PFAS. These substances are man-made and may have adverse human health effects. A variety of products contain the compounds, such as nonstick cookware or weatherproof clothing. Specifically, the bill requires the Environmental Protection Agency (EPA) to enter into an agreement with the National Academies of Sciences, Engineering, and Medicine (NASEM) to conduct a two-phase study and report on the research and development needed to advance human exposure estimation and toxicity hazard estimation of individual or total PFAS. The bill also requires the EPA to jointly enter into an agreement with NASEM to conduct a study and submit a report on the research and development needed to advance the understanding of the extent and implications of environmental contamination by PFAS, how to manage and treat such contamination, and the development of safe alternatives. The White House Office of Science and Technology Policy must submit an implementation plan for federal PFAS research, development, and demonstration activities, taking into account the recommendations of the NASEM reports.	Introduced by Rep. Lizzie Fletcher (D-TX) – March 30, 2022 Ordered to be reported – May 17, 2022	

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

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

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

LEGISLATION	SUMMARY	STATUS	POSITION
S.4237 Fire Ready Nation Act of 2022	To establish and maintain a coordinated program within the National Oceanic and Atmospheric Administration that improves wildfire, fire weather, fire risk, and smoke related forecasting, detection, modeling, observations, and service delivery, and to address growing needs in the wildland-urban interface, and for other purposes.	Introduced by Sen. Maria Cantwell (D-WA) – May 17, 2022 Committee on Commerce, Science, and Transportation hearing held. Ordered to be reported with an amendment – May 25, 2022	
S.4236 Water Data and Security Act of 2022	To provide for a national water data framework, to provide for the water security of the Rio Grande Basin, to reauthorize irrigation infrastructure grants, and for other purposes.	Introduced by Sen. Dianne Feinstein (D-CA) – May 17, 2022 Committee on Energy and Natural Resources Subcommittee on Water and Power hearing held – May 25, 2022	
H.R.7792 Water Data Act	To provide for a national water data framework, and for other purposes.	Introduced by Rep. Melanie Stansbury (D-NM) – May 17, 2022	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.7847 Water Efficiency, Conservation, and Sustainability Act of 2022	To increase efficiency and conservation in public water systems, and for other purposes.	Introduced by Rep. Jerry McNerney (D-CA) – May 19, 2022	
H.R.7897 PFAS Reference Standards Act	Companion bill to S.4279. To require manufacturers of PFAS to submit analytical reference standards to the Environmental Protection Agency, and for other purposes.	Introduced by Rep. John Sarbanes (D-MD) – May 27, 2022	
H.R.8018 Healthy H2O Act	To amend the Consolidated Farm and Rural Development Act to establish a grant program to assist with the purchase, installation, and maintenance of point-of-entry and point-of-use drinking water quality improvement products, and for other purposes. Companion bill to S.4081.	Introduced by Rep. Chellie Pingree (D-ME) – June 9, 2022	
S.4279 Water Efficiency, Conservation, and Sustainability Act of 2022	To increase efficiency and conservation in public water systems, and for other purposes.	Introduced by Sen. Alex Padilla (D-CA) – May 19, 2022	
H.R.8090 To reauthorize funding for the Reclamation Climate Change and Water Program	Companion bill to H.R.7847. To reauthorize funding for the Reclamation Climate Change and Water Program.	Introduced by Rep. Katie Porter (D- CA) – June 15, 2022	
H.R.8127 To reauthorize the Water Infrastructure Finance and Innovation Act of 2014, and for other purposes	To require the Secretary of the Army and the Administrator of the Environmental Protection Agency to conduct a study analyzing the cost to permit applicants and permit holders of complying with sections 402 and 404 of the Federal Water Pollution Control Act, and for other purposes.	Introduced by Rep. Kim Schrier (D- WA) – June 16, 2022	



Memorandum

To: Las Virgenes – Triunfo JPA

From: Syrus Devers, Best Best & Krieger

Date: June 28, 2022

Re: Monthly State Political Report

Legislative Report

The bills for the 2021-22 legislative session are now dead, "cooked," or close enough to allow a bit more time to work out a few final details. Policy committees wrapped up their work the last week of June. Until the end of session on August 31st, committee staff will analyze amendments made in the Appropriations Committees, or amendments made in the other house when a bill comes back to the house of origin for a concurrence vote. There is always the potential for a "gut and amend" which triggers a hearing in a policy committee, but the requirement for a bill to be in print for three days before final legislative action can be taken has diminished the practice. The legislative Summer Recess (must be nice) begins July 1st and ends August 1st.

SB 1157 (Hertzberg) is in print as amended per the agreement in the Assembly Water, Parks, and Wildlife Committee. The water industry side did score two wins in getting a requirement for a study that leaves no room for equivocation. The SWRCB and DWR must assess and "quantify" the "economic benefits and impacts" of meeting the indoor residential use standards, which is what was lacking in last year's study. Importantly for Triunfo, impacts to wastewater system are specifically called out. The other significant win was the inclusion of impacts to recycling projects, and a requirement to consider variances to "accommodate unique challenges related to indoor water use..." which seems to be on point for Pure Water.

Of course the State Budget is all over the news. Technically, June 15th was the deadline to pass the Budget out of the Legislature. And pass a Budget Bill they did, but it was a mere formality in order to let the state keep paying bills and for legislators to keep getting paid. The real budget came out over the weekend and set a spending record. Of interest to the water community is the \$21 billion in funding for drought, climate and energy, but there were few details. Many water industry lobbyist did work hard on funding for dam safety and they were rewarded with \$100 million in the Budget Bill. All other details will have to wait for Budget Trailer Bills, or "BTBs." Several BTBs did get worked out, but not the ones the water community is interested in; however, there is still time. The Governor and the legislative leaders can keep working until the recess starts. If that does not happen, we will have to wait until August.



Administrative Report

Three years ago Governor Newsom derailed the twin tunnels under the Delta championed by former Governor Jerry Brown. Newsom started the process over by announcing support for a single tunnel, but no one was certain if he would seriously pursue the project at all. Opinions may differ on how long it took, but it appears that Newsome does intend to press forward. At a recent presentation to the Delta Independent Science Board, DWR Dir. Karla Nemeth stated that the Delta Conveyance has taken on new significance due to climate change, and detailed many improvements to the current process as compared to the previous administration. All indications are that a draft EIR will be published this summer. Tony Meyers, Dir. Delta Conveyance Office, indicated a realistic timeline of six to eight years to shovel ready. Ironically, that is a couple of years beyond Newsom's maximum time in office—right about where the twin tunnels were when he took office.

Las Virgenes-Triunfo JPA

Bill Matrix – June 28th, 2022

Prepared by Best Best & Krieger

A. Priority Support/Oppose

					,		I
Measur e	Author	Topic	Status	Location	Brief Summary	Position	Notes 1
<u>AB</u> 1845	Calderon D	Metropolitan Water District of Southern California: alternative project delivery methods.	In committee: Set, first hearing. Hearing canceled at the request of author.	6/1/2022- S. GOV. & F.	Would authorize the Metropolitan Water District of Southern California to use the design-build procurement process for certain regional recycled water projects or other water infrastructure projects. The bill would define "design-build" to mean a project delivery process in which both the design and construction of a project are procured from a single entity. The bill would require the district to use a specified design-build procedure to assign contracts for the design and construction of a project, as defined.	Support	
AB 1944	Lee D	Local government: open and public meetings.	6/22/2022-In committee: Set, first hearing. Hearing canceled at the request of author. In committee: Hearing postponed by committee.	6/8/2022- S. GOV. & F.	The Ralph M. Brown Act requires, with specified exceptions, that all meetings of a legislative body of a local agency, as those terms are defined, be open and public and that all persons be permitted to attend and participate. The act contains specified provisions regarding the timelines for posting an agenda and providing for the ability of the public to observe and provide comment. The act allows for meetings to occur via teleconferencing subject to certain requirements, particularly that the legislative body notice each teleconference location of each member that will be participating in the public meeting, that each teleconference location be accessible to the public, that members of the public be allowed to address the legislative body at each teleconference location, that the legislative body post an agenda at each teleconference location, and that at least a quorum of the legislative body participate from locations within the boundaries of the local agency's jurisdiction. The act provides an exemption to the jurisdictional requirement for health authorities, as defined. This bill would require the agenda to identify any member of the legislative body that will participate in the meeting remotely.	Out for Analysis	Possible support, but AB 2449 is more aligned with Board comments.
<u>AB</u> 2142	Gabriel D	Income taxes: exclusion: turf replacement water conservation program.	6/27/2022- In committee: Referred to suspense file.	6/27/202 2-S. APP R. SUSPEN SE FILE	Current law provides an exclusion from gross income for any amount received as a rebate or voucher from a local water or energy agency or supplier for the purchase or installation of a water conservation water closet, energy efficient clothes washers, and plumbing devices, as specified. This bill would, for taxable years beginning on or after January 1, 2022, and before January 1,	Support	94

AB 2157	Rubio, Blanca D	Urban water use objectives: indoor residential water use.	5/6/2022-F ailed Deadline pursuant to Rule 61(b)(6). (Last location was A. PRINT on 2/15/2022)	A. DEAD	and the Corporation Tax Law, provide an exclusion from gross income for any amount received as a rebate, voucher, or other financial incentive issued by a public water system, as defined, local government, or state agency for participation in a turf replacement water conservation program. Current law requires the Department of Water Resources, in coordination with the State Water Resources Control Board, and in collaboration with and input from stakeholders, to conduct necessary studies and investigations and authorizes the department and the board to jointly recommend to the Legislature a standard for indoor residential water use. Current law, until January 1, 2025, establishes 55 gallons per capita daily as the standard for indoor residential water use, beginning January 1, 2025, establishes the greater of 52.5 gallons per capita daily or a standard recommended by the department and the board as the standard for indoor residential water use, and beginning January 1, 2030, establishes the greater of 50 gallons per capita daily or a standard recommended by the department and the board as the standard recommended by the department and the board as the standard for indoor residential water use. This bill would make a nonsubstantive change to the provision requiring the department and the board to collaborate with, and seek input from, stakeholders with regard to the studies,	Watch	
AB 2247	Bloom D	Perfluoroalkyl and polyfluoroalkyl substances (PFAS) and PFAS products and product components: publicly accessible reporting platform.	6/22/2022-From committee: Do pass and re-refer to Com. on APPR. (Ayes 5. Noes 2.) (June 22). Re-referre d to Com. on APPR.	6/22/202 2-S. APP R.	investigations, and report. Would require, as part of the hazardous waste control laws, the Department of Toxic Substances Control to work with the Interstate Chemicals Clearinghouse to establish, on or before January 1, 2025, a publicly accessible reporting platform to collect information about perfluoroalkyl and polyfluoroalkyl substances (PFAS) and products or product components containing intentionally added PFAS, as defined, being sold, offered for sale, distributed, or offered for promotional purposes in, or imported into, the state. The bill would require, on or before July 1, 2025, and annually thereafter, a manufacturer, as defined, of PFAS or a product or a product component containing intentionally added PFAS that is sold, offered for sale, distributed, or offered for promotional purposes in, or imported into, the state to register the PFAS or the product or product component containing intentionally added PFAS, and specified other information, on the publicly accessible reporting platform.	Watch	
AB 2313	Bloom D	Water: judges and adjudications.	6/1/2022- Referred to Com. on JUD.	6/1/2022- S. JUD.	Current law authorizes the Judicial Council to conduct institutes and seminars for the purpose of orienting judges to new judicial assignments, keeping them informed concerning new developments in the law,	Out for Analysis	05

					and promoting uniformity in judicial procedure, as specified. This bill would require the Judicial Council, on or before January 1, 2025, to establish a program that provides training and education to judges in specified actions relating to water, as defined. The bill would provide that the program may be funded by an appropriation from the General Fund in the annual Budget Act or another statute, or by using existing funds for judicial training.		
<u>AB</u> 2449	Rubio, Blanca D	Open meetings: local agencies: teleconferences.	6/23/2022- From committee chair, with author's amendmen ts: Amend, and re-refer to committee. Read second time, amended, and re-referred to Com. on JUD.	6/22/202 2-S. JUD.	The Ralph M. Brown Act, requires, with specified exceptions, that all meetings of a legislative body of a local agency, as those terms are defined, be open and public and that all persons be permitted to attend and participate. Current law, until January 1, 2024, authorizes a local agency to use teleconferencing without complying with specified teleconferencing requirements in specified circumstances when a declared state of emergency is in effect, or in other situations related to public health. This bill would revise and recast those teleconferencing provisions and, until January 1, 2026, would authorize a local agency to use teleconferencing without complying with the teleconference location be identified in the notice and agenda and that each teleconference location be accessible to the public if at least a quorum of the members of the legislative body participates in person from a singular physical location clearly identified on the agenda that is open to the public and situated within the local agency's jurisdiction. Under this exception, the bill would authorize a member to participate remotely under specified circumstances, including participating remotely for just cause or due to emergency circumstances. The emergency circumstances basis for remote participation would be contingent on a request to, and action by, the legislative body. The bill would define terms for purposes of these teleconferencing provisions.	Watch	Possible bill to support.
SB 230	Portantino D	State Water Resources Control Board: Constituents of Emerging Concern in Drinking Water Program.	6/22/2022- From committee with author's amendmen ts. Read second time and amended. Re-referre d to Com. on E.S. & T.M.	5/5/2022- A. E.S. & T.M.	The State Water Resources Control Board's duties include, but are not limited to, conducting research, studies, and demonstration programs relating to the provision of a dependable and safe supply of drinking water, enforcing the federal Safe Drinking Water Act, and adopting and enforcing regulations. This bill would require the state board to build upon its existing work dealing with, and work to improve its knowledge of, constituents of emerging concern (CEC) in water and, as part of this work, to improve its knowledge of CECs in drinking water by assessing the state of information, as specified. The bill would authorize the state board to establish, maintain, and direct a dedicated program	Support	96

					called the Constituents of Emerging Concern in Drinking Water Program. The bill would authorize the state board to convene a Science Advisory Panel to review and provide recommendations to the state board on CECs for further action, among other duties. The bill would require the state board to provide a report to the Legislature 3 years after the panel is convened on the work conducted by the panel.		
SB 991	Newman D	Public contracts: progressive design-build: local agencies.	6/20/2022- Read second time and amended. Re-referre d to Com. on APPR.	6/16/202 2-A. APP R.	Would, until January 1, 2029, authorize local agencies, defined as any city, county, city and county, or special district authorized by law to provide for the production, storage, supply, treatment, or distribution of any water from any source, to use the progressive design-build process for up to 15 public works projects in excess of \$5,000,000 for each project, similar to the progressive design-build process authorized for use by the Director of General Services. The bill would require a local agency that uses the progressive design-build process to submit, no later than January 1, 2028, to the appropriate policy and fiscal committees of the Legislature a report on the use of the progressive design-build process containing specified information, including a description of the projects awarded using the progressive design-build process. The bill would require the design-build entity and its general partners or joint venture members to verify specified information under penalty of perjury. By expanding the crime of perjury, the bill would impose a state-mandated local program.	Watch	
<u>SB</u> <u>1157</u>	Hertzberg D	Urban water use objectives.	6/16/2022- Read second time and amended. Re-referre d to Com. on APPR.	6/14/202 2-A. APP R.	Current law, until January 1, 2025, establishes 55 gallons per capita daily as the standard for indoor residential water use. Current law establishes, beginning January 1, 2025, the greater of 52.5 gallons per capita daily or a standard recommended by the Department of Water Resources and the State Water Resources Control Board as the standard for indoor residential water use, and beginning January 1, 2030, establishes the greater of 50 gallons per capita daily or a standard recommended by the department and the board as the standard for indoor residential water use. Current law requires the board, in coordination with the department, to adopt by regulation variances recommended by the department and guidelines and methodologies pertaining to the calculation of an urban retail water supplier's urban water use objective recommended by the department. This bill would eliminate the option of using the greater of 52.5 gallons per capita daily and the greater of 50 gallons per capita daily, as applicable, or a standard recommended by the department and the board as the standard for indoor residential water use. The bill would instead require that from January 1,	Oppose unless amended	97

					2025, to January 1, 2030, the standard for indoor residential water use be 47 gallons per capita daily and beginning January 1, 2030, the standard be 42 gallons per capita daily.		
В.	Watch						
Measur e	Author	Topic	Status	Location	Brief Summary	Position	Notes 1
AB 1001	Garcia, Cristina D	Environment: mitigation measures for air quality impacts: environmental justice.	6/14/2022-In committee: Set, second hearing. Hearing canceled at the request of author.	5/4/2022- S. E.Q.	The California Environmental Quality Act (CEQA) requires a lead agency to prepare a mitigated negative declaration for a project that may have a significant effect on the environment if revisions in the project would avoid or mitigate that effect and there is no substantial evidence that the project, as revised, would have a significant effect on the environment. This bill would require mitigation measures, identified in an environmental impact report or mitigated negative declaration to mitigate the adverse effects of a project on air quality of a disadvantaged community, to include measures for avoiding, minimizing, or otherwise mitigating for the adverse effects on that community. The bill would require mitigation measures to include measures conducted at the project site that avoid or minimize to less than significant the adverse effects on the air quality of a disadvantaged community or measures conducted in the affected disadvantaged community that directly mitigate those effects.	Watch	
<u>AB</u> <u>1717</u>	Aguiar-Curr y D	Public works: definition.	6/27/2022-In committee: Referred to suspense file.	6/27/202 2-S. APP R. SUSPEN SE FILE	Current law requires that, except as specified, not less than the general prevailing rate of per diem wages, determined by the Director of Industrial Relations, be paid to workers employed on public works projects. Current law defines the term "public works" for purposes of requirements regarding the payment of prevailing wages to include construction, alteration, demolition, installation, or repair work done under contract and paid for using public funds, except as specified. Current law makes a willful violation of laws relating to the payment of prevailing wages on public works a misdemeanor. This bill would expand the definition of "public works" to include fuel reduction work done under contract and paid for in whole or in part out of public funds performed as part of a fire mitigation project, as specified.	Watch	
<u>AB</u> <u>1774</u>	Seyarto R	California Environmental Quality Act: water conveyance or storage projects: judicial review.	4/29/2022- Failed Deadline pursuant to Rule 61(b)(5). (Last location was NAT.	4/29/202 2-A. DE AD	The California Environmental Quality Act (CEQA) requires a lead agency, as defined, to prepare, or cause to be prepared, and certify the completion of an environmental impact report (EIR) on a project that the lead agency proposes to carry out or approve that may have a significant effect on the environment or to adopt a negative declaration if it finds that the project will not	Watch	98

					sincerely held religious belief, as specified, and would require compliance with various other state and federal laws. The bill would require proof-of-vaccination status to be		
AB 1993	Wicks D	Employment: COVID-19 vaccination requirements.	4/29/2022- Failed Deadline pursuant to Rule 61(b)(5). (Last location was L. & E. on 2/10/2022)	4/29/202 2-A. DE AD	Would require an employer to require each person who is an employee or independent contractor, and who is eligible to receive the COVID-19 vaccine, to show proof to the employer, or an authorized agent thereof, that the person has been vaccinated against COVID-19. This bill would establish an exception from this vaccination requirement for a person who is ineligible to receive a COVID-19 vaccine due to a medical condition or disability or because of a sinceraly hold religious holist, as specified.	Watch	
AB 1817	Ting D	Product safety: textile articles: perfluoroalkyl and polyfluoroalkyl substances (PFAS).	6/13/2022-In committee: Set, first hearing. Hearing canceled at the request of author.		Would prohibit, beginning January 1, 2025, any person from manufacturing, distributing, selling, or offering for sale in the state any textile articles that contain regulated perfluoroalkyl and polyfluoroalkyl substances or PFAS, and requires a manufacturer to use the least toxic alternative when removing regulated PFAS in textile articles to comply with these provisions. The bill would require a manufacturer of a textile article that contains regulated PFAS to provide persons that offer the product for sale or distribution in the state with a certificate of compliance stating that the textile article is in compliance with these provisions and does not contain any regulated PFAS.		
			RES. on 2/10/2022)		have that effect. CEQA also requires a lead agency to prepare a mitigated negative declaration for a project that may have a significant effect on the environment if revisions in the project would avoid or mitigate that effect and there is no substantial evidence that the project, as revised, would have a significant effect on the environment. CEQA establishes a procedure by which a person may seek judicial review of the decision of the lead agency made pursuant to CEQA. This bill would require the Judicial Council to adopt rules of court applicable to actions or proceedings brought to attack, review, set aside, void, or annul the certification or adoption of an environmental impact report for water conveyance or storage projects, as defined, or the granting of project approvals, including any appeals to the court of appeal or the Supreme Court, to be resolved, to the extent feasible, within 270 days of the filing of the certified record of proceedings with the court to an action or proceeding seeking judicial review of the lead agency's action related to those projects.		

2108	Robert D	environmental justice: disadvantaged and tribal communities.	Read second time and amended. Re-referre d to Com. on N.R. & W.	2-S. N.R. & W.	appointed by the Governor to the State Water Resources Control Board be qualified in the field of water supply and water quality relating to disadvantaged or tribal communities and not be the same member as the member appointed who is qualified in the field of water supply and water quality relating to irrigated agriculture. The bill would also require that at least one person appointed to each regional board have specialized experience relating to disadvantaged or tribal communities, except as provided. The bill would prohibit, in making those appointments, preference to be given on the basis of ethnicity or national origin.		
<u>AB</u> 2451	Wood D	State Water Resources Control Board: drought planning.	6/23/2022- Read second time and amended. Re-referre d to Com. on APPR.	6/20/202 2-S. APP R.	Existing law requires the State Water Resources Control Board to formulate and adopt state policy for water quality control. This bill would create a Drought Section within the state board, as specified. The bill would require the state board, in consultation with the Department of Fish and Wildlife, to adopt principles and guidelines for diversion and use of water in coastal watersheds, as specified, during times of water shortage for drought preparedness and climate resiliency. The bill would require that the principles and guidelines provide for the development of watershed-level contingency plans to support public trust uses, public health and safety, and the human right to water in times of water shortage, among other things. The bill also would require the state board, prior to adopting those principles and guidelines, to allow for public comment and hearing, as provided. The bill would require the state board to adopt those principles and guidelines no later than March 31, 2024.	Out for Analysis	
<u>AB</u> 2605	Villapudua D	Water quality: state certification.	4/29/2022- Failed Deadline pursuant to Rule 61(b)(5). (Last location was E.S. & T.M. on 3/10/2022)	4/29/202 2-A. DE AD	The State Water Resources Control Board and the California regional water quality control boards prescribe waste discharge requirements in accordance with the Federal Water Pollution Control Act and the Porter-Cologne Water Quality Control Act. Under federal law, any applicant seeking a federal license or permit for an activity that may result in any discharge into the navigable waters of the United States is required to first seek a state water quality certification, as specified. The Porter-Cologne Water Quality Control Act authorizes the state board to certify or provide a statement to a federal agency, as required pursuant to federal law, that there is reasonable assurance that an activity of any person subject to the jurisdiction of the state board will not reduce water quality below applicable standards. The federal act provides that if a state fails or refuses to act on a request for this certification within a reasonable period of time, which shall not exceed one year after receipt of the request, then the state certification requirements are	Out for Analysis	00

					waived with respect to the federal application. This bill would authorize the state board to delegate its authority regarding the above-described issuance of a certificate or statement to the regional boards. The bill would require a project proponent, as defined, to request a prefiling meeting with the state board, as specified.		
<u>AB</u> 2639	Quirk D	San Francisco Bay/Sacramento -San Joaquin Delta Estuary: water quality control plan: water right permits.	5/27/2022- Failed Deadline pursuant to Rule 61(b)(11). (Last location was A. THIRD READING on 5/19/2022)	5/27/202 2-A. DE AD	Would require the State Water Resources Control Board, on or before December 31, 2023, to adopt a final update of the 1995 Water Quality Control Plan for the San Francisco Bay/Sacramento-San Joaquin Delta Estuary, as specified, and to implement the amendments to the plan adopted by the state board pursuant to Resolution No. 2018-0059 on December 12, 2018. The bill would prohibit the state board, on or after January 1, 2024, from approving a new water right permit that would result in new or increased diversions to surface water storage from the Sacramento River/San Joaquin River watershed until and unless the state board has taken those actions.	Watch	
AB 2740	Dahle, Megan R	Water resources: desalination.	5/6/2022-F ailed Deadline pursuant to Rule 61(b)(6). (Last location was A. W.,P. & W. on 3/17/2022)	5/6/2022- A. DEAD	Current law requires the Department of Water Resources, not later than July 1, 2004, to report to the Legislature, on potential opportunities and impediments for using seawater and brackish water desalination, and to examine what role, if any, the state should play in furthering the use of desalination technology. Current law requires the department to convene a Water Desalination Task Force, comprised of representatives from listed agencies and interest groups, to advise the department in carrying out these duties and in making recommendations to the Legislature. This bill would repeal these provisions.	Watch	
AB 2811	Bennett D	California Building Standards Commission: recycled water: nonpotable water systems.	4/29/2022- Failed Deadline pursuant to Rule 61(b)(5). (Last location was E.S. & T.M. on 3/17/2022)	4/29/202 2-A. DE AD	Would require, commencing January 1, 2024, all newly constructed nonresidential buildings be constructed with dual plumbing to allow the use of recycled water for all applicable nonpotable water demands, as defined, if that building is located within an existing or planned recycled water service area, as specified.	Watch	
AB 2877	Garcia, Eduardo D	Safe and Affordable Drinking Water Fund: tribes.	6/1/2022- Referred to Com. on E.Q.	6/1/2022- S. E.Q.	Current law establishes the Safe and Affordable Drinking Water Fund in the State Treasury to help water systems provide an adequate and affordable supply of safe drinking water in both the near and long terms. Current law continuously appropriates to the State Water Resources Control Board moneys deposited in the fund for the development, implementation, and sustainability of long-term drinking water solutions, among other things. Existing law requires the state board to expend moneys in	Out for Analysis	Source of funds?

AB 2895	Arambula D	Water: permits and licenses: temporary changes: water or water rights transfers.	6/23/2022-Read second time and amended. Re-referre d to Com. on APPR.	6/20/202 2-S. APP R.	the fund for grants, loans, contracts, or services to assist eligible recipients. Current law includes within the list of "eligible recipients," public agencies, nonprofit organizations, public utilities, mutual water companies, federally recognized California Native American tribes, specified nonfederally recognized Native American tribes, administrators, groundwater sustainability agencies, community water systems, and technical assistance providers. This bill would specify that a limited waiver of tribal sovereignty is not required for a tribe that is an eligible recipient to access funding from the fund. The bill would require the state board to work with tribes that are eligible recipients to remove any barriers for those tribes to access funding, as specified. Current law prescribes the process for a permittee or licensee to petition the State Water Resources Control Board for a temporary change due to a transfer or exchange of water rights, and imposes on the board related notice, decision, and hearing requirements. Under that process, a petitioner is required to publish notice of a petition in a newspaper, as specified. Current law requires a petition to contain specified information and requires a petitioner to provide a copy of the petition to the Department of Fish and Wildlife, the board of supervisors of the county or counties in which the petitioner currently stores or uses the water subject to the petition, and the board of supervisors of the county or counties to which the water is proposed to be transferred. This bill would revise and recast the provisions regulating temporary changes due to a transfer or exchange of water rights, including, among other revisions, specifying that those provisions apply to a person who proposes a temporary change for purposes of preserving or enhancing wetlands habitat, fish and wildlife resources, or recreation. The bill would eliminate the requirement that a petitioner publish notice of a petition	Watch	
SB 832	Dodd D	Water rights: measurement of diversion.	5/20/2022- Failed Deadline pursuant to Rule 61(b)(8). (Last location was S. APPR. SUSPENS E FILE on 4/25/2022)	5/20/202 2-S. DEA D	Current law defines various terms applicable to the Water Code. This bill would define "water year," unless otherwise specified, to mean the 12-month period beginning October 1 and ending September 30.	Watch	
SB 892	Hurtado D	Cybersecurity preparedness:	6/27/2022- VOTE: Do	6/27/202 2-A. APP	Would require Cal OES to develop, propose, and adopt optional reporting guidelines	Out for Analysis	Source of funds?

		food and agriculture sector and water and wastewater systems sector.	pass and be re-referred to the Committee on [Appropria tions] (PASS)	R.	applicable to companies and cooperatives in the food and agriculture industry and entities in the water and wastewater systems industry if they identify a significant and verified cyber threat or active cyberattack. The bill would require a report of cyberattack or cyber threat submitted pursuant to guidelines developed pursuant to these provisions to be confidential and would prohibit disclosure as a public record. The bill would require Cal OES to direct Cal-CSIC to prepare, and Cal OES to submit to the Legislature on or before January 1, 2024, a strategic, multiyear outreach plan to assist the food and agriculture sector and the water and wastewater sector in their efforts to improve cybersecurity and an evaluation of options for providing grants or alternative forms of funding to, and potential voluntary actions that do not require funding and that assist, those sectors in their efforts to improve cybersecurity preparedness.		
SB 1059	Becker D	Privacy: data brokers.	5/20/2022- Failed Deadline pursuant to Rule 61(b)(8). (Last location was S. APPR. SUSPENS E FILE on 5/16/2022)	5/20/202 2-S. DEA D	Current law requires data brokers to register with, and provide certain information to, the Attorney General. Current law defines a data broker as a business that knowingly collects and sells to third parties the personal information of a consumer with whom the business does not have a direct relationship, subject to specified exceptions. Current law subjects data brokers that fail to register to injunction and liability for civil penalties, fees, and costs in an action brought by the Attorney General, with any recovery to be deposited in the Consumer Privacy Fund, as specified. Current law imposes a \$100 civil penalty for each day a data broker fails to register. This bill would include in the definition of data broker a business that knowingly collects and shares, as defined, certain personal information to third parties. The bill would transfer all authority and responsibilities under the provisions relating to data broker registration from the Attorney General to the CCPA, including by requiring data brokers to annually register with the CPPA on or before January 31. However, the bill would authorize the Attorney General to also bring an action against a data broker that fails to register.	Watch	
<u>SB</u> 1197	Caballero D	Water Innovation and Drought Resiliency Act of 2022.	5/20/2022- Failed Deadline pursuant to Rule 61(b)(8). (Last location was S. APPR. SUSPENS E FILE on 5/2/2022)	5/20/202 2-S. DEA D	Current law declares that the protection of the public interest in the development of the water resources of the state is of vital concern to the people of the state and that the state shall determine in what way the water of the state, both surface and underground, should be developed for the greatest public benefit. Current law creates the Office of Planning and Research to serve the Governor as staff for long-range planning and research and as a comprehensive state planning agency. This bill, the Water Innovation and Drought Resiliency Act of 2022, would create the	Watch	03

					Initiative to Advance Water Innovation and Drought Resiliency at the office for the furtherance of new technologies and other innovative approaches in the water sector. The bill would require the office, as part of the initiative, to take specified measures on or before December 31, 2024, to advance innovation in the water sector and ensure a drought-resilient economy.		
<u>SB</u> 1219	Hurtado D	21st century water laws and agencies: committee.	6/9/2022-J une 14 set for first hearing canceled at the request of author.	& W.	Would require the Secretary of the Natural Resources Agency and the Secretary for Environmental Protection to convene a committee to develop and submit, on or before December 31, 2024, to the Governor and to the Legislature a strategic vision, proposed statutes, and recommendations for a modern 21st century set of water laws and regulations and state and local water agencies for the state, as provided. The committee would consist of 5 specified heads of state agencies, 2 members appointed by the Senate Committee on Rules, and 2 members appointed by the Speaker of the Assembly. The bill would require the Governor or the committee to appoint a "blue ribbon" citizen commission or taskforce, a stakeholder advisory committee, and any other group that the Governor or the committee deems necessary or desirable to assist in carrying out these provisions. The bill would require all relevant state agencies, at the request of the committee, to make available staff and resources to assist in the preparation of the strategic vision and proposed statutes.	Watch	Possible priority bill, but unlikely to move.
	c . p.:						

C. Spot Bill

Measur e	Author	Topic	Status	Location	Brief Summary	Position	Notes 1
AB 2201	Bennett D	Groundwater sustainability agency: groundwater extraction permit: verification.	6/22/2022- From committee chair, with author's amendmen ts: Amend, and re-refer to committee. Read second time, amended, and re-referred to Com. on GOV. & F.	6/14/202 2-S. GO V. & F.	Would prohibit a county, city, or any other water well permitting agency from approving a permit for a new groundwater well or for an alteration to an existing well in a basin subject to the act and classified as medium- or high-priority unless specified conditions are met, including that it obtains a written verification, from the groundwater sustainability agency that manages the basin or area of the basin where the well is proposed to be located, determining that, among other things, the extraction by the proposed well is consistent with any sustainable groundwater management program established in any applicable groundwater sustainability plan adopted by that groundwater sustainability agency or an alternate plan approved or under review by the Department of Water Resources.	Watch	
<u>AB</u> 2940	<u>Dahle,</u> <u>Megan</u> R	Water rights: reasonable and beneficial use of water.	5/6/2022-F ailed Deadline pursuant to		Current law declares that the right to water is limited to that water that is reasonably required for the beneficial use to be served, and does not extend to the waste or		04

			Rule 61(b)(6). (Last location was A. PRINT on 2/18/2022)		unreasonable use, unreasonable method of use, or unreasonable method of diversion of water. This bill would make nonsubstantive changes to that provision.		
<u>SB</u> 1442	Borgeas R	Water conservation and reclamation projects.	3/9/2022- Referred to Com. on RLS.	2/18/202 2-S. RLS.	Current law establishes the Water Conservation Projects Act of 1985 and declares the intent of the Legislature to encourage local agencies and private enterprise to implement water conservation and reclamation projects. This bill would make nonsubstantive changes to related legislative findings and declarations.	Watch	
<u>SB</u> 1459	Caballero D	State water policy.	3/9/2022- Referred to Com. on RLS.	2/18/202 2-S. RLS.	The Porter-Cologne Water Quality Control Act requires the State Water Resources Control Board to formulate and adopt state policy for water quality control. This bill would make nonsubstantive changes to that provision.	Watch	
<u>SB</u> <u>1485</u>	Rubio D	Elections: required filings.	4/29/2022- Failed Deadline pursuant to Rule 61(b)(5). (Last location was E. & C.A. on 3/23/2022)	4/29/202 2-S. DEA D	Under current law, if an incumbent officer of a county does not deliver their nomination papers by 5 p.m. on the 88th day before the direct primary election, any person other than the incumbent has until 5 p.m. on the 83rd day before the election to file nomination documents for the elective office. This bill would require the county elections official to post on their internet website an office that has an extended nomination period.	Watch	

Measur e	Author	Topic	Status	Location	Brief Summary	Position	Notes 1
AB 2387	Garcia, Eduardo D	Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, and Workforce Development Bond Act of 2022.	5/19/2022-In committee: Held under submissio n.	2-A. APP R.	Would enact the Safe Drinking Water, Wildfire Prevention, Drought Preparation, Flood Protection, Extreme Heat Mitigation, and Workforce Development Bond Act of 2022, which, if approved by the voters, would authorize the issuance of bonds in the amount of \$7,430,000,000 pursuant to the State General Obligation Bond Law to finance projects for safe drinking water, wildfire prevention, drought preparation, flood protection, extreme heat mitigation, and workforce development programs.	Out for Analysis	This bill is dead as a practicable matter, even if it's technically still viable.

Total Measures: 34

Total Tracking Forms: 34

INFORMATION ONLY

July 5, 2022 JPA Board Meeting

TO: JPA Board of Directors

FROM: General Manager

Subject: Pure Water Project Las Virgenes-Triunfo: Update

SUMMARY:

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

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

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

FISCAL IMPACT:

No

ITEM BUDGETED:

No

Prepared by: Eric Schlageter, Principal Engineer

ATTACHMENTS:

Pure Water Project Update Jacobs



To: Las Virgenes-Triunfo JPA Board of Directors

From: Jennifer Phillips, Jacobs

Date: June 28, 2022

Re: Pure Water Project JPA Board Monthly Update

Pure Water Project Overview

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

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

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

Monthly Major Milestones

- Conducted Media Training sessions with JPA Board members.
- Discussed a transition approach for the Demonstration Facility operation.
- Submitted a Water Code Section 1211 briefing and checklist for consideration by the State Water Resources Control Board to clarify the applicability of the 1211 Wastewater Change Petition process.
- Continued development of the Conceptual Design Report and confirmed major PWP elements, flow management, and levels of redundancy.
- Prepared a market sounding brief and conducted one-on-one confidential sessions with potential progressive design build (PDB) teams to support the AWPF procurement process. Intent was to gain feedback from potential proposers on intended approach, risk transfer limitations, contract element preferences and challenges, and lessons learned.

THROUGH JUNE 2022 108

Key Program Accomplishments Last Month

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

June Accomplishments:

Programmatic:

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

Technical:

- Engaged the larger process team to progress the <u>AWPF Conceptual Design</u> by conducting process analyses, continuing conversations with equipment vendors, and preparing figures for the technical report.
- Completed the construction of the <u>Reverse Osmosis (RO) Concentrate Pipe Run</u> at the demonstration facility to simulate the ≈13 mile pipeline and identify the potential for scaling based on anticipated detention time and velocities.
- Further evaluated <u>flow equalization</u> needs at Tapia WRF, pumping systems, progress of conceptual design layout, and O&M considerations. Presented updated results of flow and equalization evaluation to LVMWD staff on June 21.
- Further coordinated with LVMWD staff regarding the <u>transition plan for the</u>
 <u>Demonstration Facility</u> and what is needed to confirm design criteria for the full-scale facility. Met with LVMWD staff on June 22 to review current water quality testing and documentation to determine requirements moving forward.
- Conducted a <u>leadership meeting</u> on June 23 with LVMWD staff to confirm and gain consensus on major Pure Water Project elements: design flows, California Toxics Rule approach, level of redundancy, standby power, non-process layout, and procurement strategy.
- Presented preliminary evaluation criteria for the <u>conveyance alignment study</u> to LVMWD staff on June 15 to share progress and gather initial feedback.

Regulatory/Environmental:

- Prepared and submitted letter and checklist to the California State Water Resources Control Board (SWRCB) on June 27 to discuss approach for the Wastewater Change Petition under Water Code <u>Section 1211</u>.
- Updated the draft PEIR based on comments from LVMWD staff, and updated the timeline for additional legal review and public release.
- DDW and RWQCB demonstration tour was held on June 14.

Financial:

Continued tracking of funding options and supporting LVMWD staff, as needed.

Procurement:

- Finalized the market sounding brief and advertised for the <u>Marketing Sounding</u>
 <u>Meetings</u> with prospective Design-Build firms June 24-30 to refine the procurement process.
- Conducted a series of one-on-one confidential market sounding sessions with potential progressive design build teams to gain feedback on intended approach, risk transfer limitations, contract element preferences and challenges, and lessons learned.

Public Outreach:

- Conducted media training sessions with the JPA Board on June 3.
- Prepared logistics plan for the draft PEIR public meeting for the California Environmental Quality Act (CEQA) process.
- Conducted biweekly coordination calls with LVMWD staff to support ongoing public outreach efforts.

Look Ahead

The Project Team is preparing the technical evaluations of each site, conducting testing at the Demonstration facility to inform the design, meeting with local cities to review draft conveyance alignment study, progressing the CEQA work, and proceeding with the strategies outlined in the Program Implementation Plan for July.

The Project Team is focused on the following activities for July:

- Progress technical design and drafting of the AWPF Concept Design report based on feedback from the technical workshops held with LVMWD staff over the past 4 months.
- Finalize equalization technical memorandum that identifies the flow equalization approach for Tapia WRF and the new AWPF.
- Hold meetings with the City of Agoura Hills and Westlake Village regarding the
 conveyance alignments and draft PEIR to gain feedback. Hold meeting with Calleguas
 to discuss the extension of the Salinity Management Pipeline. Hold meeting with
 Thousand Oaks to review the updated conveyance alignments based on previous input.
- Summarize Market Sounding results gained from prospective PDB firms.
- Update draft PEIR with LVMWD staff comments and provide updated document for legal review.
- Begin preparation for the CEQA public meeting, tentatively scheduled for September 8.

PIPER SANDLER

Las Virgenes – Triunfo Joint Powers Authority Board Presentation

July 5, 2022





2 Agenda

Section

- I Piper Sandler Update
- **II** Market Overview & Trends
- III Accelerated Financing ~ Sensitivity Analysis

Section I

Piper Sandler Update

4 **Las Virgenes – Triunfo JPA Team**

SRF/Utility Finance Group

Matt Courtney Kansas City

> Whit Moloney Nashville

Halina De La Rosa LA / El Segundo

> Greg **Swartz** Phoenix

Structuring & Credit

Tom LaFleur Investments & Derivatives Chicago

Peter Stettler Rating Interactions Chicago

Lauren

MacMillan

Portland

California Public Finance Group

Mark Adler California Lead El Segundo / LA

Dennis McGuire Sacramento

Tony Rapista El Segundo / LA

Renee Vancho Orange County

Bond Marketing & Pricing

Chris Bessette California Underwriting San Francisco

Steve Cavalier Head of Underwriting Chicago

Joanna Brody Variable & Short-Term New York

Brent Rivard Taxable Fixed Rate Minneapolis

National Resources & Support

Deb Schoneman President Minneapolis

Frank Fairman Public Finance Head Minneapolis

John Miller **Bond Sales** Kansas City

Susan Pryce Investor Relations Minneapolis

5 2021 Activity

Advisor

- ***** # 6
- ❖ 217 Issues
- ❖ \$11.8 Billion

Placement Agent

- ***** # 1
- 4 192 Issues
- ❖ \$2.5 Billion

Senior Underwriter

- ***** # 3
- ❖ 943 Issues

As a combined total, we led more transactions in 2021 than any other firm.

We are on pace to do so again in 2022.



Piper Sandler ~ Water & Sewer Expertise

Recent Transactions ~ 2021 to Present

Role	#	\$ Million
Senior Underwriter	133	\$1,332
Placement	25	\$128
Advisor	30	\$1,556

South Columbia Basin Irrigation District, Washington



Water Revenue, \$8.2 M Advisor ~ Pending

Texas Water Development Board



SRF Bonds, \$235.6 M Senior ~ 6/8/2022

Northern Colorado Water Conservancy District



COPs, \$33.9 M Advisor ~ 5/24/2022

Wichita, Kansas



Water SRF Loan, \$60.0 M Advisor ~ 4/29/2022

Parker Water & Sanitation District, Colorado



Water Sewer Revenue, \$81.7 M Senior ~ 3/15/2022

Newport, Oregon



Water Sewer Revenue, \$4.6 M Placement Agent ~ 2/15/2022

San Juan Water District, California



Water Revenue, \$8.2 M Placement Agent ~ 1/31/2022

Gresham, Oregon



Water Revenue, \$41.5 M Advisor ~ 1/31/2022₁₆

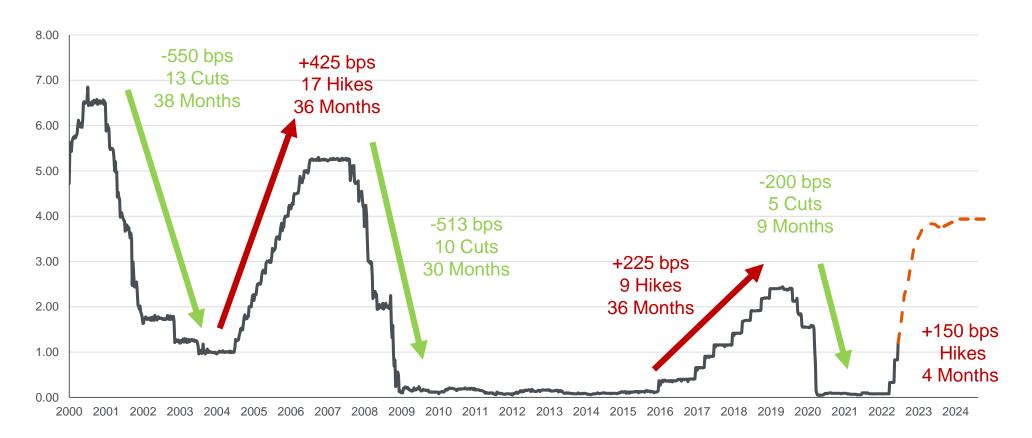
Section II

Market Overview & Trends

8 Federal Fund Rates ~ 2000 to Present

Federal Reserve Actions

❖ Index for Tax-Exempt Rates

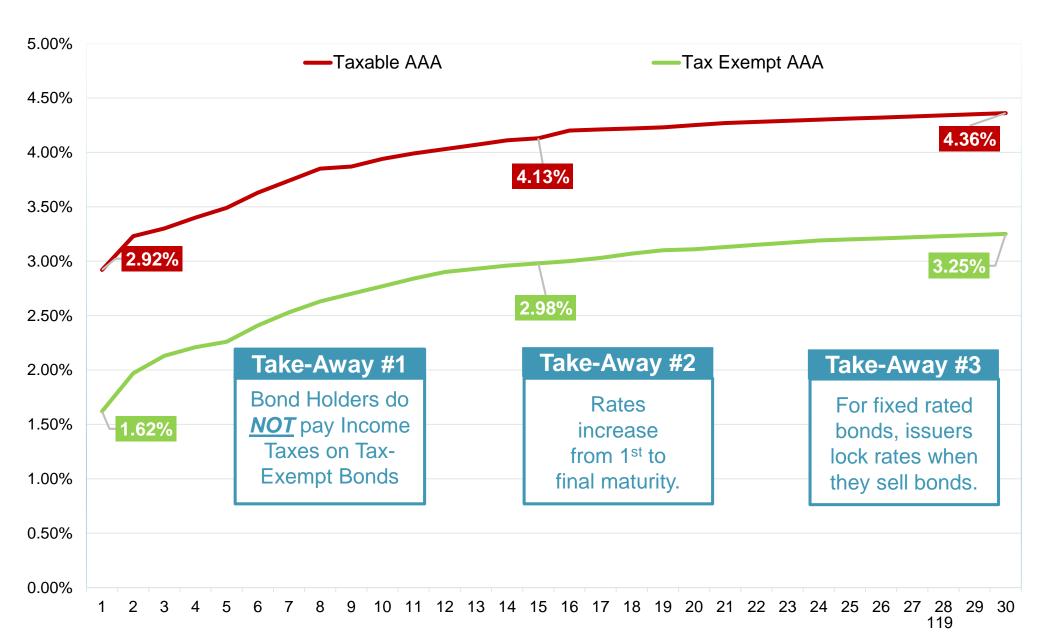


❖ Recent & Forecasted Increases

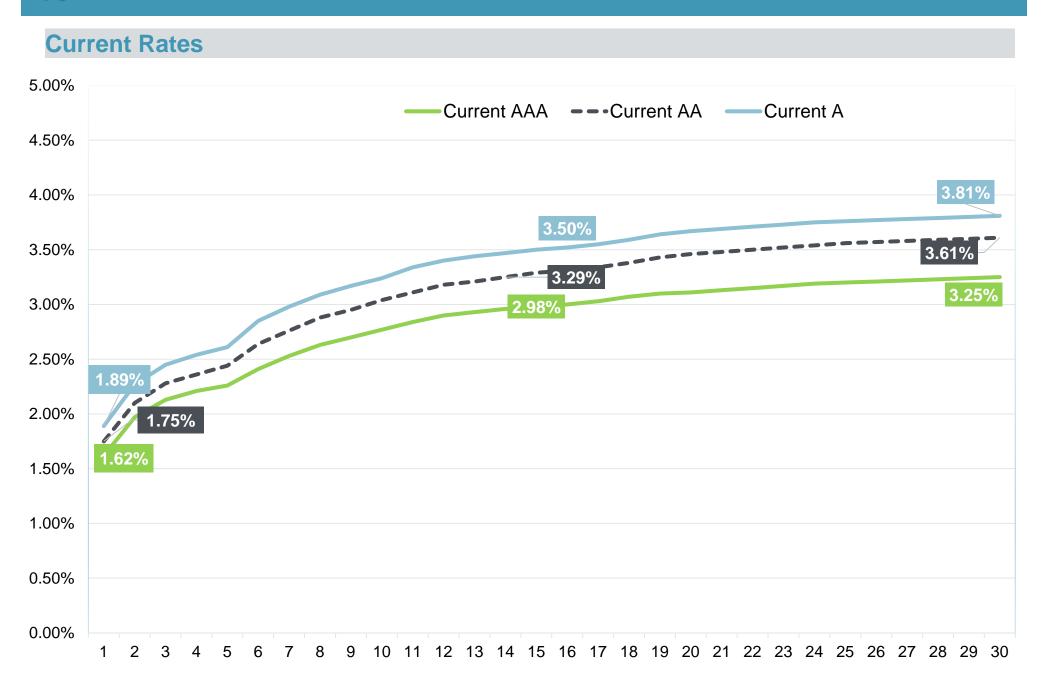
2022 March	2022 May	2022 June	2022 July – Dec.	2023	2024
0.25% 25 basis points	0.50% <i>50 bps</i>	0.75% 75 bps	1-2 hikes	2-3 Hikes	0-2 Hikes 118

9 Taxable vs. Tax-Exempt

Current Rates

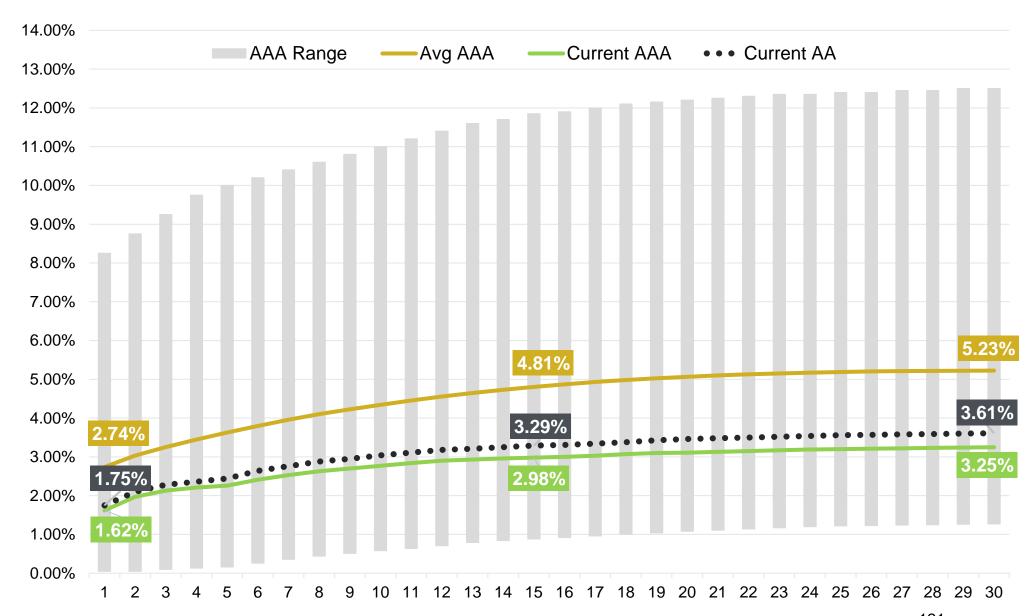


10 Tax-Exempt Rates ~ "AAA", "AA", "A" Rates



11 Tax-Exempt Rates ~ Historical Rates

1982 to Present



12 National Utility Trends

- Diversify Funding Sources
- Priction Between Regional Providers & Users
- Enhance
 Legal
 Structures
- 4 Green Bonds
- Utility Sales /
 Acquisitions
- Ratings /
 Disclosure

- Increased Pay-Go & Fed/State \$
- Limited Public Private Partnerships
- Rate Setting & Cost Allocation
- Baltimore, Chicago, Northern CO, Toledo, Valley Water
- Eliminate Reserves
- Support between Enterprises
- Growing Demand
- Marketing Benefit
- Consolidate 72,000 Utilities
- Investor Acquisitions Exceed Municipal Acquisitions
- Stable Ratings During COVID
- Fewer Rating Agencies & Ratings

Section III

Accelerated Financing

Sensitivity Analysis

14 Estimated Series 2022

Pro	nie	ct:
	IJС	Cl.

Cost to Issue:

Final Maturity:

Net Effective Rate:

Debt Service

Average Annual:

Total P & I:

Current Rates

\$ 100,000,000

\$ 356,280

2042

3.96%

\$ 7,199,589

\$ 142,191,875

+ 0.50%

\$100,000,000

\$ 368,560

2042

4.27%

\$ 7,447,835

\$ 147,094,750

Increase

+ \$12,280

+ 0.31%

+ \$ 248,246

+ \$ 4,902,875

July 5, 2022 JPA Board Meeting

TO: JPA Board of Directors FROM: Facilities & Operations

Subject: Tapia Water Reclamation Facility Flood Protection Evaluation: Award

SUMMARY:

JPA Board Members have expressed concerns regarding flood protection at the Tapia Water Reclamation Facility (Tapia). The concerns are elevated due to the expected effects of climate change, resulting in the potential for high intensity rain events and more frequent occurrence of wildfires. Severe wildfires could have an impact on Tapia because debris washed into the creek during flooding may cause an obstruction at the Malibu Canyon Road Bridge.

Previously, the Tapia Flood Wall Study Update concluded that the existing flood protection facilities provided adequate protection for Tapia based on observations of significant flow events. In 2020, the County of Los Angeles Public Works Department completed a hydraulic analysis for Malibu Creek, which changed volumes for a FEMA 100-year storm and a Capital Flood (50-year storm over a saturated watershed). From this analysis, the FEMA 100-year flood was updated to a peak discharge of 40,544 cubic feet per second (CFS), and the Capital Flood was evaluated with a discharge of 69,400 CFS.

The County's analysis of a FEMA 100-year flood determined the water surface elevation of Malibu Creek adjacent to Tapia would exceed the flood wall elevation at the southeastern portion (balancing pond and chlorine contact channel) of the facility. Flooding in this area would cause a severe disruption in treatment by eliminating disinfection and effluent pumping. For a Capital Flood, the water surface elevations in Malibu Creek, as determined by the County, would all exceed the height of the flood wall at Tapia. If a Capital Flood event were to occur at Tapia, many of the critical facilities would be taken out of service including the influent headworks and pump station, the Southern California Edison sub-station, emergency generators, balancing pond and chlorine contact channel. This would be a catastrophic failure.

Considering the new information and potential for flooding, a Request for Proposals for an updated, comprehensive analysis of the level of flood protection provided for Tapia was issued on April 27, 2022. Proposals were received from three firms by the June 6, 2022 deadline: Stetson Engineers, Inc.; Pace Advanced Civil Engineering, Inc.; and Kasraie Consulting. Staff reviewed the proposals and recommends selection of Stetson Engineers, Inc. (Stetson) for the work. Stetson's proposed scope of work includes the construction of a 2D model, including calibration and verification of the model to determine flow profiles in Malibu Creek adjacent to Tapia. Stetson has extensive previous experience with similar projects.

RECOMMENDATION(S):

Authorize the Administering Agent/General Manager to execute a professional services agreement with Stetson Engineers, Inc., in the amount of \$105,100, to perform a flood protection evaluation for the Tapia Water Reclamation Facility.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

No

FINANCIAL IMPACT:

The cost of the work is \$105,100, which will be allocated 70.6% to LVMWD and 29.4% to TWSD. Sufficient funds are expected to be available in the adopted Fiscal Year 2022-23 JPA Budget for the flood protection evaluation.

DISCUSSION:

JPA Board Members have expressed concerns regarding flood protection at the Tapia Water Reclamation Facility (Tapia). The concerns are elevated due to the expected effects of climate change, resulting in the potential for high intensity rain events and more frequent occurrence of wildfires. Severe wildfires could have an impact on Tapia because debris washed into the creek during flooding may cause an obstruction at the Malibu Canyon Road Bridge.

Previously, the Tapia Flood Wall Study Update was presented to the JPA Board on August 3, 2015. The report included an evaluation of Malibu Creek flow station data, channel sediment, channel debris, channel vegetation conditions and impervious area percentage changes for the drainage basin from 2003 to 2015. It concluded that the existing flood protection facilities provided adequate protection for Tapia based on observations of significant flow events since 2003 compared to the original design ultimate peak flow of 52,500 CFS.

Recently, the Los Angeles County Department of Public Works (Public Works) began planning to replace the Malibu Canyon Road Bridge over Malibu Creek. As a part of design process, Public Works' Stormwater Engineering Division, Hydraulics and Hydrology Section developed a preliminary hydraulic analysis for Malibu Creek in the vicinity of the bridge, which included Tapia as it is immediately upstream. The analysis included preliminary water surface elevations at various creek stations adjacent to the Tapia under two scenarios: (1) a FEMA 100-year flood event; and (2) a Public Works' Capital Flood event. The properties for the FEMA 100-year flood event (1% annual chance) were updated in 2018 to reflect a peak discharge of 40,544 CFS, which is less than the ultimate peak flow used for design of Tapia's floodwall. The Capital Flood assumes a 50-year flood event occurring over a burned and saturated watershed with the discharge volume bulked to account for sediment and debris transport. As a result of the bulking, the Capital Flood produces a discharge volume of 69,400 CFS and results in a significantly higher water surface elevation than the FEMA 100-year event.

Public Works' analysis of the FEMA 100-year flood event resulted in preliminary water surface elevation for Malibu Creek at various stations adjacent to Tapia. The water surface elevations range from 478.15 feet at the northwest end of Tapia, reducing to 475.88 feet at the southeast end of Tapia. Tapia's flood wall elevation at the northwest (headworks) end of the facility is 477.66 feet and reduces to 472.5 feet at the southeast end. The floodwall elevation adjacent to the balancing pond is 473.5 feet. It is important to note that the many of the structures within Tapia have a higher elevation than the floodwall, such as the filters (487 feet) and secondary clarifiers (491 feet); therefore, they would be protected. However, the water surface elevations established by Public Works' report exceed the floodwall height, as well as the balancing pond wall height at the southeastern portion of the facility. The FEMA 100-year flood event could inundate the balancing pond, effluent pond, and chlorine contact channel, causing a severe disruption to the treatment process.

For a Capital Flood event, the preliminary water surface elevations for Malibu Creek all exceed the height of the floodwall at Tapia. In addition to the southeastern portion of the Tapia being flooded, the influent sewer vault (elevation 474 feet) and headworks (elevation 476 feet) would be inundated. Additionally, the Southern California Edison sub-station (elevation 467 feet) and emergency generators (elevation 476.3 feet) would be flooded, cutting off all the power to the facility. This scenario could result in a catastrophic failure.

Considering the new information and potential for flooding, a Request for Proposals for an updated, comprehensive analysis of the level of flood protection provided for Tapia was issued on April 27, 2022. Three proposals were received by the June 6, 2022 deadline. Staff reviewed the proposals and recommends selection of Stetson Engineers, Inc. for the flood protection evaluation.

Stetson's proposed scope of work includes the construction of a HEC-RAS 2D model, including calibration and verification to determine flow profiles in Malibu Creek adjacent to Tapia. The proposal includes running multiple scenario simulations to assess flood conditions under different circumstances, including existing conditions, after the replacement of the Malibu Canyon Road Bridge and after the removal of the Rindge Dam. Stetson's proposal shows that their team has extensive experience with similar projects in the past.

Adequate flood protection ensures the continuity of treatment operations at Tapia.

Prepared by: Brett Dingman, Water Reclamation Manager

ATTACHMENTS:

Tapia Flood Protection Evaluation Proposal Tapia Flood Protection Evaluation Fee





PROPOSAL

TO

LAS VIRGENES - TRIUNFO JOINT POWERS **AUTHORITY**

FOR

TAPIA WATER RECLAMATION FACILITY: FLOOD PROTECTION EVALUATION UPDATE

SUBMITTED TO:

MR. BRETT DINGMAN LAS VIRGENES MUNICIPAL WATER DISTRICT 4232 LAS VIRGENES ROAD CALABASAS, CA 91302

JUNE 6, 2022



861 Village Oaks Drive, Suite 100 • Covina, California 91724 Phone: (626) 967-6202 • FAX: (626) 331-7065 • Web site: www.stetsonengineers.com

Northern California • Southern California • Arizona •

TABLE OF CONTENTS

	PAGE No.
1. EXECUTIVE SUMMARY LETTER	1-1
2. Project Understanding and Approach	2-1
3. Scope of Work	3-1
4. QUALIFICATIONS, CAPABILITIES, AND EXPERIENCE	4-1
5. Key Personnel and Team Member Description	5-1
6. QUALITY CONTROL	6-1
7. SUBCONSULTANT LIST	7-1
8. VALIDITY OF PROPOSAL	8-1
9. STATEMENT OF INSURANCE COMPLIANCE	9-1
10. Assumptions	10-1

LIST OF APPENDICES

APPENDIX A PROJECT SCHEDULE

APPENDIX B RESUMES

APPENDIX C SAMPLE CERTIFICATE OF INSURANCE

1. EXECUTIVE SUMMARY LETTER

June 6, 2022

Mr. Brett Dingman, PE Las Virgenes Municipal Water District 4232 Las Virgenes Road Calabasas, CA 91302

Subject: Proposal for Flood Protection Evaluation Update for

Tapia Water Reclamation Facility

Dear Mr. Dingman:

Stetson Engineers Inc. (Stetson) is pleased to provide the Las Virgenes – Triunfo Joint Powers Authority (JPA) with the enclosed response to the "Request for Proposals (RFP) for Tapia Water Reclamation Facility: Flood Protection Evaluation Update". Stetson is prepared to commit the most qualified engineering professionals and support staff to produce a quality work product that the JPA will find useful for determining whether the existing flood protection at the Tapia WRF is adequate. Stetson has assisted in numerous flood analysis and flood protection projects, including recent flood studies for Marin County Flood Control District, the Pala Reservation, the Los Robles Mobile Home Park, and Mariposa Public Utility District that are included as project references.

Stetson has prepared this proposal to meet the following primary objectives for the JPA's flood protection evaluation for the Tapia WRF: perform a hydraulic analysis using pertinent topography and other relevant data inputs, evaluate scenarios for the capital flood and the FEMA 100-year flood, analyze the benefit of the removal of Ringe Dam and associated sediment transport in reducing the flood water level at the Tapia WRF, evaluate the impact on ingress and egress to the Tapia WRF during the capital flood and the FEMA 100-year flood, and present findings and potential recommendations for flood protection in a technical report.

The following contact information is provided:

Firm Name: Stetson Engineers Inc.

Office Address: 861 S. Village Oaks Drive, Suite 100

Covina, California 91724

• *Telephone:* (626) 967-6202

Corporate Officer Authorized to

Execute Agreement: Mr. Stephen B. Johnson

• Primary Contact: Mr. Jeff Helsley

Email: jeffh@stetsonengineers.com

Thank you for considering Stetson's Proposal and this opportunity to assist the Las Virgenes – Triunfo Joint Powers Authority.

Sincerely

Stephen B. Johnson, P.E, President/CEO/CFO Stetson Engineers Inc.

2. PROJECT UNDERSTANDING AND APPROACH

The JPA is soliciting proposals to perform a hydraulic analysis to determine if the existing flood protection at the Tapia WRF is adequate and, if not, recommend additional protection measures.

The Tapia WRF, constructed in 1964, is operated under a NPDES permit issued by the Los Angeles Regional Water Quality Control Board, which requires that "All facilities used for collection, transport, treatment, or disposal of wastes shall be adequately protected against damage resulting from overflow, washout, or inundation from a storm or flood having a recurrence interval of once in 100 years".

Since 1986, Los Angeles County has adopted the Capital Flood protection policy. So, the Tapia WRF is also required to provide the Capital Flood protection. The Capital Flood is the runoff produced by a 50-year frequency design storm falling on a saturated watershed. A 50-year frequency design storm has a probability of 1/50 of being equaled or exceeded in any year (i.e., a recurrence interval of once in 50 years). Capital Flood protection also requires adding the effects of fires and erosion (burning and sediment/debris bulking) under certain conditions.

The Tapia WRF is located in Los Angeles County on the south bank of Malibu Creek, just upstream of the Malibu Canyon Road Bridge (see Figure 1). Below is a summary of relevant flood studies:

- In 1965, a floodplain delineation study was performed by the Los Angeles County Flood Control District. This study indicated that the Tapia WRF was outside of the floodplain except for some storage buildings on the northwest corner of the plant. Subsequent to the floodplain delineation study, a floodwall was constructed on this part of the site so that the entire facility would be outside of the floodplain. A design peak discharge of 41,800 cfs at the Tapia WRF was used in the 1965 floodplain delineation.
- In 1990, Rivertech Inc. performed a floodplain evaluation to determine the level of flood protection necessary for the Tapia WRF. Based on the Rivertech's HEC-2¹ hydraulic modeling results of the ultimate development condition (with an estimated peak discharge of about 41,800 cfs at the Tapia WRF and an estimated peak discharge of about 52,250 cfs at gaging station F130-R²), the floodwall at the Tapia WRF was constructed to a height of 477.66 ft at the west end of the plant stepping down to an elevation of 472.5 ft at the east end of the plant.
- In 2003, the Las Virgenes Municipal Water District performed an update of the Rivertech 1990 study and validated the Rivertech recommended elevations by comparison of the high water elevations observed at the Tapia WRF during the February 10-12, 1992 and the February 6-7, 1998 storm events (with observed peak discharges at gaging station F130-R at 23,300 cfs and 19,100 cfs, respectively). No hydraulic modeling analysis was conducted in the 2003 update.
- In 2015, the Las Virgenes Municipal Water District prepared a further update of observation of major storm events since the 2003 update using the gaging station peak

¹ HEC-2 is the predecessor of the current HEC-RAS hydraulic modeling program developed by the U.S. Army Corps of Engineers.

² The gaging station F130-R has a drainage area of about 105 mi², of which the Malibu Creek has a contributing area of about 95 mi² and the tributary Cold Creek has a contributing area of about 10 mi². The gaging station is located at about 0.2 mile downstream of the Cold Creek confluence.



discharge data, channel sediment, channel debris, channel vegetation conditions, and percentage changes in impervious area in the drainage basins. The 2015 update concluded that the existing flood protection facilities at the Tapia WRF would provide adequate flood protection by comparison of the high water elevations observed at the Tapia WRF during the January 9-10, 2005 and the March 20-21, 2011 storm events (with observed peak discharges at gaging station F130-R at 12,700 cfs and 6,490 cfs, respectively). No hydraulic modeling analysis was conducted in the 2015 update.

• In 2020, the Stormwater Engineering Division, Hydrology & Hydraulics Section of Los Angeles County Department of Public Works (LADPW) performed a hydraulic modeling analysis using HEC-RAS (version 5.0.5) for the proposed replacement of the Malibu Canyon Road Bridge. The modeling results indicated that floodwater elevations under the FEMA 100-year discharge condition (40,544 cfs³) were above the Tapia WRF's flood protection wall in several locations on the eastern side of the facility, which would cause failures in the effluent section of the plant. In a Capital Flood event (69,400 cfs)⁴, the modeling analysis indicated that the entire flood protection wall would be overtopped causing a catastrophic failure of the facility.

The 2003 and 2015 updates based on the observed historical high water levels should not be seen as a basis for verifying the adequacy of the Tapia WRF flood protection since the historical actual high flow events had much lower peak discharges than the design discharge for the Capital Flood. However, the observed high water levels would be useful information for calibration and verification of a hydraulic model.

Both the Rivertech 1990 HEC-2 modeling and the LADPW 2020 HEC-RAS modeling were one-dimensional (1D) steady-flow hydraulic modeling without model calibration/verification. Both model's reliability has not been well established and demonstrated. Table 1 is a comparison of the main model inputs used in the 1990 HEC-2 modeling and the 2020 HEC-RAS modeling. The Rivertech 1990 modeling considered flow changes upstream and downstream of the Cold Creek confluence, which is realistic. It is unclear if the LADPW 2020 modeling considered the flow changes in the model inputs.

Channel roughness (represented by Manning's n values) has a wide range of literature values and is normally sensitive to the computed water surface elevations. It would be better to determine the roughness value through model calibration/verification if historical high water marks are available. Without model calibration/verification, there would be no defined way to determine the validity of the selected Manning's n values.

The selected downstream boundary location and the selected method to determine the downstream boundary water level are also important to hydraulic modeling. The selected or assumed downstream boundary condition should not affect the computed water surface elevations for the areas of interest in the upstream. It is unclear what location and method were used in the LADPW 2020 modeling.

_

³ The FEMA-published 100-year discharge for Malibu Creek is located at cross section A shown in the FEMA Flood Insurance Study (FIS)'s water surface profile. This location is about 1,540 ft above the Pacific Coast Highway with a drainage area of 110 mi² reported in the FIS (or about 4.5 miles downstream of gaging station F130-R).

⁴ It is unclear whether the estimated Capital Flood discharge of 69,400 cfs is located upstream of the Malibu Canyon Road Bridge or at gaging station F130-R. Based on the Rivertech 1990 study, the peak discharge at gaging station F130-R is about 20% higher than the peak discharge at the Tapia WRF due to the contribution of Cold Creek, a tributary of Malibu Creek.

Table 1 Comparison of Main Model Inputs between the Rivertech 1990 HEC-2 Modeling and the LADPW 2020 HEC-RAS Modeling

	Discharge Used in the Modeling	Channel Roughness – Manning's n	Downstream Boundary
Rivertech 1990 HEC-2 Modeling	41,800 cfs at the Tapia WRF and 52,500 cfs at the F130-R gaging station to reflect the Cold Creek inflow	Existing Condition: Main channel: 0.064 Left overbank: 0.041-0.044 Right overbank: 0.035 Future Condition: Main channel: 0.100 left overbank: 0.041-0.044 Right overbank: 0.042	Estimated Ringe Dam spillway water level
LADPW 2020 HEC-RAS Modeling	FEMA 100yr flood: 40,544 cfs; Capital Flood: 69,400 cfs	 Existing Condition: Main channel: 0.040-0.050 Left overbank: 0.050-0.070 Right overbank: 0.030 	Unclear in location and method

Channel cross section alignment is also important to 1D hydraulic modeling. The dog-legged cross section alignment near the Malibu Canyon Road Bridge in the LADPW 2020 1D hydraulic modeling (see Figure 2) appears to be arbitrary and would be expected to affect the computed water surface elevations. The arbitrarily selected narrow top of bank locations near the bridge (the two red dots at each cross section represent the main channel top of bank locations) would also be expected to affect the computed water surface elevations. In addition, several channel cross sections near the bridge intersect with the bridge structure. This is not an acceptable configuration in any 1D hydraulic modeling. The issues with the channel cross section alignment and configuration in the LADPW 2020 1D modeling could be a possible reason that the LADPW model-simulated water surface elevations for the FEMA 100-year peak discharge condition (40,544 cfs) were higher than the Rivertech 1990 modeling results although the discharge and the main channel Manning's n used in the LADPW 2020 modeling were both lower than those used in the Rivertech 1990 modeling. Lower discharge and lower Manning's n would theoretically result in lower, not higher water surface elevations.

Given the above preliminary review, there is a need to develop an independent new hydraulic model that is reliable and defensible. The model will need to meet the following main criteria:

- Accurate representation of the physical flow conditions as realistically as possible with no or minimum arbitrary judgment.
- Well performed model calibration and verification without the need for additional justifications of the selected Manning's n values that are within the range of literature values.
- Use of both the FEMA 100-year peak discharge and the LADPW-estimated Capital Flood with consideration of flow changes upstream and downstream of the Cold Creek confluence
- Well defined downstream boundary condition (in terms of location and water level). The selected or assumed downstream boundary condition should not affect the computed water surface elevations for the areas of interest in the upstream.

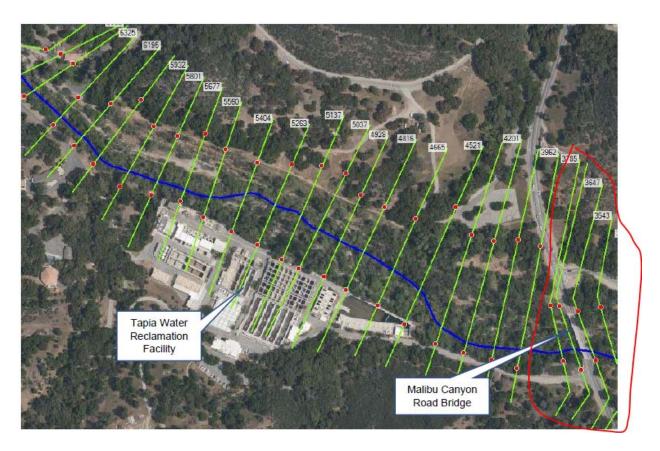


Figure 2 Dog-Legged Cross Section Alignment near the Malibu Canyon Road Bridge in the LADPW 2020 HEC-RAS 1D Hydraulic Modeling

3. Scope of Work

The current widely used hydraulic modeling program HEC-RAS (version 5.0 or higher) has capabilities for 1D (one-dimensional) modeling, 2D modeling, and combined 1D and 2D modeling. In a 1D hydraulic model, the calculations are made at a series of surveyed cross sections across the channel and floodplain. Cross sections are typically spaced every few hundred feet. In a 2D model, the calculations are made at grid cells throughout the channel and floodplain. A 1D model is good at estimating the flow at which a channel (relatively narrow channels in particular) will overtop and cause flooding, but less so at predicting where water will go once it escapes into the floodplain. For that reason, a 2D model is used for the floodplain area to better predict where flow will go once it escapes from the channel. In a combined 1D channel and 2D floodplain model, the calculations are designed to take advantage of the respective strengths of the 1D and 2D models.

The LADPW used 1D steady-flow for the modeling in 2020. We propose to use 2D unsteady-flow⁵ for the independent modeling. Compared to 1D, 2D modeling would more realistically represent the physical flow conditions in relatively wide channels during large flood events (such as the Malibu Creek) and in the floodplains, since the flows are naturally two-dimensional driven by hydraulics and topography.

A project schedule is included as Appendix A.

TASK 1 – PROJECT MANAGEMENT AND MEETINGS

Project management is an on-going process over the entire course of the project progress. During the project, Stetson will work closely with JPA staff. We propose monthly progress meetings to discuss specific issues. We encourage frequent phone calls and other informal communications with JPA staff. This approach will keep the project on-track, on-time, and on-budget, and will ensure that JPA staff is well informed.

Stetson will implement strict quality control processes throughout the project. Quality control involves achievement of quality standards within the parameters of project schedule and budget, without placing undue demands on management and technical personnel. Management procedures, proposed communications and meetings, and report preparation procedures all help assure that elements of quality control are exercised at all levels within the Project team that fully-informed oversight may be exercised by the JPA. Mr. Jeff Helsley, the Project Manager at Stetson, will review all submittals to the JPA to ensure quality control issues are minimized. Dr. Xiaoqing Zeng, the lead hydraulic engineer at Stetson, will supervise all aspects of the technical work and will work closely with Dr. Guoyuan Li, the lead modeler at Stetson, to ensure a finished product of the highest possible quality.

Stetson will prepare and participate in the following anticipated meetings. The inputs from these meetings will be incorporated into the hydraulic modeling work and/or study report.

1) Project kickoff meeting with JPA staff

LAS VIRGENES - TRIUNFO JOINT POWERS AUTHORITY

STETSON ENGINEERS INC.

⁵ With regard to flow variability with time, hydraulic models can be either steady-flow or unsteady-flow (or dynamic) models. Steady-flow models run at a constant flow (e.g., the peak of the 100-year flow) and solve the mathematical equations over space only, without considering flow variations over time. Unsteady-flow models run the entire hydrograph with its rising, peak, and falling stages and solve the mathematical equations with consideration of flow variations over both space and time. Steady-flow models are generally more conservative than unsteady-flow models in that they predict larger areas of flooding because they assume that all parts of the creek and floodplain are receiving the peak flow simultaneously and continuously over an infinite amount of time, and flood attenuation is not considered.

- 2) Meeting with LADPW staff, if necessary
- 3) Workshop meeting with JPA staff about the model construction and model calibration/verification
- 4) Workshop meeting with JPA staff and California State Parks staff about the model simulation scenarios and results

At the workshop meetings, Stetson will utilize the advanced graphical features of the U.S. Army Corps of Engineers HEC-RAS modeling software. These features consist of dynamic visualization and animation of model results. The flood waves can be represented as a light blue transparent shade overlaid on an aerial photo or other type of base map. Through dynamic visualization and animation, the progression and recession of the flow of floodwater over the land surface can be shown over time. This is a powerful way to convey the impacts of flood waves and provide insight for additional flood protection measures (if any) needed for the Tapia WRF.

TASK 2 – DATA COLLECTION AND REVIEW OF EXISTING STUDIES

Stetson already has the following reports and will review them to identify useful information for the hydraulic modeling analysis:

- Rivertech 1990 Floodplain Evaluation Study for Malibu Creek Near the Tapia Water Reclamation Facility
- Las Virgenes 2015 Tapia Water Reclamation Facility Floodwall Study Update
- LADPW 2020 Malibu Canyon Road Bridge Hydraulic Analysis

Additional data/information that will be collected to assist with the hydraulic modeling analysis may include, but would not be limited to, the following:

- The HEC-RAS hydraulic model files developed by LADPW in 2020;
- The LADPW topographic survey data around the proximity of the Malibu Canyon Road Bridge (which was mentioned in the LADPW 2020 modeling report);
- The 3-foot spatial resolution Digital Elevation Model (DEM) derived from the LiDAR data collected in 2015 and 2016 by the Los Angeles Regional Imagery Acquisition Consortium (which was mentioned in the LADPW 2020 modeling report).
- The complete terrain data used by LADPW in its 2020 hydraulic modeling.
- The comprehensive hydrology study report completed by LADPW in 2007 for the Malibu Creek Watershed (which was referenced in the LADPW 2020 modeling report for the Capital Flood estimation);
- Los Angeles County 2006 Hydrology Manual regarding the Capital Flood estimation;
- Design drawings of the existing embankment and floodwall at the Tapia WRF;
- Design drawings of the existing Malibu Canyon Road Bridge and the proposed replacement bridge; and
- Historical high water levels and the corresponding peak discharges for model calibration and verification.

Stetson will review the collected data and examine the completeness and quality of the data. Stetson will identify additional data needs (if any) for the hydraulic modeling analysis.

TASK 3 – FIELD INSPECTION AND SURVEY OF THE MALIBU CANYON ROAD BRIDGE

Stetson will conduct an on-site field inspection of the study reach to examine vegetation conditions and other conditions influencing creek hydraulics. Stetson will also survey the Malibu Canyon Road Bridge to get the HEC-RAS model required geometry input data for the bridge and compare the surveyed bridge data with the existing bridge representation in the LADPW's

2020 model (if obtained). Stetson will also visit the abandoned Ringe Dam to inspect the spillway and sedimentation conditions. During the field inspection, Stetson will take notes and photos.

Stetson will also visit the Tapia WRF, inspect the floodwalls, and discuss with JPA staff the historical high water levels (if any) and the locations of the high water levels at the plant. Stetson will mark the high water level locations on a map or drawing. These high water level data will be used for model calibration and verification.

TASK 4 - CONSTRUCTION OF A HEC-RAS 2D UNSTEADY-FLOW MODEL

With the high resolution topographic data collected in Task 2, Stetson will develop a digital terrain model (DTM) and use it to construct a HEC-RAS 2D unsteady-flow model. The model domain will start at the Pacific Ocean and extend upstream to about 1,000 ft upstream of the Tapia WRF. The model domain will laterally extend wide enough into both sides of the floodplain to ensure that the lateral extent will cover all potential inundation areas under the Capital Flood, including Cold Creek. The Malibu Canyon Road Bridge, the Tapia WRF floodwall, and the Ringe Dam will be carefully represented in the model. The selected downstream boundary location at the Pacific Ocean is intended to better define the downstream boundary water levels such as the mean higher high water. This downstream location will not have any effect on the computed water surface elevations at the Tapia WRF.

2D Grid Cell Size. The primary size for the 2D grid cells will be small enough (e.g., 10 ft by 10 ft) to capture details of the channel and floodplain topography. Additional effort will be made to enhance the topography representation at key locations (e.g., top of bank areas, floodwalls, berms, roads) using break lines (see additional description of break lines below) and fine mesh size (e.g., 2 ft by 2 ft). The topographic resolution will be sufficient to capture topography of streets and most flow barriers such as berms/floodwalls or other high ground features. The effects of building structures will be represented in the model by using a very high Manning's n roughness for grid cells where structures are located to allow floodwater to enter buildings but at very slow speed.

Break Lines⁶. Break lines will be included in the 2D computational mesh in order to align the cell edges with high ground. Aligning the cell edges with high ground ensures that barriers to flow, such as floodwalls, berms, or roads, are correctly represented in the computational mesh. Without break lines, flow may cross a high ground barrier prematurely.

Manning's n Values. Manning's n values are used to account for the resistance to flow exerted by the ground surface or other surface (e.g., vegetation) that the flowing water is exposed to. A greater n value indicates greater surface roughness and resistance to flow. The spatially varying Manning's n values will be initially estimated based on land cover data and the HEC-RAS version 5 User's Manual (HEC, 2016). These initial Manning's n values will then be modified as needed to reflect observed hydraulic conditions during calibration/verification of the 2D model.

Boundary Conditions. The upstream boundaries will be located at the upstream ends of the main channel and tributaries of the model domain. The upstream boundary conditions will be the inflow hydrographs during the selected flood event. The inflow hydrographs will be derived by scaling the hydrograph of a selected flood event observed at gaging station F130-R or from the hydrograph in the comprehensive hydrology study report completed by LADPW in 2007 for the Malibu Creek Watershed (if available). The downstream boundary will be set as the

-

⁶ Break lines are used to define features such as berms, roads, channel top of bank areas, and other high ground features. Break lines force surface triangulation along the break line preventing triangulation across the break line when developing the topographic Digital Elevation Model.

observed time-varying Pacific Ocean tide for the model calibration/verification events, and constant mean higher high water (MHHW) for the scenario simulations. Using MHHW is a standard practice in analyzing riverine flooding in coastal creeks and is commonly used by FEMA for its flood insurance rate maps.

TASK 5 - MODEL CALIBRATION AND VERIFICATION

With the observed historical high water level data and the corresponding peak discharges collected in Task 2 for several high flow events (e.g., the 2/17/2017 high flow event), Stetson will first calibrate the model to an in-channel flow event by running and rerunning the model and adjusting the model's in-channel parameters (Manning's n in particular) with each iteration until the model-simulated peak water surface elevations satisfactorily match the observed channel high water levels. Stetson will then calibrate the model to an overbank flooding event by further adjusting the floodplain parameters until the model-simulated peak water surface elevations in the floodplain satisfactorily match the observed floodplain high water levels. Stetson will finally verify the model to another flow event without adjusting any model parameters. For all three events, Stetson will ensure that the differences between the model-simulated peak water levels and the observed high water levels are all within the FEMA-required 0.5 foot range. With this accuracy, the model will be considered well calibrated/verified and, thus, reliable.

TASK 6 - MODEL SIMULATIONS

Using the calibrated/verified model, Stetson will perform model simulations for the following three scenarios:

- 1) Existing Condition (with Existing Malibu Canyon Road Bridge)
- 2) Proposed Malibu Canyon Road Replacement Bridge Condition
- 3) Proposed Malibu Canyon Road Replacement Bridge Condition plus Removal of the Ringe Dam⁷

Removal of the abandoned Ringe Dam would result in transport of the sediment deposited behind the dam. Stetson will estimate the "equilibrium" channel bed condition behind the dam after its removal. This estimated equilibrium channel bed condition will be used for the Scenario 3 modeling.

For each scenario above, the following two flow conditions will be simulated:

- FEMA 100-year flood
- LADPW-estimated Capital Flood with consideration of debris effect

The LADPW-estimated Capital Flood has already accounted for burning and sediment bulking. The debris effect during the Capital Flood will be considered in the same way as in the LADWP 2020 modeling, which assumed that two feet of debris will be accumulated on each side of each bridge pier for the full depth of flow.

A total of six (6) model simulations will be conducted for evaluation of the adequacy of the Tapia WRF's existing flood protection. Simulated peak water surface profiles will be graphically presented and the flood inundation extent will be mapped for each simulation. Stetson will use the simulated results to evaluate the adequacy of the Tapia WRF's existing flood protection and the impact upon ingress and egress to the Tapia WRF during the FEMA 100-year flood and the LADPW-estimated Capital Flood. Stetson will provide recommendations for the Tapia WRF flood protection if the existing flood protection is inadequate. Stetson will then perform an

LAS VIRGENES - TRIUNFO JOINT POWERS AUTHORITY

STETSON ENGINEERS INC.

⁷ The Ringe Dam is an abandoned dam located approximately 2 miles downstream of the Tapia WRF (see Figure 1).

additional simulation to verify the effectiveness of the recommended improvements in flood protection.

TASK 7 - PREPARE AND SUBMIT DELIVERABLES

Stetson will provide the JPA with a draft hydraulic analysis report (Report) summarizing the work and results from Tasks 2 through 6 above. The Report will provide findings on the adequacy of the Tapia WRF's existing flood protection and the impact upon ingress and egress to the Tapia WRF during the FEMA 100-year flood and the LADPW-estimated Capital Flood. The Report will also provide recommendations for the Tapia WRF flood protection, if the existing flood protection is inadequate.

Stetson anticipates that two (2) rounds of comments on the draft Report that will be provided by JPA staff. Stetson will then incorporate JPA's comments into a final Report and provide the final Report to JPA.

Stetson has extensive experience and technical skills in all aspects of flood protection systems. In watershed scale hydrologic and hydraulic (H&H) studies, Stetson uses the latest versions of FEMA accepted hydrologic and hydraulic models, such as HEC-HMS, HEC-RAS 1D/2D, EPA-SWMM, and MIKE-FLOOD models. We have an in-house field survey crew and required equipment to carry out topographic surveys to support model development, and in-house expertise in applying AutoCAD and Geographic Information System ("GIS") software for pre-and post-processing and mapping of model results. Using these skills, Stetson has assisted FEMA in the delineation of special hazard zones, including floodplains and floodways, and helped local government agencies to plan and develop flood risk reduction projects and prepare design plans. We have a team of design engineers with experience in design of hydraulic control structures used in flood protection. Below is a partial list of representative civil engineering projects in flood protection systems that involved H&H modeling:

- Ross Valley flood reduction capital improvement plan; Stetson prepared program-level conceptual and feasibility-level designs and cost estimates of channel improvements and flood detention basins. HEC-HMS, HEC-RAS 1D steady-flow, and MIKE-FLOOD unsteadyflow were used in the H&H modeling and floodplain mapping.
- Mill Valley flood reduction improvement plan; Stetson prepared conceptual and feasibility-level designs and cost estimates of channel improvements, bypass channels, and flood detention basins. HEC-HMS and HEC-RAS 1D steady-flow were used in the H&H modeling and floodplain mapping.
- Final designs for San Anselmo Flood Risk Reduction flood diversion and storage project; Stetson prepared analyses, basis of design, and designs for the project including, a radial-gated diversion-spillway structure, side weir linked to an adjoining detention basin with a gated-outlet, floodwall, control building, storm drain improvements, and other associated infrastructure. HEC-HMS and HEC-RAS 1D/2D unsteady-flow were used in the H&H modeling and floodplain mapping.
- Creekside Marsh culvert replacement and habitat enhancement project; Stetson prepared
 the analyses, basis of design, and construction plans and documents for a culvert
 replacement to enhance tidal exchange and improve habitat in the 21-acre Creekside Marsh
 located in Greenbrae, California. As part of the project Stetson also provided permitting
 support, pre- and post-construction monitoring, and engineering oversight during
 construction. HEC-RAS 1D unsteady-flow was used in the hydraulic modeling.
- Lower Corte Madera Creek levee evaluation; Stetson evaluated the adequacy of the flood protection provided by the existing levees in the lower Corte Madera area that is vulnerable to flooding from multiple sources including tidal flooding, riverine flooding, and storm drain flooding that often interact and combine to make flooding worse. Stetson also provided recommendations to improve the flood protection system including levee raise, additional levees, tidal gages, and pump station. HEC-RAS 1D/2D unsteady-flow was used in the hydraulic modeling.
- Novato Creek levee evaluation; Stetson evaluated the adequacy of the flood protection
 provided by the existing levees in the Novato Creek area that is vulnerable to flooding from
 multiple sources including tidal flooding, riverine flooding, and storm drain flooding. Stetson
 also evaluated the proposed improvement conditions. HEC-RAS 1D/2D unsteady-flow was
 used in the hydraulic modeling.

- Hydraulic modeling of the proposed Los Robles Mobile Home Park Floodwall; Stetson evaluated if the proposed floodwall project for the Los Robles Mobile Home Park flood mitigation could cause any negative impact on flooding to the neighbors. Stetson also provided recommendations on the height of the proposed floodwall based on the computed 100-year water surface elevations. This study is required by the City of Novato for the permit application of the proposed floodwall project. HEC-RAS 2D unsteady-flow was used in the hydraulic modeling.
- Dam failure analysis and inundation mapping and emergency action plan (EAP) for various dams as required recently by the California Department of Water Resources, Division of Safety of Dams (DSOD) and the California Governor's Office of Emergency Services (Cal OES). HEC-RAS 2D unsteady-flow was used in all the hydraulic modeling. Below is a list of dams for which we have worked on. All analyses and inundation mappings have been officially approved by DSOD.
 - Stockton Creek Dam (672.000); Mariposa Public Utility District
 - o Foothill Regional Park Dam (1002.008); Sonoma County Regional Parks Department
 - o Municipal Dam (21.000); Private Owner
 - o Magnolia Dam (1302.000); Lake of the Pines Association
 - o Lagunita Dam (1427.000); Private Owner
 - o Red Mountain Reservoir (37.000); Fallbrook Public Utility District
 - Santiago Creek Dam (75.000); Serrano Water District and Irvine Ranch Water District
 - o Foss Creek North Area Dam (20.002); City of Healdsburg
 - o Duncan Dam (1128.002); Private owner
- Hydraulic modeling analysis for various bridge replacement projects. HEC-RAS 1D/2D unsteady-flow was used in all the hydraulic modeling. The hydraulic modeling analysis provided 50-year and 100-year water surface elevations for bridge soffit design and recommended bridge scour countermeasures. Below is a list of bridge replacement projects for which we have worked on in recent years:
 - Nokomis Ave Bridge
 - Madrone Ave Bridge
 - Winship Ave Bridge
 - Creek Road Bridge
 - Meadow Way Bridge
 - Azalea Ave Bridge

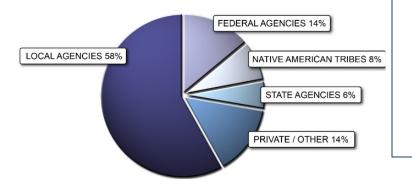
INTRODUCTION - FIRM OVERVIEW

Stetson Engineers Inc. ("Stetson") was established by Thomas M. Stetson in 1957 as Thomas M. Stetson Civil and Consulting Engineers. In 1977, the company was incorporated in California as Stetson Engineers Inc. For over 60 years, Stetson has provided professional engineering services to the water industry and water community throughout the western United States. Stetson is certified as a small business by the State of California. Stetson is headquartered in San Rafael, California and has offices located in Southern California, Colorado, Arizona, and Oregon.

Stetson's staff consists of about 60 technical professionals with expertise in a broad range of disciplines including civil and environmental engineering; surface water hydrology and hydraulics; geology and hydrogeology; groundwater resources, water systems engineering, and water rights.

Stetson specializes in all phases of water resources engineering, including watershed scale hydrological studies; integrated 1D/2D hydrodynamic modeling; floodplain inundation mapping; flood control facilities development, design, permitting, construction; FEMA base flood elevation (BFE) determination and floodway delineation; Dam breach analysis and emergency action plan hydrogeological studies of groundwater basins; and system planning, design, permitting and construction for pipelines, reservoir storage facilities, pumping stations, and water treatment facilities.

Our clients include private entities, local districts, water agencies, and federal agencies in accordance with the distribution shown in the chart below.





Project Manager: Jeff Helsley

Phone:

(626) 967-6202

Fax:

(626) 331-7065

Email:

jeffh@stetsonengineers.com

Southern California Office: Stetson Engineers Inc.

861 Village Oaks Drive, Suite 100

Covina, CA 91724

PROJECT EXPERIENCE

A. Hydrology Study of the Proposed Los Robles Mobile Home Park Floodwall

Goldstone Management Inc., CA

Reference: Mr. Timothy Hansen, Manager

Goldstone Management Inc.

2044 Kala Bagai Way Berkeley, CA 94704

(510) 508-6242; timlhansen@aol.com

Dates of Service: September 2021 to January 2022

On December 10-11, 2014, a combination of high tides and high intensity rains resulted in severe flooding in Novato, including the Los Robles Mobile Home Park (see the photo below). The purpose of this hydrology study is to evaluate if the proposed floodwall project for the Los Robles Mobile Home Park flood mitigation could cause any negative impact on flooding to the neighbors. This hydrology study is required by the City of Novato for the permit application of the proposed floodwall project. The proposed floodwall will be placed along the wooden fence in the photo below. The City of Novato has approved the study and issued a permit.



2014 flood in the Los Robles Mobile Home Park. The floodwall will be placed along the wooden fence.

Stetson performed the following work to analyze the project impact on flooding:

- Visited the site to inspect the hydraulic conditions of the creeks and the stormwater drainage system, located the stormdrain inlets and outlets outside of the Mobile Home Park, and measured the stormdrain sizes and invert elevations.
- Delineated the contributing drainage areas of all stormdrains inside and outside of the Mobile Home Park.
- Quantified the 100-year peak flows of all stormdrains inside and outside of the Mobile Home Park.
- Developed a HEC-RAS 2D unsteady-flow hydraulic model to analyze the 100-year inundation and water surface elevation profile under both existing and project conditions.
- Evaluated the project impact on flooding based on the hydraulic modeling results.
- Provided recommendations on the floodwall height and freeboard.



Simulated 100-Year Inundation between Existing and Project Conditions

B. Pala Reservation Flood Mitigation Study

Pala Band of Mission Indians

Reference: Ms. Shasta Gaughen, Director of Pala Environmental Department

Pala Tribe

12196 Pala Mission Road Pala, California 92059

(760) 891-3515; sqaughen@palatribe.com

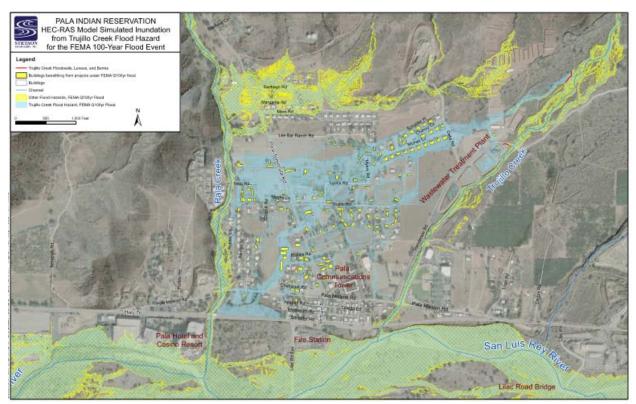
Dates of Service: 2020 to 2021

The Pala Reservation is vulnerable to the effects of flooding from several sources. These flooding sources include (1) surface waters such as streams, creeks, (2) storm drains, and (3) subsurface sources such as rising groundwater and flowing seeps/springs. Stream and creek sources pose major threats to public health and safety, property, and critical infrastructure on the Tribe's Reservation and adjacent fee lands. While problematic, flooding from storm drains and subsurface sources typically causes only localized damage to property and infrastructure and disruption to public services and does not pose major threats to public health, safety and critical infrastructure. For this reason, this study focuses on flood hazards posed by surface streams with an emphasis on the San Luis Rey River and certain tributaries that pass-through flood-prone areas of the Reservation.

This study included the following tasks:

- Task 1 Identify and Characterize Potential Flood Hazards
- Task 2 Analyze Potential Flood Hazards; Identify Significant Flood Hazards
- Task 3 Evaluate Impacts and Rank and Prioritize Flood Hazards
- Task 4 Develop Flood Mitigation Project Concepts
- Task 5 Develop Conceptual Flood Mitigation Project Plans for Selected High Priority Flood Hazards
- Task 6 Prepare Project Report

The figure below shows the 100-year inundation simulated by our developed HEC-RAS 2D unsteady-flow model and the identified locations for floodwalls along Trujillo Creek and at the Pala wastewater treatment plant.



Simulated 100-Year Inundation and Identified Floodwall Locations along Trujillo Creek and at the Papa Wastewater Treatment Plant

C. San Anselmo Flood Risk Reduction Project

Marin County Flood Control District

Reference: Ms. Liz Lewis, Planning Manager

Marin County Flood Control District 3501 Civic Center Drive, Room 304

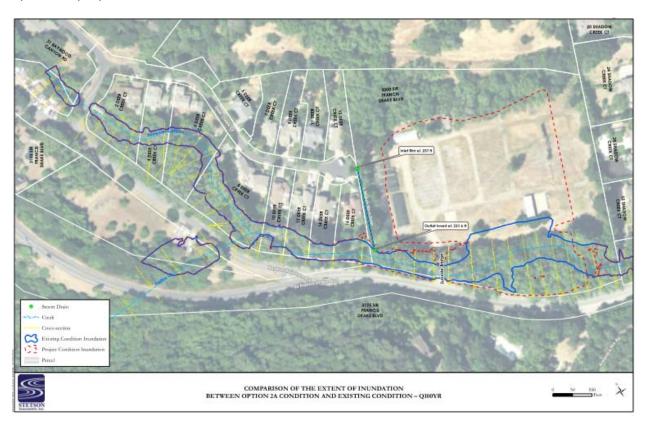
San Rafael, CA 94903

(415) 473-7226; <u>lizlewis@marincounty.org</u>

Dates of Service: Ongoing

From 2017–2018, Stetson prepared hydrologic/hydraulic analysis, feasibility-level designs, and project EIR for the San Anselmo Flood Risk Reduction Project which consists of removal of Building Bridge #2 in downtown San Anselmo and construction of the Sunnyside flood detention basin in Fairfax. Stetson is currently preparing more detailed hydrologic/hydraulic analysis and final designs for the Project, including designs of a diversion structure with an emergency spillway for the flood detention basin and radial gate to control bypass flow through an 18 ft wide culvert under the diversion structure for flood operations and maximum sediment pass-through.

The figure below shows the 100-year inundation simulated by our developed HEC-RAS 1D/2D unsteady-flow model for the existing and project conditions in the vicinity of the proposed Sunnyside flood detention basin for the purpose of evaluating the backwater effect on the upstream properties.



D. Dam Failure Study and Inundation Mapping for Stockton Creek Dam

Mariposa Public Utility District, Mariposa County, CA

Reference: Ms. Susan Wages, Mariposa Public Utility District

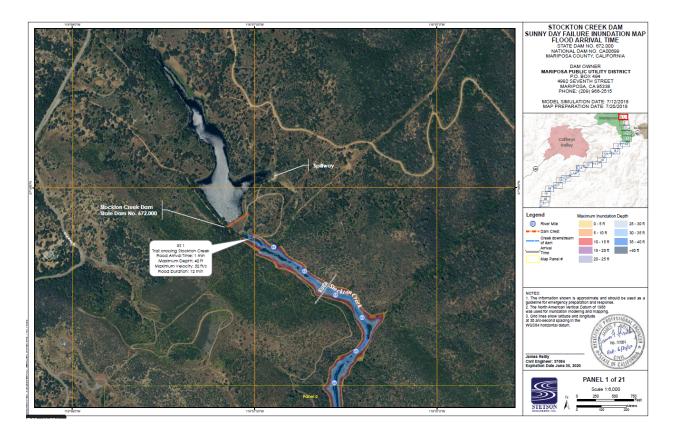
4992 7th Street, Mariposa, CA 95338 (209) 966-2515; <u>mpudoffice@sti.net</u>

Dates of Service: June 2018 to October 2018

Senate Bill 92 added Sections 6160 and 6161 to the Water Code that became effective on June 27, 2017, requiring owners of State-regulated dams, except those classified as low hazard, to prepare Emergency Action Plans (EAPs) containing inundation maps for emergency preparedness.

Stetson prepared a dam failure study and inundation maps for Mariposa Public Utility District (MPUD) for Stockton Creek Dam, a "high" risk jurisdictional dam subject to the new dam regulations. The work included a dam failure analysis, 2D inundation modeling in HEC-RAS, and inundation mapping. The dam inundation maps and associated technical study report have been approved by DSOD.

The figure below is an excerpt of the DSOD-approved map prepared for Stockton Creek Dam.



5. KEY PERSONNEL AND TEAM MEMBER DESCRIPTION

Stetson's Project Team possesses comprehensive capability for flood protection evaluations. Stetson's Project Team includes strong managers, experienced modelers, water quality experts, and water system design engineers. Stetson has in-depth local experience in the broad range of issues needed to successfully perform the hydraulic analysis for the JPA. Mr. Stephen B. Johnson will serve as Principal-in-Charge and Mr. Jeff Helsley will serve as the main contact and Project Manager for the JPA's Flood Protection Evaluation. Stetson is fully capable to provide the hydraulic evaluation for this project without the need for any subconsultants. **Resumes of the Project Team are provided in Appendix B.**

STEPHEN JOHNSON, P.E.

PRINCIPAL-IN-CHARGE

Mr. Johnson, President and a Principal of Stetson Engineers Inc., is the Principal-in-Charge of the Covina office and has over 44 years of experience. Mr. Johnson supervises, directs or performs in a wide variety of projects. Mr. Johnson has been involved in a multitude of studies and projects and maintains close contact with all active clients, attending meetings regularly for the public clients. He has been involved in water system master plans, water system analyses, water rights quantification and analysis, supplemental water requirement studies, alternative water supply studies, annual reports, water quality monitoring reports, groundwater management studies, and project feasibility studies. Mr. Johnson has extensive experience with municipal and water district level issues. Mr. Johnson works directly as Engineer for the Main San Gabriel Basin Watermaster, and for several watersheds in southern California on such matters as water supply, water quality, management, and financing.

JEFFREY D. HELSLEY, P.E.

PROJECT MANAGER

Mr. Helsley has over 37 years of experience in water resource management in Southern California. Mr. Helsley was formerly the District Engineer and Assistant General Manager of the Water Replenishment District of Southern California, where he was responsible for the development and implementation of programs to enhance groundwater recharge, improve groundwater basin management, and protect groundwater quality. Mr. Helsley was also formerly a Supervising Engineer at the Los Angeles County Flood Control District/Los Angeles County Department of Public Works. Mr. Helsley has supervised numerous water system evaluations and water system master plans for the Covina office, including those for San Gabriel Valley Water Company, the City of Lakewood, the City of Lynwood, the City of Glendora, and the City of Covina. Mr. Helsley has extensive experience in municipal water supply projects in both the Main San Gabriel Basin and in Central Basin and has unique knowledge of water supply, water quality, and groundwater management for both of these groundwater basins. Mr. Helsley has also assisted clients with water supply assessments and has assisted with negotiating operations and maintenance agreements.

XIAOQING ZENG, P.E., PH.D.

H&H GROUP LEADER/CHIEF MODELER

Dr. Xiaoqing Zeng joined Stetson in 2002. He is a registered California civil engineer and will serve as the lead hydraulic engineer/hydrologist. Dr. Zeng's areas of expertise include watershed hydrologic modeling, 1-D and 2-D hydrodynamic and water quality modeling for rivers, lakes, reservoirs, and estuaries, sediment transport modeling, stormwater drainage system modeling, ground water hydrodynamic modeling, reservoir operations modeling, hydraulic network modeling, aquatic biogeochemical and food chain modeling, stochastic modeling in hydrology and water quality using Monte Carlo Simulation techniques, field investigation and experimental design to collect data for model calibration and validation, model uncertainty analysis, sediment-water interaction analysis, storm water management, hydraulic analysis of wastewater ocean outfalls, environmental/water resources systems analysis using optimization techniques, master plan and engineering design for water and sewer systems, and engineering economic analysis.

GUOYUAN LI, P.E., Ph.D. SENIOR HYDRAULIC ENGINEER/HYDROLOGIST/MODELER

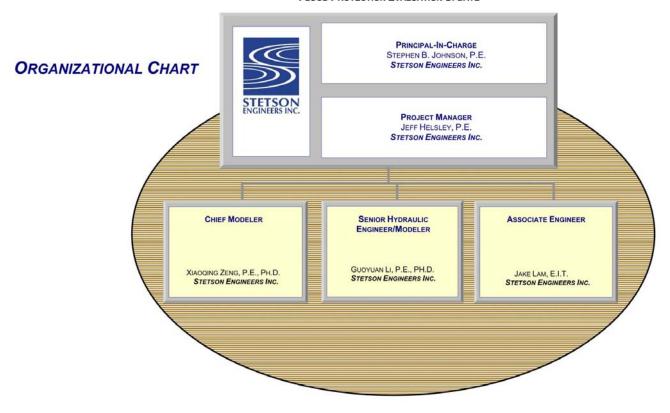
Dr. Guoyuan Li joined Stetson in August 2006. He is a California registered civil engineer and certified professional hydrologist and will be a key project hydraulic engineer/hydrologist for the District projects. His areas of expertise include hydrologic modeling, floodplain 1-D/2-D hydrodynamic modeling, sediment transport modeling, water quality modeling, and statistical analysis for rivers, lakes, reservoirs, and estuaries. He is specialized in solving real world problems using a variety of computerized mathematical models and programming techniques commonly used in water resources engineering. He is one of the earliest users that apply the latest HEC-RAS 5.0 2-D capability on river and floodplain modeling, floodplain inundation mapping, and dam breach inundation mapping. Dr. Li is uniquely qualified for his hands-on experience and expertise on the latest H&H modeling techniques.

JAKE LAM, E.I.T ASSOCIATE ENGINEER

Mr. Lam has experience in water resource engineering and has worked on numerous water supply and demand assessment projects. Mr. Lam has helped prepare Urban Water Management Plans, Watershed Sanitary Survey Reports, Water Loss Audit evaluations, and Water Supply Assessments. Mr. Lam assists as part of the consulting engineering team for the San Gabriel River Watermaster, Main San Gabriel Basin Watermaster, and Raymond Basin Watermaster. Additionally, Mr. Lam has a background in HEC-RAS 1-D modeling for steady and unsteady flow conditions.

LAS VIRGENES - TRIUNFO JOINT POWERS AUTHORITY

TAPIA WATER RECLAMATION FACILITY: FLOOD PROTECTION EVALUATION UPDATE



6. QUALITY CONTROL

Quality control is of paramount importance on all projects, particularly when they have potentially far-reaching consequences. Quality control involves achievement of quality standards within the parameters of project schedule and budget, without placing undue demands on management and technical personnel. Quality assurance and control are familiar terms in the construction trades, where they refer to standard engineering procedures for accepting or rejecting a work product or activities according to established criteria, specifications, or documentation requirements. In a project, the terms take on a different meaning, but the concepts are consistent. In gathering, reviewing, analyzing, and organizing data, Stetson assures quality by:

- Assigning to project work only those professionals who meet standards for training and experience;
- Having qualified senior engineers review technical performance;
- Having trained, experienced personnel review draft reports;
- Using approved, proven methods for data gathering;
- Organizing data into computerized data bases using state-of-the-art software and trained technicians;
- Fully documenting data base development, models, and all recommendations or conclusions:
- Identifying the level of detail required early in process; and
- Carefully and thoroughly consulting with all relevant parties.

Management procedures, proposed communications and meetings, and report preparation procedures all help assure that these elements of quality control are exercised at all levels within project teams that fully-informed oversight may be exercised by the client.

Quality control is not just the responsibility of project principals or project managers, although accountability rests there. Stetson managers are all experienced at supervising and directing complex multi-disciplinary engineering and resource management projects, including projects involving extensive formal Quality Control/Quality Assurance programs.

7. SUBCONSULTANT LIST

Stetson is fully capable to provide the hydraulic evaluation for this project without the need for any subconsultants.	

8. VALIDITY OF PROPOSAL							
This Proposal will remain in effect for 180 calendar days from June 6, 2022.							

9. STATEMENT OF INSURANCE COMPLIANCE

Upon award of contract, Stetson will provide the required insurance coverage noted in the JPA's Sample Agreement. A sample of Stetson's Professional Liability Insurance Certificates can be found under Appendix C.

10. ASSUMPTIONS

This proposal assumes that the LADPW topographic survey data around the proximity of the Malibu Canyon Road Bridge (which was mentioned in the LADPW 2020 modeling report) can be obtained from the LADPW without the need for field topographic survey.

APPENDIX A PROJECT SCHEDULE





LOS VIRGENES - TRIUNFO JOINT POWERS AUTHORITY TAPIA WATER RECLAMATION FACILITY FLOOD PROTECTION EVALUATION UPDATE PROPOSED PROJECT SCHEDULE

ID	Task Name		Duration	Start	Finish	Jun '22	Jul '22	Aug '22	Sep '22	Oct '22	Nov '22	Dec '22	Jan '23
1	Notice to Proceed		0 days	Fri 7/1/22	Fri 7/1/22	•	7/1					1	1
2	Task 1. Project Management and	Meetings	132 days	Mon 7/4/22	Tue 1/3/23	į							•
3	Kickoff Meeting / Initial Worksh	пор	2 days	Mon 7/4/22	Tue 7/5/22	i I		i i	i		i I	- -	i I
4	Progress Meeting #1		1 day	Mon 8/1/22	Mon 8/1/22	I					I I	I I	I I
5	Progress Meeting #2		1 day	Thu 9/1/22	Thu 9/1/22	1					 	 	
6	Progress Meeting #3		1 day		l II	1					 	 	
7	Workshop Meeting #1		1 day	Tue 11/8/22	Tue 11/8/22	i		i i	i		Ļ		i I
8	Workshop Meeting #2		1 day	Thu 12/1/22	Thu 12/1/22	I I			1		† T		I I
9	Task 2: Data Collection and Revie	w	24 days	Tue 7/5/22	Fri 8/5/22	 	*		1			T	
10	Data Collection		8 days	Mon 7/11/22	Wed 7/20/22	1						1	
11	Review of Existing Studies and		12 days	Thu 7/21/22	Fri 8/5/22	I I			İ		i I	I I	I I
12	Task 3. Field Inspection and Surv Road Bridge	ey of Malibu Canyon	12 days?	Mon 8/8/22	Tue 8/23/22	 						1 1 1	
13	Conduct Field Inspection		12 days	Mon 8/8/22	Tue 8/23/22	1			1			1 1	I I
14	Meeting with LADPW Staff		5 days	Mon 8/15/22	Fri 8/19/22	1			1		!	1	I I
15	Task 4. Construction of Unsteady	Flow Model	24 days	Wed 8/24/22	Mon 9/26/22	 							1
16	Create HEC-RAS 2-D Unsteady	Flow Model	24 days			i					i l	i I	i I
17	Task 5. Model Calibration and Ve	rification	30 days	Tue 9/27/22	Mon 11/7/22	1						1 1	I I
18	Calibration and Verification of	Model	30 days	Tue 9/27/22	Mon 11/7/22	1			<u> </u>			1	I I
19	Task 6. Model Simulations		17 days		Wed 11/30/22	1							
20	Model Simulations for Existing	Condition	17 days		Wed 11/30/22	i		i i	i				i I
21	Model Simulations for Propose Replacement		17 days		Wed 11/30/22	 					 	1	
22	Model Simulations for Propose Replacement & Dam Removal	ed Bridge	17 days	Tue 11/8/22	Wed 11/30/22	 						1	
23	Task 7. Prepare and Submit Deliv	erables	24 days			i		i i	į		•		
24	Hydraulic Analysis Report		24 days	Thu 12/1/22	Tue 1/3/23	 			1 1		l I		
		Task			Inactive Miles	tone			Finish-only	У	_		•
		Split			Inactive Sumr	mary			External T	asks	\Diamond		
Project	Project: Taipa Water Reclamation Facility: Milestone		•		Manual Task		\Diamond		External M	lilestone			
Data: F	Flood Protection Evaluation	Summary							Progress				_
Date. F	11 0/3/22	Project Summary			Manual Sumn	nary Rollup	•		Deadline		$\hat{\mathbf{T}}$		
		External Tasks			Manual Sumn	nary	•						
		External Milestone	♦		Start-only	•							
	-				Page 1								
					9								

APPENDIX B PROJECT RESUMES



Name & Title: Steve Johnson, P.E., Corporate President/CEO and Managing Principal	Project Assignment: Principal Engineer
Years of Experience with Firm 44	Years of Experience With Other Firms
Education: Degree(s) / Year / Specialization: B.S. Civil Engineering / 1977 / California Polytechnic University, Pomona	Registrations / Certifications: Civil Engineer No. 32396, California 1981

Experience Record

Mr. Johnson is Corporate President/CEO and Managing Principal of the Covina office of Stetson Engineers. Mr. Johnson is responsible for all engineering operations performed by the firm's southern California office, in Covina, California. Mr. Johnson's extremely broad experience covers the southern California work for well over a quarter century. As a Managing Principal, Mr. Johnson is responsible for all corporate management functions and professional engineering support services. Mr. Johnson has represented Stetson for over 40 years, continuous.

Mr. Johnson is a designated expert for purposes of water system and water rights evaluation and appraisal. This includes qualification in U.S. Federal Court as an expert under the Daubert rules of qualification. He has provided expert witness testimony on water system/water rights condemnation actions, groundwater contamination cases, and flood damage evaluations and assessments. Mr. Johnson's expertise has supported numerous water systems and water rights transactions and settlements. He has also provided expert witness testimony of the impacts and decision-making associated with water supply contamination, before the California Public Utilities Commission, Administration Law Judge.

Mr. Johnson is the designated "Project Engineer" for implementing cleanup of the largest groundwater contamination site in the nation, under the U.S. Environmental Protection Agency's Superfund Program. Under this assignment, Mr. Johnson coordinates with the U.S. EPA, six different water purveyors, the Main San Gabriel Basin Watermaster, the San Gabriel Basin Water Quality Authority, and numerous Responsible Parties and their engineering/legal representatives. This assignment has a current value of \$250 to \$300 million and will produce over 35,000 acre-feet of treated, potable groundwater annually. Mr. Johnson's responsibilities include all phases of project planning, financing, coordination, regulatory compliance, design, contract solicitation, construction management, operations, and performance monitoring for contamination plume control and cleanup.

As a predecessor to this assignment, Mr. Johnson supervised the planning, design, construction, operations, and regulatory approval of the first groundwater treatment facility in the United States to successfully treat for Perchlorate and NDMA for potable consumption. This facility was also the first groundwater treatment facility to be permitted for drinking water supply under the California Department of Health Services Policy 97-005 for impaired water supplies.

Mr. Johnson represents several prominent water agencies as "Engineer". These agencies include the Main San Gabriel Basin Watermaster, the Upper San Gabriel Valley Municipal Water District, the San Gabriel Valley Municipal Water District, and the San Gabriel Basin Water Quality Authority. Typical assignments include safe yield studies, groundwater contamination characterization and remediation, design, construction management, rate assessment, water supply studies, and reports to the board.

Since the early 1980s, Mr. Johnson has been heavily involved with engineering solutions to contamination of drinking water supplies. This work involves a wide range of experience and expertise, including site and regional characterization of soil and groundwater contamination, hydrogeologic studies, groundwater basin modeling, development of cleanup and water supply plans, remediation studies, development and full implementation of treatment projects, and coordination with all regulatory agencies. The contaminants of concern include volatile organic compounds (VOCs), Perchlorate, NDMA, 1-4-dioxane, Chromium and others. This work has been performed in full cooperation with the U.S. Environmental Protection Agency, the State Department of Toxic Substance Control, the Department of Health Services, the State Water Resources Control Board, and the Regional Water Quality Control Board.

Stetson Engineers Inc. Page 1 of 6



(Continued)

The following projects are representative of Mr. Johnson's experience:

City of Los Angeles, Department of Water and Power. Supplemental Water Study.

<u>City of Los Angeles, Department of Water and Power.</u> Hoover Dam Power Contracts.

Upper San Gabriel Valley Municipal Water District

- Supervision of District Engineering Duties
- Area Wide Water Quality Monitoring Plan
- AB 1803 Water Quality Monitoring Plan
- AB 797 Water Conservation Plan
- Feasibility Studies Use of Reclaimed Water
- Supervision of EPA Superfund Sub-Contract
- Drought Studies
- Puente Hills Landfill Investigation
- District Mapping
- Reclaimed Water Study
- Direct Use Project
- Indirect Reuse Replenishment Project

San Gabriel River Watermaster. Named one of the three Watermasters in 2011

City of Bakersfield

- Design of Turnout Structure Kern River
- Design of Turnout Structure Canal
- Water System Master Plan
- Review of New Development Plans
- Design of Box Culvert
- Acquisition of New Facilities
- Water System Operations Study

Santa Ynez River Water Conservation District

- Design of Reservoir Renovation
- Design of Lake Cachuma Intake Facility
- Design of Well Fields (6.0 cfs, 4.0 cfs and 1.73 cfs)
- Design of Booster Station
- Administration of State Loan and Grant
- Supervision of Cathodic Protection
- Design of Well No. 15 Pumping Equipment
- Lake Cachuma Intake Maintenance

Stetson Engineers Inc. Page 2 of 6



Steve Johnson, Principal Engineer (Continued)

- Zone III Reservoir Design
- Cachuma Pipeline Rehabilitation
- SWP Facilities Design

East Pasadena Water Company Design of Water Main Extensions for Fire Service.

<u>Kaiser Steel</u> Valuation of Water Related Holdings at Fontana Plant.

City of Solvang

Design of Wells No. 7 and 8 Water Supply

San Gabriel Valley Municipal Water District

- Feasibility Study Hydroelectric Generation Stations
- Continuing Developer Interaction Responsibilities
- Supervision of Periodic Pipeline As-Built Updates
- Feasibility Study and Acquisition for Turnout Structure
- Transmission Pipeline Rehabilitation Project
- State Water Project Entitlement Report
- Urban Water Management Plans
- Pipeline Extension Project

City of Industry Master Plan of Development

Main San Gabriel Basin Watermaster

- Supervision of Engineering Duties
- Basin Water Quality Studies
- Basin Modeling
- Enforcement of Pumping Control
- Operable Unit Cleanup Plans
- BPOU Cleanup Project
- Full Compliance Permitting

<u>Puente Basin Watermaster</u> Supervision of Engineering Duties

Buellton Community Services District

- Water System Design
- Sewer System Design

City of Torrance Feasibility Study on Hydroelectric Generation

Mr. Riley Metz Site Drainage Study and Improvement

Mr. Redmond Flood Damage Study

Boy Scouts of America Flood Damage Study

Rapid Transit District Waste Discharge Study



(Continued)

Mr. Lapin Flood Damage Study

U.S. Department of Navy, Camp Pendleton

- Water System Study
- Water System Design

City of Claremont Representative on Proposed Quarry Development

<u>Cabazon Water Company</u> Valuation Study

HLM Water System Valuation Study

Citizens Utilities Company Valuation of Jackson Water Works

County of San Bernardino Safe Yield Study

Walsh v. State of California Flood Damage Study

Three Valleys Municipal Water District Subagency Report

Morongo Band of Mission Indians Ongoing Engineering Studies

La Quinta Water System Valuation Study

City of Ontario Flood Damage Study

Serrano Park Homeowners Association Flood Plain Improvements

California Department of Fish and Game Valuation of Water Rights at Indian Joe Spring

Sunnymead Ranch Lake Reconstruction

<u>City of Livermore and California Water Service</u> Trade of Service Areas – Arbitration

Sparkletts Water Water Supply Study

Cancun Racquet Club Subsidence Evaluation

East Highlands Ranch Water Rights and Consultation Work

Covina Irrigating Company Valuation

Hartman Farms (Ohio) Coordination of basin recharge with rock and sand operations

Turner Ranches Valuation of Sanitary System

City of Barstow

- Water Rights
- Mohave River Water Quality Evaluations
- Contaminant Investigations

City of Glendora Conjunctive Use Study

Lewis Homes Management Corp Water Resources and Supply Studies

City of Oceanside Water Resources Study

City of Upland Water Rights Evaluation



(Continued)

San Gabriel Basin Water Quality Authority

- Consulting Services
- Arrow Well Project
- Big Dalton Project
- Monrovia Project

City of Bullhead City, Wastewater Treatment Plant Evaluation

Azusa Valley Water Company Valuation

American Water Works. Well Design

City of Covina. Valuation of Covina Irrigating Company

Suburban Water Systems. Valuation of Facilities

City of Whittier Urban Water Plans

Lewis Homes, Monrovia Nursery Water Resources

Beverly Acres Mutual Water User's Association Valuation

Southern California Water Company, Staff Projects

City of Oceanside - Water Resources Study

Prado Dam Flood Damage - Perrizo

Chino Basin Watermaster - Engineering

Santa Margarita Water District - Appraisal

San Gabriel Valley Water Co. v. Sanitation Districts

Tri-Cities/Camp Pendleton - Economic Evaluation of Conjunctive Use Water Supply Project

Three Valleys Water District - General Engineering

San Gabriel River Water Committee - General Engineering

City of Beverly Hills - Water Distribution System Analysis

Valley County Water District - Urban Water Management Plan

Valley County Water District - General Engineering

Montebello Land and Water Company

City of Oceanside - Water Rights and System Modeling

City of Oxnard - Water Quality

Raymond Basin - Perchlorate Study

Star Kist Foods - Water Rights Evaluation

<u>Orange County Water District - Prado Basin Constructed Wetlands</u>

East Highlands Ranch - Water Supply

Elsinore Water District Well Interference

City of Perris

Stetson Engineers Inc. Page 5 of 6



(Continued)

LPVCWD Perchlorate/NDMA Facility

Tejon Ranch Water/Sanitation

City of San Diego Studies

DHS Permitting - Policy 97-005

SEMOU Cleanup Plans

SCWC SEMOU Water

San Jacinto-Hemet Groundwater Management Plan

Baldwin Park Operable Unit – Groundwater Cleanup Project

San Gabriel Valley Water Company (SGVWC) – General Rate Case Filing Before the Public Utilities Commission for SGVWC's Fontana Water Company Division

People vs. Rosemead

CalTrans vs. San Antonio Lakes Partners, et al.

State of New Mexico, et al. vs. General Electric company

American States Water Company et al. vs. State of California et al., & Aerojet-General Corporation, et al.

Suburban Water Systems Rate Case before the Public Utilities Commission

Paulus Engineering, Inc. vs. Ridge Development, LLC

Summit Water Holdings, LLC/Harper Lake Basin

<u>Villages of Avalon Community Association vs. Perris Public Utility Authority</u>

People of the State of California and the City of San Diego vs. Kinder Morgan Energy Partners

Tahoe City Public Utility Districts vs. Tahoe Park Water Company; Lake Forest Water Company



Name & Title: Jeff Helsley, P.E., Supervising Engineer	Project Assignment: Project Manager
Years of Experience with Firm 22	Years of Experience With Other Firms 17
Education: Degree(s) / Year / Specialization: M.S. Environmental Engineering / 1982 / University of Southern California, Los Angeles (USC) B.S. Civil Engineering / 1981 / California State University, Los Angeles (CSULA)	Registrations / Certifications: Civil Engineer No. 039599, California, 1985

Experience Record

Mr. Helsley joined Stetson Engineers, Inc. in 1999 as project manager for water rights quantification and valuation studies, alternative water supply studies, water resource management studies, water facilities design including site improvements for drainage and access, and groundwater recharge feasibility studies including sand and gravel pits in the San Gabriel Valley.

Mr. Helsley was formerly the District Engineer and Assistant General Manager of the Water Replenishment District of Southern California, where he was responsible for the development and implementation of programs to enhance groundwater recharge, improve groundwater basin management, and protect groundwater quality.

Water System Master Plans

- City of Lakewood (Hydraulic Model Update)
- City of Covina (Hydraulic Model prepared)
- City of Glendora (Hydraulic Model prepared)
- City of Industry
- City of San Jacinto
- Fontana Water Company (Hydraulic Model prepared)
- La Puente Valley County Water District
- San Antonio Water Company (Hydraulic Model prepared)
- San Gabriel Valley Water Company
- Pitchess Detention Center
- Pyramid Lake Water Resources
- Utilities Inc. of Central Nevada (Hydraulic Model prepared)

San Gabriel Valley Municipal Water District

- City of Sierra Madre Emergency Connection
- Integrated Resources Plan

Water Supply Assessments

- The Shops at Santa Anita, Arcadia, California
- Copa de Oro Development, Rosemond, California
- Newhall County Water District, Santa Clarita Valley, California
- Uptown Specific Plan, Whittier, California
- Monrovia Nursery, Azusa/Glendora, California

Stetson Engineers Inc. Page 1 of 2



Jeff Helsley, Project Manager (Continued)

- West Main Street Master Plan, Alhambra, California
- Valley Vision Specific Plan, San Gabriel, California

Water Supply Feasibility Studies

- Sierra Bella Development, Lucerne Valley, California
- Sierra Lakes Development, Santa Clarita Valley, California
- Rolling Meadows Development, Tejon Ranch, California
- East Highlands Ranch, Upland, California
- Larsen Ranch, Antelope Valley, California

East Raymond Basin Water Resources Plan

Stetson Engineers Inc. Page 2 of 2



Name & Title:	Project Assignment:
XIAOQING ZENG, PhD, PE, Supervising Engineer	Lead Hydraulic
	Engineer/Hydrologist/Modeler
Years of Experience with Firm:	Years of Experience With Other Firms:
20	8
Education: Degree(s) / Year / Specialization:	Registrations / Certifications:
Ph.D. / 2001 / Environmental Systems Analysis and	2002/California, Civil Engineer # 64910
Hydrology, University of Georgia	
M.S. / 2001 /Applied Mathematical Science, University of	
Georgia	
M.E. / 1992 / Hydraulics and Fluvial Dynamics, Yangtze	
River Academy, China	
B.E. / 1989 / Hydraulic Engineering and Water	
Resources, Tsinghua University, China	

Experience Record

Dr. Zeng has 6 years experience in environmental studies in China and 20 years experience in the United States. He is a registered California civil engineer. His areas of expertise include watershed hydrologic modeling, 1-D and 2-D hydrodynamic and water quality modeling for rivers, lakes, reservoirs, and estuaries, sediment transport modeling, stormwater drainage system modeling, ground water hydrodynamic modeling, reservoir operations modeling, hydraulic network modeling, aquatic biogeochemical and food chain modeling, stochastic modeling in hydrology and water quality using Monte Carlo Simulation techniques, field investigation and experimental design to collect data for model calibration and validation, model uncertainty analysis, sediment-water interaction analysis, storm water management, hydraulic analysis of wastewater ocean outfalls, environmental/water resources systems analysis using optimization techniques, master plan and engineering design for water and sewer systems, and engineering economic analysis.

2002 - PRESENT, STETSON ENGINEERS, SUPERVISING WATER RESOURCES ENGINEER

Joined Stetson in early 2002 to support the firm's surface water team for a wide range of projects.

Selected Projects

- Hydraulic Modeling Support for the San Anselmo Flood Risk Reduction Project EIR
 Directed the HEC-RAS 1D/2D hydraulic modeling and sediment transport modeling and prepared summary reports; Provided H&H support for the project in CEQA matters; Provided responses to public comments on the draft EIR related to hydraulic modeling.
- Final Design of the San Anselmo Flood Risk Reduction Project
 Lead Engineer in hydrology and hydraulic analysis for the Project. Directed the HEC-RAS 1D/2D hydraulic modeling to support designs; Prepared flood detention operations plan; Prepared sedimentation analysis and is preparing sediment management plan.
- Hydrology and Hydraulic Study of Belvedere Coastal Levees and Interior Lagoon for FEMA Accreditation, Belvedere, CA
 - Lead Engineer in hydrology and hydraulic analysis for the Project. Directed hydrologic and hydraulic model development and simulations. Conducted coastal overtopping analysis. Identified system improvement solutions.

Stetson Engineers Inc. Page 1 of 2



XIAOQING ZENG, PhD, PE (continued)

Ross Valley Flood Reduction and Creek Management Capital Improvement Study, CA
 Lead Engineer in hydrology and hydraulic analysis for the Project. Prepared detention basin analysis using HEC-HMS, hydraulic capacity and sediment management analysis for the tidal-affected earthen channel, flood damage analysis, and master plan report. 1-D and 2-D linked

MIKE FLOOD hydraulic model was used for floodplain mapping.

- Phoenix Lake Integrated Water Resources Management Retrofit, CA
 Lead Engineer in hydrology and hydraulic analysis for the Project. Prepared hydrologic analysis of long-term yield of the lake under dual-use operations for flood detention and water supply; Developed real-time operations plan for flood control; Conducted PMP and PMF analysis for the lake spillway: Developed a coordinated operations plan for the lake under multi-use operations for
- Corte Madera Creek Unit 4 Flood Damage Reduction Study, California
 Directed the HEC-RAS 1D/2D model development and calibration and scenario simulations;
 Developed flood reduction measures based on modeling results.

flood reduction, water supply, water quality, ecosystem restoration, and recreation.

- Arroyo Corte Madera del Presidio Creek Appraisal-Level Flood Study for the City of Mill Valley, CA
 Lead Engineer in hydrology and hydraulic analysis for the Project. Major constrictions to flows and
 priority for removal of these constrictions were identified. The effectiveness of peak flow reduction
 measures (including detention basins, cisterns, and impervious surface) were evaluated. The HECHMS watershed hydrologic model and HEC-RAS hydraulic model were used in the flood study.
- SWMM Modeling of the Storm Drain System at Montford Avenue/Miller Avenue, Mill Valley, CA
 Directed the model development and simulations. Identified system deficiencies and improvement solutions.
- Hydraulic Analysis of Lower Ryan Creek and Pump Stations, Mill Valley, CA
 Lead Engineer in hydrology and hydraulic analysis for the Project. Supervised hydraulic model development and calibration. Formulated alternatives to reduce floodplain inundation. Supervised simulation runs to examine the effectiveness of the alternatives in reducing floodplain inundation.
- Hydraulic Analysis of Proposed Los Robles Mobile Home Park Floodwall, CA
 Project Manager in hydrology and hydraulic analysis for the Project. A HEC-RAS 2D unsteady-flow model was developed and used in the hydraulic analysis.
- Lower Corte Madera Creek Levee Evaluation, CA
 - Lead Engineer in hydrology and hydraulic analysis for the Project. Supervised the HEC-RAS 1D/2D hydraulic modeling analysis, identified inadequate locations for flood protection, provided improvement recommendations including levee raise, additional levees, tidal gates, and pump station for interior drainage system.
- Pala Tribe Flood Mitigation Study, CA
 Lead Engineer in H&H analysis for the Project. Identified flooding sources and provided mitigation measures. A HEC-RAS 2D model was developed and used in the hydraulic analysis.
- Peer Review of FEMA Riverine and Coastal Flood Maps for Marin County Communities, CA Prepared peer review of FEMA riverine and coastal flood maps for Marin County communities.

Stetson Engineers Inc. Page 2 of 2



Name & Title: Guoyuan Li, PhD, PE, PH, Supervising Engineer	Project Assignment: Project Hydrologist / Hydraulic Modeler
Years of Experience with Firm: 16	Years of Experience with Other Firms:
Education: Degree(s) / Year / Specialization: Ph.D. / 2006 / Water Resources / University of Georgia M.S. (minor) / 2005 / Statistics / University of Georgia M.S. / 2001 / Hydrology / Beijing Forestry University, China B.S. / 1998 / Soil and Water Conservation / Beijing Forestry University, China	Registrations / Certifications: California Professional Civil Engineer, No. 81337 Certified Professional Hydrologist, No. 14-H- 6008

Experience Record

Dr. Li joined Stetson in August 2006 to support the firm's surface and ground water team for a wide range of projects. He serves as a modeler in hydrology, hydraulics, water quality, and sediment transport for a wide range of multidisciplinary water resources and environmental engineering projects. His areas of expertise include hydrologic modeling, hydrodynamic modeling, sediment transport modeling, water quality modeling, and statistical analysis for rivers, lakes, reservoirs, and estuaries. He is specialized in solving real world problems using a variety of computerized mathematical models and programming techniques commonly used in water resources engineering.

STETSON ENGINEERS, SENIOR WATER RESOURCES ENGINEER

Selected Projects

- Hydraulic Modeling Support for the San Anselmo Flood Risk Reduction Project EIR
 Project engineer for the project. Performed HEC-RAS 1D/2D hydraulic modeling and sediment transport modeling.
- Final Design of the San Anselmo Flood Risk Reduction Project
 Project engineer for the Project. Performed HEC-RAS 1D/2D hydraulic modeling to support designs.
- Ross Valley Flood Reduction and Creek Management Capital Improvement Study, CA
 Project engineer for the Project. Developed HEC-HMS hydrologic model for rainfall-runoff analysis;
 Performed HEC-RAS hydraulic modeling to develop channel improvement measures;
 Developed 1-D and 2-D linked MIKE FLOOD hydraulic model for floodplain mapping.
- Stockton Creek Dam Breach Inundation Mapping for Mariposa Public Utility District
 Lead hydraulic modeler for the project. Developed the HEC-RAS 2D model. Determined dam
 breach modeling parameters. Simulated inundation extent, depth, and flood arrival time. Drafted
 the hydraulic study report.
- LOMA Application for Private Owners Adjacent to San Geronimo Creek, Forest Knolls, Marin County, California
 - Hydrologist and hydraulic modeler for the project. Derived 100yr peak discharge at the site. Developed a HEC-RAS hydraulic model and used the model to determine the BFE and the 100yr flood inundation mapping. Completed online-submittal to FEMA for all the required materials.
- Repetitive Loss Area Analysis (RLAA) for County of Marin, CA
 Project engineer for the project. Identified repetitive loss properties. Delineated repetitive loss areas. Field visit to 19 repetitive loss areas across the County. Identified causes of flood and proposed solutions.

Stetson Engineers Inc. Page 1 of 2



Guoyuan Li, PhD, PE, PH (continued)

- Belvedere Coastal Levee and Interior Lagoon Evaluation for FEMA Accreditation
 Staff Engineer in hydrologic and hydraulic analysis for the Project. Developed HEC-RAS model for lagoon water level response to coastal overtopping and interior rainfall-runoff, culvert gate operations, and pumping operations. Applied model to evaluate the adequacy of the interior drainage facilities during a combination coastal and rainfall flood event, and identify deficiencies and recommend system modification needed for FEMA levee accreditation.
- DWR LLAP/LOLE Grant for Lower Corte Madera Creek Levee Evaluation
 Hydrologic/Hydraulic modeler for \$85,000 hydraulic evaluation of riverine and coastal levees for
 FEMA levee accreditation per FEMA CFR 65.10. Prepared the DEM for the CMC channel;
 Determined required levee raises along height-deficient reaches per FEMA freeboard standards
 considering both riverine and coastal 1%-annual-chance floods; and evaluation of interior drainage
 inboard of reaches where levee improvements are needed.
- Hydraulic Model Upgrade for Marin County Flood Control and Water Conservation District, CA
 Lead hydraulic modeler for the Project. Upgraded the existing Corte Madera Creek watershed 1D
 steady state HEC-RAS model to the integrated 1D/2D unsteady state HEC-RAS model using HECRAS v5. Solved model instability issues of the upgraded model. Calibrated the upgraded model to
 the 2016 bankful event and the 2005 flood event, and verified the model to the 1982 flood event.
 Derived flow hydrographs for a series flood recurrence intervals using the model.
- Hydraulic and Sediment Transport Modeling for Pankey Ranch Mining and River Restoration Project
 - Staff Engineer in hydraulic and sediment transport modeling analysis for the Project. Developed MIKE FLOOD 2D model to simulate spatial distribution of river flow velocity and water depth at various flow rates for fish passage design. Developed HEC-RAS quasi-unsteady state sediment transport model to simulate long term river bank stability, channel bed evolution, and sediment availability for in-stream mining and restoration.
- Hydraulic Analysis of Proposed Los Robles Mobile Home Park Floodwall, CA
 Project Engineer in hydrology and hydraulic analysis for the Project. Developed a HEC-RAS 2D unsteady-flow model and performed hydraulic modeling analysis.
- Lower Corte Madera Creek Levee Evaluation, CA
 Project Engineer in hydrology and hydraulic analysis for the Project. Developed a HEC-RAS 1D/2D model and performed hydraulic modeling analysis, identified inadequate locations for flood protection, and provided improvement recommendations including levee raise, additional levees, tidal gates, and pump station for interior drainage system.
- Pala Tribe Flood Mitigation Study, CA
 Project Engineer in hydrology and hydraulic analysis for the Project. Identified flooding sources and provided mitigation measures. A HEC-RAS 2D model was developed and used in the hydraulic analysis.
- Dam Failure Analysis and Inundation Mapping for Various Dams, CA
 Developed HEC-RAS 2D models for dam break inundation mapping for various dams.
- Hydraulic Analysis for Various Bridge Replacement Projects, CA
 Project Engineer in hydrology and hydraulic analysis for various bridge replacement projects.
 Performed HEC-RAS 1D/2D modeling to analyze 50-year and 100-year water surface elevations for bridge soffit designs, performed bridge scour analysis.

Stetson Engineers Inc. Page 2 of 2



Name & Title: Jake Lam, E.I.T.	Project Assignment: Associate Engineer
Years of Experience with Firm:	Years of Experience with Other Firms:
Education: Degree(s) / Year / Specialization: B.S. / 2018 / Environmental Engineering, University of Southern California	Registrations / Certifications: California Engineer-In-Training No. 165517
M.S. / 2021 / Civil Engineering – Water Resources, California State Polytechnic University, Pomona	

Experience Record:

Mr. Lam is a California Engineer in Training with a strong background in water supply and demand analysis for various water systems and municipalities. Mr. Lam serves as part of the consulting engineering team for the San Gabriel River Watermaster, Main San Gabriel Basin Watermaster, and Raymond Basin Watermaster. Additionally, Mr. Lam has a background in HEC-RAS 1-D Modeling.

2020 - Present, Stetson Engineers, Inc.

Selected Projects

- Watershed Sanitary Survey
 - Evaluated the environmental health of the Lytle Creek, Millard Canyon, and San Gabriel River watersheds. Analyzed water quality data, reported on historical and current sources of contamination, and provided engineering recommendations for future projects.
- AWWA Water Loss Audit
 - Performed a water distribution system analysis by quantifying water losses for the City of Monterey Park and City of Santa Fe Springs. Analyzed sources of water, meter reports, and participated in validation meetings.
 - Water Supply Assessment Report Conducted water supply assessments for various developmental projects within the Cucamonga, Chino, and Main San Gabriel Basin. Investigated water supply and demands for proposed development projects by evaluating indoor and outdoor areas, LEED requirements, and building plans.
- Urban Water Management Plan
 - Prepared numerous Urban Water Management Plans and Water Shortage Contingency Plans for cities and municipalities within the Main San Gabriel Basin, Central Basin, and Cucamonga Basin. Urban Water Management Plans are a long-term resource planning document to ensure that adequate water supplies are available to meet existing and future water needs
- Lake Henshaw Algal Bloom
 - Evaluate water quality to track harmful bacteria propagation within and downstream of Lake Henshaw, San Diego County, California.

Jake Lam, Associate Engineer

Stetson Engineers Inc. Page 1 of 1

APPENDIX C

SAMPLE INSURANCE CERTIFICATES

OP ID: RB

ACORD'

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY) 06/03/2021

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

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

PRODUCER	888-420-1967	CONTACT Inspro Agents&Brokers Ins S	CONTACT Inspro Agents&Brokers Ins Serv							
InsPro- Rhonda Buck Insurance Services		PHONE (A/C, No, Ext): 888-420-1967	FAX (A/C, No): 408-2	41-0037						
4020 Moorpark Avenue, #104 San Jose, CA 95117		ADDRESS: rbuck.inspr01@insuremail.ne	E-MAIL ADDRESS: rbuck.inspr01@insuremail.net							
Inspro Agents&Brokers Ins Serv		INSURER(S) AFFORDING COVERA	GE	NAIC #						
		INSURER A : Hanover American Ins Co#3	6064							
INSURED Stetson Engineers, Inc. 2171 E. Francisco Blvd, Ste. K		INSURER B : U.S. Specialty Ins. Co. #29599								
		INSURER C : Allmerica Financial Ben.#41840								
San Rafael, CA 94901		INSURER D : Massachusetts Bay ins Co#10006								
		INSURER E:								
		INSURER F :								

COVERAGES

CERTIFICATE NUMBER:

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

ADDL SUBR POLICY EFF POLICY EXP TYPE OF INSURANCE **POLICY NUMBER** LIMITS Х COMMERCIAL GENERAL LIABILITY 1.000.000 **EACH OCCURRENCE** CLAIMS-MADE X OCCUR DAMAGE TO RENTED PREMISES (Ea occurrence) OZFD95532202 300,000 X 07/01/2021 07/01/2022 10,000 MED EXP (Any one person) 1,000,000 PERSONAL & ADV INJURY GEN'L AGGREGATE LIMIT APPLIES PER: 2,000,000 **GENERAL AGGREGATE** \$ POLICY PRO-JECT 2,000,000 PRODUCTS - COMP/OP AGG OTHER C AUTOMOBILE LIABILITY COMBINED SINGLE LIMIT (Ea accident) 1,000,000 X ANY AUTO AWFD95530602 Х 07/01/2021 07/01/2022 OWNED AUTOS ONLY SCHEDULED AUTOS BODILY INJURY (Per accident) Х HIRED AUTOS ONLY X NON-OWNED PROPERTY DAMAGE (Per accident) Α Х UMBRELLA LIAB OCCUR 3,000,000 **EACH OCCURRENCE** OZFD95532202 X **EXCESS LIAB** 07/01/2021 07/01/2022 CLAIMS-MADE 3,000,000 AGGREGATE \$ DED X RETENTION \$ WORKERS COMPENSATION AND EMPLOYERS' LIABILITY OTH-X PER STATUTE ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) WZFD92893202 07/01/2021 07/01/2022 1,000,000 E.L. EACH ACCIDENT 1,000,000 E.L. DISEASE - EA EMPLOYEE \$ If yes, describe under DESCRIPTION OF OPERATIONS below 1,000,000 E.L. DISEASE - POLICY LIMIT Professional Liab. 07/01/2021 07/01/2022 Ea. Claim USS2131925 2,000,000 Deductible \$50,000 Aggregate 2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

For Proposal Purposes Only

CERTIFICATE HOLDER	CANCELLATION
	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE
ACODD OF CONTROL	



861 Village Oaks Drive, Suite 100 • Covina , California 91724 Phone: (626) 967-6202 • FAX: (626) 331-7065 • Web site: www.stetsonengineers.com

Northern California

Southern California

Arizona

Colorado

June 6, 2022

Mr. Brett Dingman, PE Las Virgenes Municipal Water District 4232 Las Virgenes Road Calabasas, CA 91302

Subject: Fee Proposal to Provide Professional Services for Flood Protection

Evaluation for the Tapia Water Reclamation Facility

Dear Mr. Dingman:

Stetson Engineers Inc. (Stetson) is pleased to provide the enclosed Fee Proposal in response to the Las Virgenes – Triunfo Joint Powers Authority's (JPA) Request for Proposals (RFP) to Provide Professional Services to evaluate the existing flood protection at the Tapia Water Reclamation Facility and provide recommendations as necessary. Also enclosed is Stetson's standard schedule of hourly rates and charge, which will not change in the next three years.

The enclosed proposed Fee Proposal is a "Not-to-Exceed" amount of \$105,100. Stetson has reviewed the requirements in the JPA's Request for Proposals and prepared the enclosed proposed fee based on Stetson's proposed scope of work.

Thank you for considering Stetson's Fee Proposal. We look forward to demonstrating Stetson's capabilities to the Las Virgenes – Triunfo Joint Powers Authority.

Sincerely,

Stephen B. Johnson, P.E.

President

Stetson Engineers Inc.





Los Virgenes - Triunfo Joint Powers Authority Tapia Water Reclamation Facility: Flood Protection Evaluation Update - Fee Proposal Stetson Engineers Inc.

Task Description	Principal Stephen Johnson (\$244 / Hr)		Project Manager Jeff Helsley (\$212 / Hr)		Engineering Supervisor Xiaoqing Zeng (\$212 / Hr)		Supervising Engineer Guoyuan Li (\$191 / Hr)		Associate Engineer Jake Lam (\$114 / Hr)		Administrative (\$91 / Hr)		Direct Costs	Task Sub Total	Tasks and Items Total Costs
FLOOD PROTECTION EVALUATION	Hrs		Hrs		Hrs		Hrs		Hrs		Hrs				
Task 1 - Project Management and Meetings															
1.1 - Project Management	2	\$488	6	\$1,272	2	\$424	0	\$0	0	\$0	0	\$0	\$0	\$2,184	
1.2 - Project Kick-Off Meeting	0	\$0	3	\$636	3	\$636	3	\$573	2	\$228	2	\$182	\$0	\$2,255	
1.3 - Workshop/Progress Meetings (5x)	2	\$488	8	\$1.696	16	\$3.392	16	\$3.056	8	\$912	4	\$364	\$0	\$9,908	\$14,400
		T		¥ 1,000		71,111		70,000		77	·	++++	7.	40,000	
Task 2 - Data Collection and Review															
2.1 - Data Collection	0	\$0	2	\$424	8	\$1.696	8	\$1.528	4	\$456		\$0	\$0	\$4,104	
2.2 - Review of Existing Studies and Additional Data	0	\$0	2	\$424	12	\$2.544	16	\$3,056	8	\$912		\$0	\$0	\$6,936	\$11.100
2.2 Trovior of Exiculty Studios and Additional Buta		Ψ	-	Ψ.Σ.		ψ <u>υ</u> ,σ · · ·		ψο,σσσ		QU.L		Ψ	ų,	φο,σσσ	1
Task 3 - Field Inspection and Survey of Malibu Canyon Rd Bridge															l.
3.1 - Conduct Field Inspection and Bridge Survey	0	\$0	8	\$1.696	20	\$4,240	20	\$3.820	- 8	\$912	0	\$0	\$1.500	\$12,168	
						. ,		1 - 7 -				,	1 / 1 - 1	, , , , ,	\$12,200
Task 4 - Construction of Unsteady Flow Model															
4.1 - Create a HEC-RAS 2-D Unsteady Flow Model	0	\$0	4	\$848	16	\$3.392	48	\$9,168	16	\$1.824	0	\$0	\$0	\$15,232	
4.1 - Groute a File of this 2-b offsteady Flow model	Ů	ΨΟ		ψοτο		ψ0,002	40	ψ5,100	-10	Ψ1,02-4		ΨΟ	ΨΟ	ψ10,202	\$15,300
Task 5 - Model Calibration and Verification											I				
5.1 - Calibration and Verification of Model	0	\$0	2	\$424	16	\$3.392	64	\$12,224	16	\$1.824	0	\$0	\$0	\$17,864	l .
C. Cambrador and Companion of Model		Ψ	- 1	Ψ.Σ.		ψ0,00 <u>2</u>		Ψ12,221		ψ1,021		Ψū	ţ.	ψ11,001	\$17,900
Task 6 - Model Simulations															l.
6.1 - Model Simulations for Existing Condition	0	\$0	2	\$424	8	\$1.696	16	\$3.056	- 8	\$912	0	\$0	\$0	\$6,088	
6.2 - Model Simulations for Proposed Bridge Replacement	0	\$0	2	\$424	8	\$1,696	16	\$3,056	8	\$912	0	\$0	\$0	\$6,088	
6.3 - Model Simulations for Proposed Bridge Replacement & Dam Removal	0	\$0	2	\$424	12	\$2,544	20	\$3,820	8	\$912	0	\$0	\$0	\$7,700	\$19,900
		1.						1.77				1			1
Task 7 - Prepare and Submit Deliverables															
7.1 - Hydraulic Analysis Report (Draft and Final)	0	\$0	6	\$1,272	16	\$3,392	32	\$6,112	20	\$2,280	8	\$728	\$500	\$14,284	644.000
															\$14,300
										1		,	,	,	
Total Scope of Work	4	\$976	47	\$9,964	137	\$29,044	259	\$49,469	106	\$12,084	14	\$1,274	\$2,000		\$105,100

J/108-Marketing/2022/Taipa WRF\Tapia WRF - Budget & Hours.xls



Northern California • Southern California • Arizona • Colorado • Oregon

Standard Billing Rate Schedule Professional Fees

Principal	\$244.00	Per Hour
Special Project Director	\$244.00	Per Hour
Project Manager, Senior	\$212.00	Per Hour
Supervisor I	\$212.00	Per Hour
Supervising Soil Scientist	\$197.00	Per Hour
Supervisor II	\$197.00	Per Hour
Supervisor III	\$191.00	Per Hour
Senior I	\$170.00	Per Hour
Senior II	\$153.00	Per Hour
Senior III	\$138.00	Per Hour
Construction Manager	\$138.00	Per Hour
Construction Manager / Oversight	\$122.00	Per Hour
Senior Construction Inspector	\$122.00	Per Hour
Senior Field Geologist	\$138.00	Per Hour
Senior Associate	\$132.00	Per Hour
Associate I	\$126.00	Per Hour
Associate II	\$119.00	Per Hour
Associate III	\$114.00	Per Hour
Associate Soil Scientist	\$114.00	Per Hour
Senior Assistant	\$106.00	Per Hour
Assistant I	\$101.00	Per Hour
Assistant II	\$96.00	Per Hour
Assistant Soil Scientist	\$96.00	Per Hour
Assistant III	\$91.00	Per Hour
GIS Manager	\$126.00	Per Hour
GIS Specialist I	\$104.00	Per Hour
GIS Specialist II	\$94.00	Per Hour
Technical Illustrator	\$91.00	Per Hour
AutoCAD Technician	\$91.00	Per Hour
Soil Technician	\$79.00	Per Hour
Aide I	\$74.00	Per Hour
Aide II	\$64.00	Per Hour
Aide III	\$59.00	Per Hour
Project Coordinator I	\$138.00	Per Hour
Project Coordinator II	\$101.00	Per Hour
Project Coordinator III	\$91.00	Per Hour
Contract Management	\$106.00	Per Hour
Administrative I	\$74.00	Per Hour
Administrative II	\$69.00	Per Hour
Administrative III	\$64.00	Per Hour

Effective January 1, 2022



Direct Expense Rates

Expense Description	Billing Rate
Mileage	\$* / Mile
Reproduction: Black & White (In-House)	\$0.15 / Page
Reproduction: Color - 8.5" x 11" (In-House)	\$0.89 / Page
Reproduction: Color - 11" x 17" (In-House)	\$1.89 / Page
Plotter Reproduction (In-House)	\$1.50 / Sq. Ft.
4x4 Truck with Drill Rig	\$150.00 / Day
Survey Equipment	\$120.00 / Day

Notes:

- 1) * Mileage is billed at the current IRS approved mileage rate and may be subject to change.
- 2) Subcontractor services will be charged at cost plus 10% administration fee.
- 3) All other project reimbursable expenses (i.e. telephone, commercial transportation, meals, lodging, postage, outside reproduction, etc.) will be billed at cost.
- 4) Testimony fees are 150% of standard rates and apply to depositions, court time and time spent on stand-by at attorney's request. Travel time and preparation time is charged at standard rates. Stetson Engineers Inc. authorizes only staff at associate classification or higher to testify as expert witnesses.