

**LAS VIRGENES - TRIUNFO
JOINT POWERS AUTHORITY
AGENDA**

4232 Las Virgenes Road, Calabasas, CA 91302

June 1, 2020, 5:00 PM

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

On March 4, 2020, Governor Newsom proclaimed a State of Emergency in California as a result of the threat of COVID-19. On March 17, 2020, Governor Newsom issued Executive Order N-29-20 (superseding the Brown Act-related provisions of Executive Order N-25-20 issued on March 12, 2020), which allows a local legislative body to hold public meetings via teleconferencing and to make public meetings accessible telephonically or otherwise electronically to all members of the public seeking to observe and to address the local legislative body. Pursuant to Executive Order N-29-20, please be advised that members of the Las Virgenes - Triunfo Joint Powers Authority will participate in meetings telephonically.

PUBLIC PARTICIPATION: Pursuant to Executive N-29-20 and given the current health concerns, members of the public can access meetings live on-line, with audio and limited video, at www.LVMWD.com/JPALiveStream. In addition, members of the public can submit comments electronically for consideration by sending them to www.LVMWD.com/JPALiveStream. To ensure distribution to the members of the Las Virgenes - Triunfo Joint Powers Authority 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 Public Comments 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 APPROVAL OF AGENDA

3 PUBLIC COMMENTS

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

4 CONSENT CALENDAR

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

A Minutes: Regular Meeting of May 4, 2020 (Pg. 4)

Approve.

5 ILLUSTRATIVE AND/OR VERBAL PRESENTATION AGENDA ITEMS

A Pure Water Project Las Virgenes-Triunfo: Update

6 ACTION ITEMS

- A Financial Review: Third Quarter of Fiscal Year 2019-20 (Pg. 11)**
Receive and file the financial review for the third quarter of Fiscal Year 2019-20.
- B Proposed Two-Year JPA Budget Plan for Fiscal Years 2020-22 (Pg. 20)**
Approve the proposed Two-Year JPA Budget Plan for Fiscal Years 2020-22 and adopt the proposed Fiscal Year 2020-21 JPA Budget.
- C Tapia Water Reclamation Facility SCADA System Upgrade Project: Award (Pg. 83)**
Accept the proposal and authorize the Administering Agent/General Manager to execute a professional services agreement with The RoviSys Company, in the amount of \$2,417,333, for the Tapia Water Reclamation Facility SCADA System Upgrade Project.
- D Tapia Water Reclamation Facility Outfall Rehabilitation Project: Award of Design (Pg. 95)**
Authorize the Administering Agent/General Manager to execute a professional services agreement with MKN & Associates, Inc., in the amount of \$80,937, to complete the design of the Tapia Water Reclamation Facility Outfall Rehabilitation Project.

7 BOARD COMMENTS

8 ADMINISTERING AGENT/GENERAL MANAGER REPORT

9 FUTURE AGENDA ITEMS

10 INFORMATION ITEMS

- A State and Federal Legislative Update (Pg. 141)**
- B Rancho Las Virgenes Composting Facility Repairs: Approval of Change Order (Pg. 204)**
- C Energy Storage and Resiliency Capability Feasibility Assessment: Award (Pg. 207)**

11 PUBLIC COMMENTS

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

12 CLOSED SESSION

13 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
REGULAR MEETING**

5:00 PM

May 4, 2020

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance to the Flag was led by Jane Nye.

1. CALL TO ORDER AND ROLL CALL

The meeting was called to order at **5:00 p.m.** by Chair Lewitt via teleconference 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 the Governor's Executive Order, N-29-20, which suspended certain requirements of the Ralph M. Brown Act to support social distancing guidelines associated with response to the coronavirus (COVID-19) outbreak. Josie Guzman, Clerk of the Board, conducted the roll call.

Present: Directors Caspary, Lewitt, Lo-Hill, Nye, Orkney, Polan, Renger, Shapiro, Tjulander, and Wall

Absent: None

2. APPROVAL OF AGENDA

Administering Agent/General Manager David Pedersen requested that Item 10A be moved to follow the Consent Calendar in order to receive the federal legislative update from Ana Schwab, representing Best Best & Krieger, LLP.

Director Polan moved to approve the agenda as amended. Motion seconded by Director Lo-Hill. Motion carried unanimously by roll call vote.

3. PUBLIC COMMENTS

None.

4. CONSENT CALENDAR

A Minutes: Regular Meeting of April 6, 2020: Approve

B Digester No. 2 Rehabilitation Project: Approval of Scope Change and Change Order

Authorize the Administering Agent/General Manager to execute Change in Scope No. 3 to Pacific Advanced Civil Engineering, Inc., in the amount of \$5,000, and Change Order No. 2 to GSE Construction, Inc., in the amount of \$2,975, for the Digester No. 2 Rehabilitation Project.

Director Renger moved to approve the Consent Calendar. Motion seconded by Director Shapiro. Motion carried unanimously by roll call vote.

10. INFORMATION ITEMS - (This item was moved out of sequence)

A State and Federal Legislative Update

Ana Schwab, representing Best Best & Krieger, LLP (BBK), presented the federal legislative update. She noted that BBK was working on securing financial support for public agencies with impacts due to the COVID-19 pandemic. She reported that the Senate was back in session and was currently focused on judicial nominees. She also reported that the House of Representatives was expected to return shortly, and it was expected that a fourth COVID-19 mitigation bill would be proposed by the end of the month. She stated that it was expected that the payroll tax credit for paid sick leave would be extended retroactively to include public agencies. She also reported that the federal government would work on a separate fund for public agencies to address COVID-19 mitigation costs that were being absorbed, as well as to backfill losses in revenue. She noted that BBK received two notifications regarding funding opportunities from the Bureau of Reclamation. She also reported that there was discussion on how testing wastewater for COVID-19 could be used as a key indicator for determining whether an area was ready for reopening.

5. ILLUSTRATIVE AND/OR VERBAL PRESENTATION AGENDA ITEMS

A Review of Progress on Pure Water Demonstration Project

Joe McDermott, Director of Engineering and External Affairs, reported that construction of the Pure Water Demonstration Project was nearly completed. He noted that Southern California Edison completed the electrical service connection and that the building now had electrical power. He also noted that the contractor had begun to install exterior signage, and the equipment was ready to be commissioned. He provided a virtual tour of the Pure Water Demonstration Garden and the Pure Water Demonstration Project. He responded to several questions regarding the installation of the mural, the large sliding doors along the storefront, and the color schemes.

B Scheduling of Strategic Planning Workshop on Pure Water Project Las Virgenes-Triunfo

Provide staff feedback on the timing of a JPA Board Strategic Planning Workshop on the Pure Water Project Las Virgenes-Triunfo.

Administering Agent/General Manager David Pedersen presented the report and suggested that the Board hold a workshop on May 27th or 28th at 5:00 p.m. The Board agreed to hold the workshop on May 27th at 5:00 p.m.

C Fiscal Years 2020-22 Two-Year JPA Draft Budget

Review and provide feedback on the Fiscal Years 2020-22 Two-Year JPA Draft Budget.

Administering Agent/General Manager David Pedersen provided introductory remarks and stated that significant budget impacts were not anticipated due to the COVID-19 pandemic.

Don Patterson, Director of Finance and Administration, presented the report.

Angela Saccareccia, Finance Manager, presented the Fiscal Years 2020-22 Two-Year JPA Draft Budget.

Ms. Saccareccia responded to a question regarding the estimated actual budget for electricity by stating that the Process Air Improvements Project was expected to decrease electrical consumption at the Tapia Water Reclamation Facility by 25 percent. Mr. Patterson added that staff was working with Southern California Edison regarding the various tariffs to maximize cost savings and electricity efficiency. Administering Agent/General Manager David Pedersen added that a decrease in energy consumption was already being experienced, which has reduced the energy line item cost.

Administering Agent/General Manager David Pedersen responded to a question regarding the inclusion of the Canyon Oaks Park Recycled Water Main Extension (CIP No. 10629) in the JPA draft budget by stating that this project would be for a recycled water main extension on Lindero Canyon Road to serve Canyon Oaks Park located in the City of Westlake Village. He noted that this item was a carry forward budget from prior years, and that the project was part of the larger project to construct the Calleguas-Las Virgenes Interconnection. He noted that this project would follow the same alignment on Lindero Canyon Road, and that Las Virgenes Municipal Water District applied for and received Proposition 84 grant funding. He noted that one of the elements of the grant funding criteria was to support multi-benefit projects that create and free-up potable water supply. He also noted that adding this project helped the Calleguas-Las Virgenes Interconnection Project score better, and the project would be an integral element of the interconnection

project. He also responded to a question regarding whether the grant was received and applied towards this project by stating that staff would follow-up and report back to the JPA Board.

Administering Agent/General Manager David Pedersen also responded to a question regarding the inclusion of the Cordillera Tank Rehabilitation (CIP No. 10665) in the JPA draft budget by stating that the Cordillera Tank was part of the JPA backbone recycled water system. He noted that this tank serves the JPA by allowing disposal of recycled water when necessary to the Los Angeles River.

Mr. Patterson responded to a question regarding the decrease in the school education budget as compared to previous years by stating that this program was charged to other areas in the budget and allocated to the JPA. Joe McDermott, Director of Engineering and External Affairs, added that education programs were being increased in the Triunfo Water & Sanitation District's service area.

Mr. Patterson noted that staff would further define and demonstrate where school and public education funds would be reflected or allocated in the final budget.

6. ACTION ITEMS

A Rancho Las Virgenes Farm Sprayfields Operation and Maintenance: Contract Extension

Authorize the Administering Agent/General Manager to execute a six-month extension to the existing agreement with W. Litten Land Preparation, in an amount not to exceed \$125,000, for the on-going operation and maintenance of the Rancho Las Virgenes Farm Sprayfields.

Administering Agent/General Manager David Pedersen presented the report.

Director Tjulander moved to approve Item 6A. Motion seconded by Director Renger. Motion carried unanimously by roll call vote.

B Pure Water Project Las Virgenes-Triunfo: Future Supply Actions Funding Program

Authorize the Administering Agent/General Manager to execute a professional services agreement with Carollo Engineers, Inc., in the amount of \$68,996, to administer a Future Supply Actions Funding Program grant from the Metropolitan Water District of Southern California for the Pure Water Demonstration Project and Tapia Water Reclamation Facility.

John Zhao, Director of Facilities and Operations, presented the report.

Director Polan moved to approve Item 6B. Motion seconded by Director Tjulander.

Mr. Zhao responded to a question regarding protecting against malware with the implementation of artificial intelligence through the use of a localized system that would not be directly connected to the Internet. He also responded to questions regarding the study and the use of artificial intelligence to optimize steady-state treatment processes at the Tapia Water Reclamation Facility and the Pure Water Demonstration Project.

Director Caspary lost connection to the videoconference at 6:17 p.m.

Motion carried by the following vote:

AYES: Lewitt, Lo-Hill, Nye, Orkney, Polan, Shapiro, Tjulander, Renger, Wall
NOES: None
ABSTAIN: None
ABSENT: Caspary

7. BOARD COMMENTS

Director Orkney stated that she was impressed with the new signage for the Tapia Water Reclamation Facility to properly reflect Triunfo Water & Sanitation District.

Director Caspary reconnected to the videoconference at 6:20 p.m.

8. ADMINISTERING AGENT/GENERAL MANAGER REPORT

Administering Agent/General Manager David Pedersen provided an update regarding the Rancho Phase II Solar Generation Project. He noted that construction began on April 27th and that no concerns or complaints had been received. He stated that the project was expected to go on-line in the summer. He also provided an update regarding the Rancho Las Virgenes Composting Facility, and stated that it was expected that the facility would run at partial capacity in three weeks and compost would be produced in approximately 30 days. He also reported that influent flows had increased by seven to eight percent at the Tapia Water Reclamation Facility with residents staying home due to the COVID-19 pandemic. He also provided an update regarding an analysis of wastewater to assist with understanding the extent of COVID-19 in communities. He stated that testing for COVID-19 in the wastewater could be more efficient than testing individuals in the community. He noted that staff began to collect samples from influent sewer flows, final effluent treated water, and sludge, which would be frozen based on laboratory guidelines in order to participate in university studies. He stated that it was likely that staff would recommend participating in a study through Stanford University.

John Zhao, Director of Facilities and Operations, responded to a question regarding whether compost would be tested for COVID-19 by stating that a sample from the digester sludge would be taken before composting. He noted that live viruses were not being sought as the industry standard was to look for remnants

of the virus genetic material. He stated that the study would demonstrate that there is no viable virus found in the compost.

9. FUTURE AGENDA ITEMS

None.

10. INFORMATION ITEMS

A State and Federal Legislative Update

11. PUBLIC COMMENTS

None.

12. CLOSED SESSION

None.

13. ADJOURNMENT

Seeing no further business to come before the Board, the meeting was duly adjourned at **6:27 p.m.**

Jay Lewitt, Chair

ATTEST:

James Wall, Vice Chair

June 1, 2020 JPA Board Meeting

TO: JPA Board of Directors

FROM: Finance & Administration

Subject : Financial Review: Third Quarter of Fiscal Year 2019-20

SUMMARY:

The third quarter financial review presents data as of March 30, 2020. It is important to note that due to the timing of various projects and payments, the third quarter report should primarily be used to identify areas where an emerging trend may affect the JPA's position at fiscal year-end.

RECOMMENDATION(S):

Receive and file the financial review for the third quarter of Fiscal Year 2019-20.

FISCAL IMPACT:

No

ITEM BUDGETED:

No

FINANCIAL IMPACT:

There is no financial impact associated with this action.

DISCUSSION:

The JPA's third quarter net uses of funds in Fiscal Year 2019-20 totaled \$18.2 million, compared to \$15.5 million for the same period in Fiscal Year 2018-19. There was a year-over-year increase in operating revenues (21.0%) and a comparatively lower increase in operating expenditures (3.1%). The increase in revenues was primarily due to higher recycled water sales. The increase in operating expenditures was associated with increased energy and operating costs due to the higher recycled water sales. Capital project expenditures were approximately \$2.7 million more than the prior year.

When comparing to Fiscal Year 2019-20 budget estimates through the third quarter, actual operating expenditures were approximately \$349,271 (2.7%) below budget estimates. Capital project expenditures were approximately \$2.4 million budget estimates, primarily due to the

timing of expenditures for planned projects.

Prepared by: Angela Saccareccia, Finance Manager

ATTACHMENTS:

Attachment A

Attachment B

Joint Powers Authority Operations

Quarterly Update - Comparison to Budget & Prior Year at March 30, 2020

	FY 18-19 Actual YTD	FY 19-20 Budget YTD	FY 19-20 Actual YTD
Total Operating Revenues	\$ 1,404,381	\$ 1,957,972	\$ 1,699,559
RW Pump Station	794,043	1,028,774	769,624
RW Tanks & Reservoirs	57,092	64,850	64,850
RW System Operations	14,605	34,856	894
RW Distribution	21,179	119,448	83,281
Sewer	169,960	108,791	71,804
Waste Water Treatment	6,086,536	6,598,009	6,920,800
Composting	4,068,159	3,991,070	3,834,729
Centrate Treatment	228,472	241,090	234,221
Adminstration	905,847	885,347	742,761
Total Operating Expenses	12,345,893	13,072,235	12,722,964
Net Operating (Expenses)	\$ (10,941,512)	\$ (11,114,263)	\$ (11,023,405)

Joint Powers Authority Operations
Quarterly Update - Comparison to Budget & Prior Year at March 30, 2020

	<u>FY 18-19 Actual YTD</u>	<u>FY 19-20 Budget YTD</u>	<u>FY 19-20 Actual YTD</u>
<u>Las Virgenes Share:</u>			
<u>Total Revenues</u>			
Operating Revenues	\$ 991,493	\$ 1,382,328	\$ 1,199,889
Total Revenues	<u>991,493</u>	<u>1,382,328</u>	<u>1,199,889</u>
<u>Total Expenses</u>			
Operating Expenses	\$ 8,269,431	\$ 8,755,944	\$ 8,766,122
Capital Project Expenses	3,192,184	6,794,928	5,092,980
Total Expenses	<u>11,461,615</u>	<u>15,550,872</u>	<u>13,859,102</u>
Net (Uses) of Funds - LV	<u>\$ (10,470,122)</u>	<u>\$ (14,168,543)</u>	<u>\$ (12,659,214)</u>
<u>Triunfo Share:</u>			
<u>Total Revenues</u>			
Operating Revenues	\$ 412,888	\$ 575,644	\$ 499,670
Total Revenues	<u>412,888</u>	<u>575,644</u>	<u>499,670</u>
<u>Total Expenses</u>			
Operating Expenses	\$ 4,076,462	\$ 4,316,291	\$ 3,956,842
Capital Project Expenses	1,329,323	2,829,616	2,120,873
Total Expenses	<u>5,405,785</u>	<u>7,145,907</u>	<u>6,077,715</u>
Net (Uses) of Funds - TWSD	<u>\$ (4,992,897)</u>	<u>\$ (6,570,263)</u>	<u>\$ (5,578,044)</u>
Total JPA Net (Uses) of Funds	<u>\$ (15,463,019)</u>	<u>\$ (20,738,806)</u>	<u>\$ (18,237,258)</u>

Joint Powers Authority Operations
Quarterly Update - Comparison to Budget & Prior Year at March 30, 2020

	<u>FY 18-19 Actual YTD</u>	<u>FY 19-20 Budget YTD</u>	<u>FY 19-20 Actual YTD</u>
<u>Total Revenues</u>			
Operating Revenues	\$ 1,404,381	\$ 1,957,972	\$ 1,699,559
Total Revenues	<u>1,404,381</u>	<u>1,957,972</u>	<u>1,699,559</u>
<u>Total Expenses</u>			
Operating Expenses	\$ 12,345,893	\$ 13,072,235	\$ 12,722,964
Capital Project Expenses	<u>4,521,507</u>	<u>9,624,543</u>	<u>7,213,853</u>
Other	<u>-</u>	<u>-</u>	<u>-</u>
Total Expenses	<u>16,867,400</u>	<u>22,696,778</u>	<u>19,936,817</u>
Net (Uses) of Funds	<u>\$ (15,463,019)</u>	<u>\$ (20,738,806)</u>	<u>\$ (18,237,258)</u>
Las Virgenes Share	<u>(10,916,891)</u>	<u>(14,168,543)</u>	<u>(12,659,214)</u>
Triunfo Share	<u>(4,546,128)</u>	<u>(6,570,263)</u>	<u>(5,578,044)</u>

*Las Virgenes - Triunfo Joint Powers Authority
Capital Improvement Project Status
December 31, 2019*

<i>Job # - Description</i>	<i>LV %</i>	<i>TWSD %</i>	<i>Total Project Appropriations</i>	<i>Prior Year Expenditures</i>	<i>Current Year Expenditures</i>	<i>Total Project Expenditures</i>	<i>Project Balance</i>	<i>LV Balance</i>	<i>TWSD Balance</i>
Completed Projects									
10626 - Process Air Improvements	70.6%	29.4%	\$5,829,710	\$2,240,138	\$3,598,589	\$5,838,727	(\$9,017)	(\$6,366)	(\$2,651)
The first phase is to replace the existing Roots blowers with new, high efficiency, single stage blowers. To replace the air diffusers in the aeration basins with new full floor mounted fine bubble diffusers. Additional appropriation \$100,000 approved by JPA Board 7/1/19, Item 6A Final Acceptance approved by JPA Board 12/09/2019, Item 4C									
Total Completed Projects			\$5,829,710	\$2,240,138	\$3,598,589	\$5,838,727	(\$9,017)	(\$6,366)	(\$2,651)
Projects to complete by June 30, 2020									
10608 - Rancho Amndmnt Bin&Convync Mod	70.6%	29.4%	\$2,070,518	\$1,738,370	\$176,109	\$1,914,479	\$156,039	\$110,164	\$45,875
The project consists of installing a new smaller amendment bin and modification to the conveyor system to simplify the amendment conveyance process.									
10638 - Demonstration Project	70.6%	29.4%	\$4,579,394	\$837,342	\$2,742,602	\$3,579,944	\$999,450	\$705,612	\$293,838
sub project of 10635 Pure Water Project Additional appropriation \$185,934 approved by JPA Board 7/1/19, Item 6A. Additional appropriation \$802,262 approved by JPA Board 10/7/19, Item 6A.									
10667 - Tapia Headworks White Room	70.6%	29.4%	\$421,938	\$52,373	\$61,620	\$113,993	\$307,945	\$217,409	\$90,536
Modification or replacement is needed for the floor plates and steel framing floor plate supports in the white room located at Tapia's headworks building. Additional appropriation \$9,498 approved by JPA Board 12/9/19, Item 6B									
10695 - Rancho Reliability Imprv 19-20	70.6%	29.4%	\$100,000	\$0	\$26,697	\$26,697	\$73,303	\$51,752	\$21,551
Replace or rehabilitate facilities and equipment at the Rancho facility based on failure, exceedence of useful life, or obsolescence.									
10696 - TWRf Reliability Imprv. FY 19-2	70.6%	29.4%	\$100,000	\$0	\$19,475	\$19,475	\$80,525	\$56,851	\$23,674
Replace or rehabilitate facilities and equipment at the Tapia facility based on failure, exceedence of useful life, or obsolescence.									
Total Projects to complete by June 30, 2020			\$7,271,850	\$2,628,085	\$3,026,503	\$5,654,588	\$1,617,262	\$1,141,787	\$475,475
Multi-Year Projects									

Job # - Description**LV % TWSD %****Total Project
Appropriations****Prior Year
Expenditures****Current Year
Expenditures****Total Project
Expenditures****Project
Balance****LV
Balance****TWSD
Balance****Multi-Year Projects**

10567 - Progmbble Logic Contrlr Upgrd	70.6%	29.4%	\$1,311,560	\$107,455	\$38,365	\$145,820	\$1,165,740	\$823,012	\$342,728
Replace obsolete programmable logic controllers and upgrade other electrical equipment at Tapia.									
10619 - Summer Season 2013 TMDL Compln	70.6%	29.4%	\$1,449,985	\$178,175	\$195,939	\$374,114	\$1,075,871	\$759,565	\$316,306
Construction of a 1MGD "side stream" treatment facility at Tapia to treat stream flow augmentation discharges to the 2013 TMDL limits of 1 mg/L total nitrogen and 0.1 mg/L total phosphorous. The cost estimate is based on membrane technology.									
10629 - Cny Oaks Prk RW Main Extension	70.6%	29.4%	\$399,780	\$7,451	\$0	\$7,451	\$392,329	\$276,984	\$115,345
This extension will serve the City of Westlake Village's Oak Canyon Park and eliminate a long private service line to Yerba Buena School. Funding from Prop 84 IRWM 2015									
10635 - PURE WATER PROJECT	70.6%	29.4%	\$3,456,482	\$148,654	\$30,879	\$179,533	\$3,276,949	\$2,313,526	\$963,423
This project funds preliminary studies, outreach, CEQA analysis, preliminary design and final design. Project 10637 Facility Siting Study was completed in prior year for \$180,777. Project 10650 Land Acquisition was completed in prior year for \$2,109,359 Project 10636 Mixing and Dilution Study was completed in prior year for \$337,500									
10665 - Cordillera Tank Rehab	70.6%	29.4%	\$1,201,267	\$39,879	\$23,889	\$63,768	\$1,137,499	\$803,074	\$334,425
Rehabilitation including interior and exterior coating, valve and appurtenance upgrades and replacements, restoration of deteriorated asphalt, and work to ensure up-to-date compliance for safety and water quality equipment.									
10666 - Calabasas Prk RW Main Extensn	70.6%	29.4%	\$320,000	\$0	\$0	\$0	\$320,000	\$225,920	\$94,080
Install approximately 1,200 LF of 6-8 inch pipeline to loop the existing recycled water system.									
10668 - RLV Storm Wtr Divsn Strctr Rpl	70.6%	29.4%	\$41,767	\$3,746	\$0	\$3,746	\$38,021	\$26,843	\$11,178
Replacement of the two storm water diversion structures at the Rancho Las Virgenes Composting Facility. Increase the size and length of the farm field discharge pipeline.									
10669 - Dev Tour Seating Area @ Tapia	70.6%	29.4%	\$25,000	\$14,035	\$0	\$14,035	\$10,965	\$7,741	\$3,224
Develop tour seating area at Tapia adjacent to the control building									
10680 - RLV Digester Cleaning & Repair	70.6%	29.4%	\$2,822,155	\$438,305	\$64,245	\$502,550	\$2,319,605	\$1,637,641	\$681,964
Clean out and make all necessary repairs to digesters #2. the scope of repairs is based on the recently completed rehabilitation of digester # 1. Additional appropriation \$714,379 approved by JPA Board 12/9/19, Item 6C									
10688 - Rancho Solar Gen.-Ph II	70.6%	29.4%	\$596,555	\$400,986	\$0	\$400,986	\$195,569	\$138,072	\$57,497
Rancho Solar Generation Project Phase II: Service Agreement for Wholesale Distribution Service and Rule 21 Generator Interconnection Agreement Reimbursable expense of an interconnection facility.									

Job # - Description**LV % TWSD %****Total Project
Appropriations****Prior Year
Expenditures****Current Year
Expenditures****Total Project
Expenditures****Project
Balance****LV
Balance****TWSD
Balance****Multi-Year Projects**

10689 - WoolseyFire Rpr - Rancho	70.6%	29.4%	\$1,989,455	\$2,943	\$194,662	\$197,605	\$1,791,850	\$1,265,046	\$526,804
Woolsey Fire Facility Repair. Appropriation of \$46,955 for engineering design and support services during construction approved by JPA Board 3/28/2019, Item 6E.									
10692 - WoolseyFire Rpr-JPA Facilities	70.6%	29.4%	\$878,612	\$0	\$3,897	\$3,897	\$874,715	\$617,549	\$257,166
Woolsey Fire Facility Repair. Appropriation of \$46,112 for engineering design and support services during construction approved by JPA Board 3/28/2019, Item 6E.									
10693 - Pavement Restoration Rancho	70.6%	29.4%	\$533,320	\$0	\$0	\$0	\$533,320	\$376,524	\$156,796
Pavement restoration/slurry at Rancho									
10702 - Tapia Efflnt P/S Feeder Reloc	70.6%	29.4%	\$100,000	\$0	\$0	\$0	\$100,000	\$70,600	\$29,400
Remove or abandon in place existing 4160 volt feeders currently suspended from the top slab of the Effluent Pump Station wet well, underneath the existing MCCs.Perform electrical design and replace the overhead 4160 volt feeders.									
10707 - Brine Discharge Mgmt Proj.	70.6%	29.4%	\$210,945	\$0	\$36,885	\$36,885	\$174,060	\$122,886	\$51,174
sub-project of 10635 Pure Water Project. Regional Brine Management Study and Multi-Agency reimbursement agreement approved by JPA Board 8/5/19, Item 6C									

Total Multi-Year Projects

\$15,336,883	\$1,341,629	\$588,761	\$1,930,390	\$13,406,493	\$9,464,984	\$3,941,509
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Projects on Hold

10520 - SCADA System Communictn Upgrd	70.6%	29.4%	\$93,100	\$32,447	\$0	\$32,447	\$60,653	\$42,821	\$17,832
Upgrade the JPA owned portion of the supervisory control and data acquisition system (SCADA) system to an Ethernet based radio network and provide additional data paths for system redundancy.									
10661 - A/B Bus Electrical Modificatn	70.6%	29.4%	\$100,000	\$0	\$0	\$0	\$100,000	\$70,600	\$29,400
Study the feasibility of reconfiguring the Tapia electrical switch gear and then hire electrical team to make the modifications.									
10670 - Centrate 20" Valve Repair	70.6%	29.4%	\$264,000	\$0	\$0	\$0	\$264,000	\$186,384	\$77,616
Repair buried 20-inch Miliken valve at the centrate facility.									
10703 - Tapia Tertiary Filters Rehab	70.6%	29.4%	\$60,000	\$0	\$0	\$0	\$60,000	\$42,360	\$17,640
Tertiary Filters concrete rehabilitation.									

Total Projects on Hold

\$517,100	\$32,447	\$0	\$32,447	\$484,653	\$342,165	\$142,488
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<i>Job # - Description</i>	<i>LV % TWSD %</i>	<i>Total Project Appropriations</i>	<i>Prior Year Expenditures</i>	<i>Current Year Expenditures</i>	<i>Total Project Expenditures</i>	<i>Project Balance</i>	<i>LV Balance</i>	<i>TWSD Balance</i>
<i>Totals</i>		<u>\$28,955,543</u>	<u>\$6,242,299</u>	<u>\$7,213,853</u>	<u>\$13,456,152</u>	<u>\$15,499,391</u>	<u>\$10,942,570</u>	<u>\$4,556,821</u>
<i>Totals: Las Virgenes MWD</i>		<u>\$20,442,613</u>	<u>\$4,407,063</u>	<u>\$5,092,980</u>	<u>\$9,500,043</u>	<u>\$10,942,570</u>		
<i>Totals: Triunfo Water and Sanitation District</i>		<u>\$8,512,930</u>	<u>\$1,835,236</u>	<u>\$2,120,873</u>	<u>\$3,956,109</u>	<u>\$4,556,821</u>		

June 1, 2020 JPA Board Meeting

TO: JPA Board of Directors

FROM: Finance & Administration

Subject : Proposed Two-Year JPA Budget Plan for Fiscal Years 2020-22

SUMMARY:

The proposed Two-Year JPA Budget Plan is \$28.2 million for Fiscal Year 2020-21 and \$30.3 million for Fiscal Year 2021-22. The proposed Fiscal Year 2020-21 JPA Budget is approximately 3.3% higher than the Fiscal Year 2019-20 Budget of \$27.3 million, primarily due to an increase in estimated expenditures for capital improvement projects.

RECOMMENDATION(S):

Approve the proposed Two-Year JPA Budget Plan for Fiscal Years 2020-22 and adopt the proposed Fiscal Year 2020-21 JPA Budget.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

The proposed Fiscal Year 2020-21 JPA Budget is \$28.2 million.

DISCUSSION:

JPA Operating Budget:

The proposed JPA operating budgets for Fiscal Years 2020-21 and 2021-22 are \$17,807,859 and \$17,884,300, respectively. There were minor adjustments made to allocations from the Preliminary Budget presented to the JPA Board on May 4, 2020.

The proposed Fiscal Year 2020-21 JPA Budget for operating expenses is \$227,253 higher (1.3% more) than the adopted Fiscal Year 2019-20 JPA Budget. The increase is primarily due to higher labor costs, which are partially offset by cost-savings associated with reduced energy consumption. The proposed Fiscal Year 2021-22 JPA Budget for operating expenses is

\$17,884,300, which is \$76,441 (0.4% more) than the Fiscal Year 2020-21 JPA Budget, also due primarily to a projected increase in labor costs partially offset by cost-savings associated with reduced energy consumption.

Capital Improvement Projects Budget:

The proposed Fiscal Year 2020-21 JPA Capital Improvement Projects Budget, including carryforward amounts, is \$19,768,546.

Following is a summary of the major projects:

- Pure Water Project Las Virgenes-Triunfo (\$7.0 million)
- Summer Season TMDL Compliance (\$2.6 million)
- Tapia Programmable Logic Controller Upgrades (\$2.4 million)
- Rancho Woolsey Fire Repair (\$1.4 million)

Wholesale Recycled Water Rate:

The budget process includes calculating the wholesale recycled water rate in accordance with the JPA Board-approved methodology. The proposed rates for Fiscal Years 2020-21 and 2021-22 are \$429.91 per acre foot and \$456.63 per acre foot, respectively, as compared to \$480.53 in the adopted Fiscal Year 2019-20 JPA Budget.

Attached is the proposed budget document, which includes the following items:

- Operating budget line item summary at the enterprise level;
- Projection of allocated JPA expenses to participants;
- Recycled water wholesale rate computations; and
- Capital improvement projects listing.

Prepared by: Angela Saccareccia, Finance Manager

ATTACHMENTS:

Proposed Two-Year JPA Budget Plan for Fiscal Years 2020-22



Las Virgenes – Triunfo Joint Powers Authority

FY 2020-21
and
FY 2021-22
Budget

**Las Virgenes – Triunfo
Joint Powers Authority**

Fiscal Year 2020-21
And
Fiscal Year 2021-22

Triunfo Water & Sanitation District

James Wall - Vice Chair
Raymond Tjulander
Jane Nye
Janna Orkney
Leon Shapiro

Mark Norris – General Manager

Las Virgenes Municipal Water District

Jay Lewitt - Chair
Leonard Polan
Charles Caspary
Lynda Lo-Hill
Lee Renger

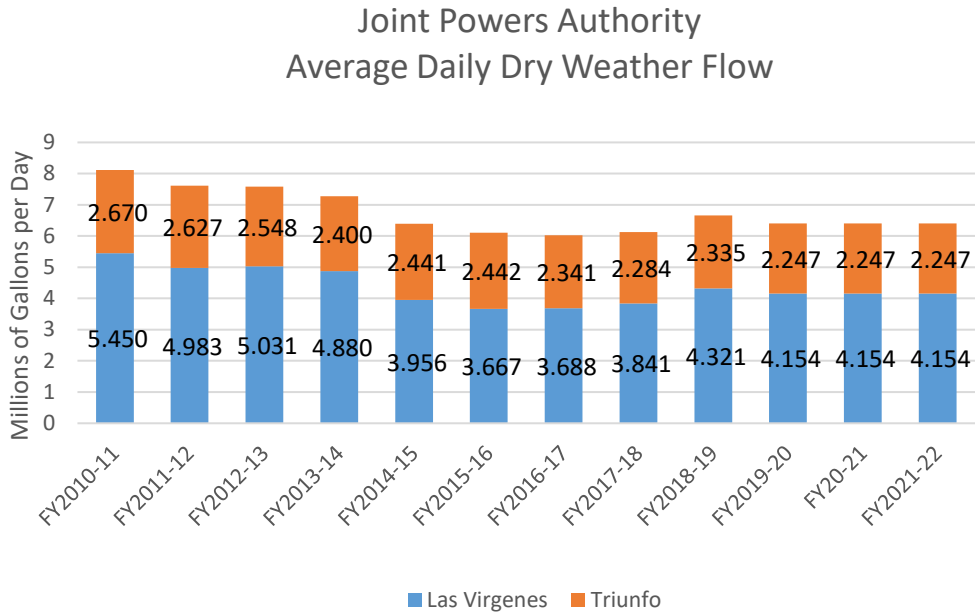
David Pedersen – General Manager

Administering Agency:
Las Virgenes Municipal Water District
4232 Las Virgenes Road
Calabasas, CA 91302-1994
818.251.2100
www.lvmwd.com

BUDGET OVERVIEW

The following pages present an overview of the Fiscal Year 2020-22 Joint Powers Authority Budget created within the terms of the Joint Powers Authority agreement.

The following graph shows the participant's sewage flows since FY 2010-11. The reduction in flows reflects low growth policies of cities within the watershed, diversion of some sewage to the City of Los Angeles, water allocations to customers within the respective sewer service areas of the Joint Powers Authority partners, and conservation efforts due to the on-going statewide drought for the last several years. The budgeted flows in FY 2020-22 assume no increase as the impacts of the drought are expected to level off.

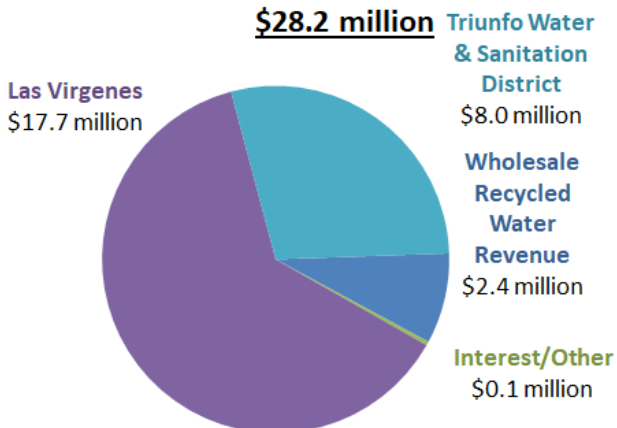


Source of Joint Powers Authority Funds

The Joint Powers Authority (JPA) receives revenue from sales of recycled water, compost sales and from interest revenue, but the JPA partners contribute most of the funds for the JPA, as shown below.

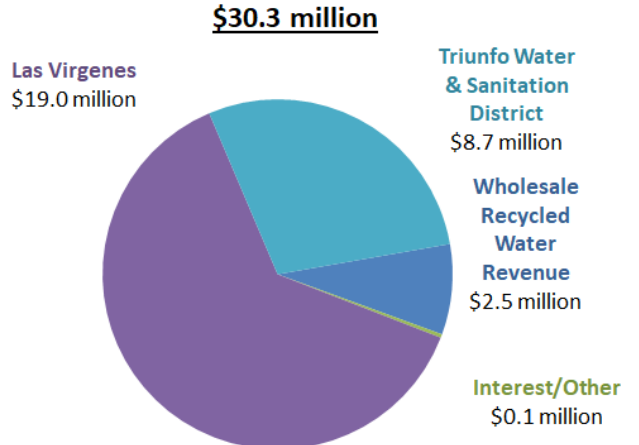
**JOINT POWERS AUTHORITY
FY 2020-21 SOURCES OF FUNDS**

\$28.2 million



**JOINT POWERS AUTHORITY
FY 2021-22 SOURCES OF FUNDS**

\$30.3 million



The operating expenses of the JPA are allocated to the participants in four ways, depending upon the type of expenses. The basis of allocation is:

- Participants' reserve capacity rights in the trunk sewer (FY 2020-21 and FY 2021-22: LVMWD 39.4%; TWSD 60.6%),
- Participants' reserve capacity rights in the treatment plant and recycled water system (FY 2020-21 and FY 2021-22: LVMWD 70.6%; TWSD 29.4%),
- Participants' flow into the treatment plant (varies monthly – FY 2020-21: projected to be LVMWD 63.1%; TWSD 36.9%, and FY 2021-22: projected to be LVMWD 63.1%; TWSD 36.9%), or
- Equal shares by participants for audit and meter station expense.

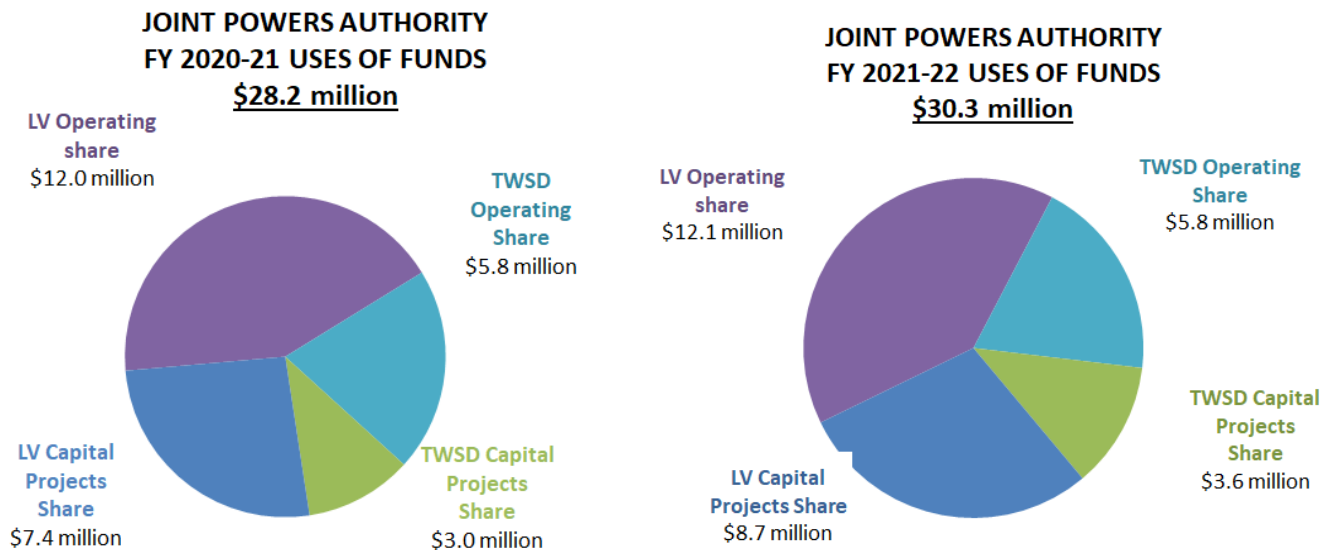
Because allocation of expense varies by type of expense, the overall percentage allocated to each participant changes from year to year. The total anticipated contribution from partners in FY 2020-21 is estimated to be \$0.6 million more than budgeted in FY 2019-20 for operations contribution and \$0.7 million more in capital projects contribution. For FY 2021-22, operations contribution is estimated to be \$0.1 million less than budgeted in FY2020-21 and \$1.9 million more in capital projects contribution.

LAS VIRGENES - TRIUNFO JOINT POWERS AUTHORITY
WORKING CAPITAL ANALYSIS - SOURCES OF FUNDS

	FY2017-18 ACTUAL	FY2018-19 ACTUAL	FY2019-20 BUDGET	FY2019-20 EST. ACTUAL	FY2020-21 BUDGET	FY2021-22 BUDGET
Operating Revenue						
Recycled Water Revenue						
Las Virgenes Municipal Water District	1,603,106	1,503,857	1,838,299	1,882,618	1,838,192	1,954,050
Triunfo Water & Sanitation District	678,150	564,870	849,097	579,991	540,397	573,984
Total Recycled Water Revenue	<u>2,281,256</u>	<u>2,068,727</u>	<u>2,687,396</u>	<u>2,462,609</u>	<u>2,378,589</u>	<u>2,528,034</u>
MWD Incentive - Local Projects	-	-	-	-	-	-
Other	64,477	46,547	80,000	65,000	80,000	80,000
Total Operating Revenue	<u>2,345,733</u>	<u>2,115,274</u>	<u>2,767,396</u>	<u>2,527,609</u>	<u>2,458,589</u>	<u>2,608,034</u>
Interest & Other Revenue	<u>69,273</u>	<u>164,219</u>	<u>20,000</u>	<u>20,000</u>	<u>20,000</u>	<u>20,000</u>
Participant's Contribution						
Las Virgenes Municipal Water District						
Operations	8,954,214	9,251,780	9,918,452	9,571,594	10,323,097	10,235,773
Capital Projects	4,305,115	5,809,903	6,818,691	5,009,664	7,347,053	8,740,169
Total Las Virgenes Triunfo	<u>13,259,329</u>	<u>15,061,683</u>	<u>16,737,143</u>	<u>14,581,258</u>	<u>17,670,150</u>	<u>18,975,942</u>
Water & Sanitation District						
Operations	4,309,989	4,458,738	4,874,758	4,552,173	5,006,173	5,020,493
Capital Projects	1,792,781	2,419,422	2,839,512	2,086,177	3,059,538	3,639,674
Total Triunfo	<u>6,102,770</u>	<u>6,878,160</u>	<u>7,714,270</u>	<u>6,638,350</u>	<u>8,065,711</u>	<u>8,660,167</u>
Total Sources of Funds	<u>21,777,105</u>	<u>24,219,336</u>	<u>27,238,809</u>	<u>23,767,217</u>	<u>28,214,450</u>	<u>30,264,143</u>

Use of Joint Powers Authority Funds

For operations and capital improvement projects, the use of funds in the proposed budget is \$28.2 million for FY 2020-21, and \$30.3 million for FY 2021-22, as shown below.



The proposed operating expenses for FY 2020-21 are approximately \$247 thousand or 1.41% higher than the adopted budget for FY 2019-20. The main drivers for the increased operating expenses are projected increases of allocated labor and support costs offset by decreases in electricity costs. Capital projects have increased by \$0.7 million for FY 2020-21. For FY 2021-22 operating expenses are \$76 thousand more than budgeted in FY2020-21 primarily due to increased allocated labor and support costs offset by decreases in electricity costs.

The proposed capital improvement project (CIP) budget for FY 2020-21 is approximately \$0.7 million higher than the budget for FY2019-20. This variance is detailed in the capital improvement projects detailed listing and varies from year-to-year based on the approved CIP and the timing of project completion. For FY 2021-22, capital improvement projects budget is approximately \$2.7 million more than budgeted in FY 2020-21.

LAS VIRGENES - TRIUNFO JOINT POWERS AUTHORITY WORKING CAPITAL ANALYSIS - USES OF FUNDS

	FY2017-18 ACTUAL	FY2018-19 ACTUAL	FY2019-20 BUDGET	FY2019-20 EST. ACTUAL	FY2020-21 BUDGET	FY2021-22 BUDGET
Operating Expenses						
Las Virgenes Municipal Water District	10,583,466	10,793,257	11,866,909	11,253,179	12,020,305	12,071,903
Triunfo Water & Sanitation District	5,095,743	5,196,754	5,713,697	5,418,197	5,787,554	5,812,397
Total Operating Expenses	15,679,209	15,990,011	17,580,606	16,671,376	17,807,859	17,884,300
Non-Operating Expenses						
Las Virgenes Municipal Water District	-	-	-	-	-	-
Triunfo Water & Sanitation District	-	-	-	-	-	-
Total Non-Operating Expenses	-	-	-	-	-	-
Capital Projects						
Las Virgenes Municipal Water District	4,305,115	5,809,903	6,818,691	5,009,664	7,347,053	8,740,169
Triunfo Water & Sanitation District	1,792,781	2,419,422	2,839,512	2,086,177	3,059,538	3,639,674
Total Capital Projects	6,097,896	8,229,325	9,658,203	7,095,841	10,406,591	12,379,843
Total Uses of Funds	21,777,105	24,219,336	27,238,809	23,767,217	28,214,450	30,264,143

Wholesale Recycled Water Rates

At the JPA meeting on June 6, 2011, the joint board approved a new formula for determining the wholesale price of recycled water, that is, the price that the JPA charges to its two customers—Las Virgenes Municipal Water District and Triunfo Water & Sanitation District. Previously, the wholesale rate for recycled water was based upon the operating costs for recycled water reservoirs, system operations and pump stations (only for areas in which pumping is necessary). This represents the operating costs of recycled water. The new formula, effective July 1, 2011, used the operating costs and added the administrative overhead for recycled water operations and a depreciation expense for recycled water capital assets. The July 1, 2020 proposed wholesale rate for recycled water with pumping is \$429.91 per acre foot, which is lower than the previous rate of \$480.53 per acre foot. The July 1, 2021 proposed wholesale rate for recycled water with pumping is \$456.63 per acre foot, which is higher than the previous rate of \$429.91 per acre foot. For FY 2020-21 wholesale recycled water delivered to the Las Virgenes Valley, which does not require additional pumping, the proposed rate of \$326.32 per acre foot is a decrease from \$346.65 per acre foot in the prior year. For FY 2021-22 wholesale recycled water delivered to the Las Virgenes Valley, which does not require additional pumping, the proposed rate of \$353.04 per acre foot is an increase from \$326.32 per acre foot in FY 2020-21.

Allocation of General and Administrative Costs

The general and administrative costs of Las Virgenes Municipal Water District are distributed among its three enterprises (potable water, recycled water and sanitation), its capital improvement projects, and the operations of the JPA. In accordance with the original Joint Powers Authority agreement, the general and administrative costs are distributed to the JPA based upon direct labor hours.

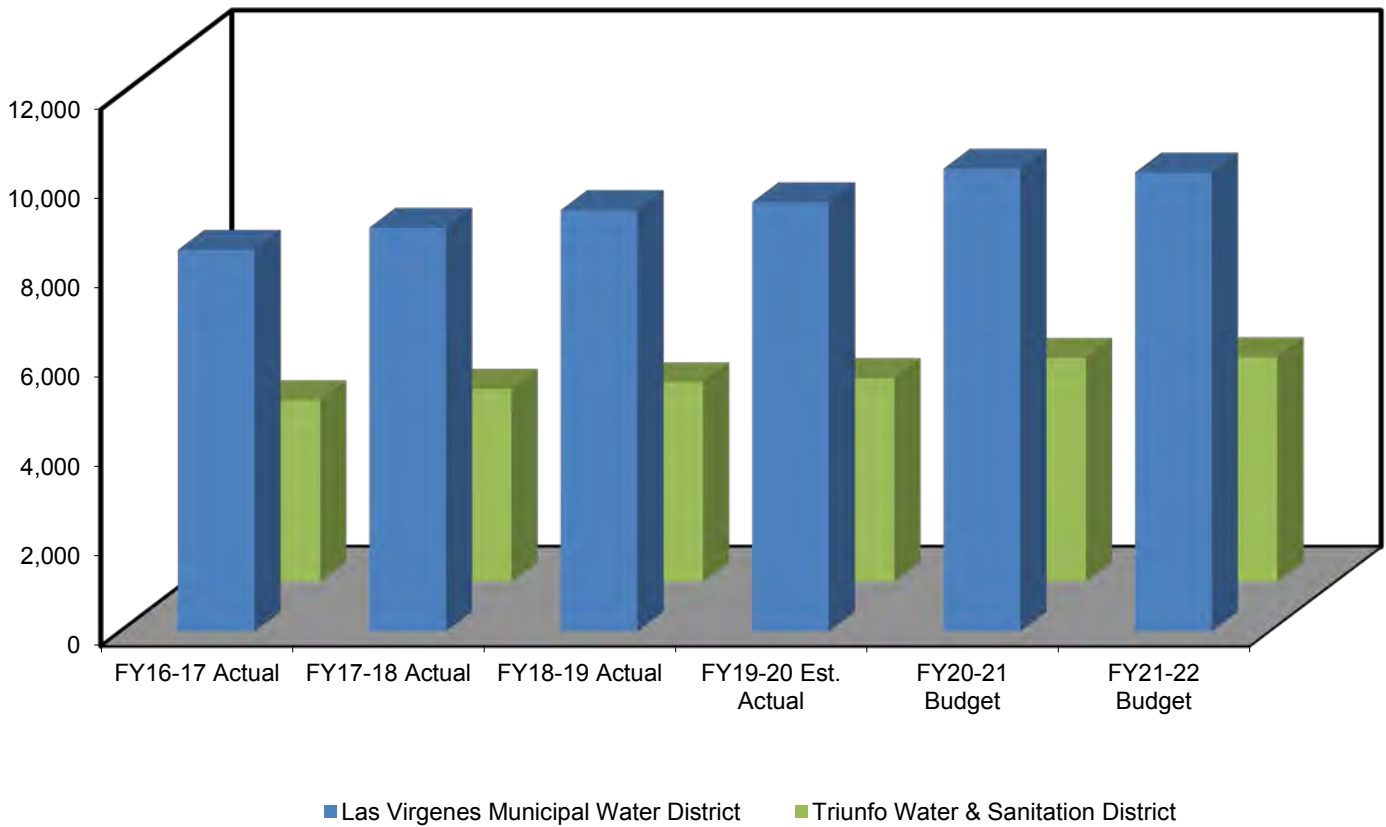
Capital Improvement Projects

The Capital improvement projects are shown by enterprise (Recycled Water and Sanitation) and by project number. This corresponds to the classification of the funding by LVMWD and agrees with the JPA capital budget.

**Las Virgenes - Triunfo
Joint Powers Authority
Allocated Net Expense Summary
(Dollars in Thousands)**

	FY16-17 Actual	FY17-18 Actual	FY18-19 Actual	FY19-20 Est. Actual	FY20-21 Budget	FY21-22 Budget
JPA Revenues	2,168	2,346	2,115	2,528	2,459	2,608
JPA Expenses	14,755	15,679	15,990	16,671	17,808	17,884
Net Operating Expense	12,587	13,333	13,875	14,143	15,349	15,276

	FY16-17 Actual	FY17-18 Actual	FY18-19 Actual	FY19-20 Est. Actual	FY20-21 Budget	FY21-22 Budget
Las Virgenes Municipal Water District	8,528	9,023	9,416	9,592	10,343	10,256
Triunfo Water & Sanitation District	4,059	4,310	4,459	4,552	5,006	5,020
Total Allocated Expenses	12,587	13,333	13,875	14,144	15,349	15,276



FISCAL YEAR 2019-20 ESTIMATED ACTUAL
ESTIMATED ACTUAL FY 2019-20

EXPENSES (REVENUES)	JPA EXPENSES BY ALLOCATION GROUPS					
	A	B	C	D	E	TOTAL
SEWER EXPENSE	160,110	0	0	0	0	160,110
TREATMENT RECLAMATION	0	6,106,094	2,633,922	0	0	8,740,016
TREATMENT COMPOSTING	0	3,814,086	1,466,499	0	0	5,280,585
TREATMENT INJECTION	0	152,197	93,677	0	0	245,874
PUMP STATIONS	0	1,112,158	0	0	0	1,112,158
TANKS/RESERVOIR WELLS	0	56,789	0	0	0	56,789
SYSTEM OPERATION	0	9,145	0	0	0	9,145
WATER SYSTEM	0	95,730	0	0	0	95,730
ADMINISTRATIVE EXPENSES	0	965,469	0	6,000	0	971,469
PWP DEMO	0	0	0	0	0	0
REVENUES	0	(2,527,609)	0	0	0	(2,527,609)
	A	B	C	D	E	TOTAL

	A		B		C		D		E		TOTAL	
	%	\$	%	\$	%	\$	%	\$	%	\$		
U-1 SANITATION DISTRICT	36.3%	58,120	53.1%	5,644,264	43.3%	1,816,044	25.0%	1,500	82.2%	0	53.2%	7,519,928
U-2 SANITATION DISTRICT	3.1%	4,963	17.5%	1,860,162	20.5%	859,790	25.0%	1,500	0.0%	0	19.3%	2,726,415
RECYCLED WATER FUND			(656,394)								-4.6%	(656,394)
TOTAL LVMWD	39.4%	63,083	70.6%	6,848,032	63.8%	2,675,834	50.0%	3,000	82.2%	0	67.9%	9,589,949
TRIUNFO WSD	60.6%	97,027	29.4%	2,936,027	36.2%	1,518,264	50.0%	3,000	17.8%	0	32.1%	4,554,318
	A	B	C	D	E	TOTAL						

GROUP

- A** Basis of allocation to each participant is participant's reserve capacity rights in the trunk sewer.
- B** Basis of allocation to each participant is participant's reserve capacity rights in the treatment plant and recycled water system.
- C** Basis of allocation to each participant is participant's flow into the treatment plant.
- D** Each participant is allocated an equal share.
- E** Basis of allocation is each participant's average monthly cash balance.

JOINT POWERS AUTHORITY
PARTICIPANT SEWAGE FLOWS and EXPENSE ALLOCATION
ESTIMATED ACTUAL FY 2019-20

PARTICIPANT	PROJECTED SEWAGE FLOWS			ALLOCATION OF TOTAL EXPENSES TO PARTICIPANTS		
	MILLION GALLONS PER DAY (MGD)	MILLION GALLONS PER YEAR (MG)	PERCENT BASED ON FLOWS	TOTAL EXP	\$ PER MG	%
	(A)	(B)	(C)	(D)	(D) / (B)	
U-1 SANITATION DISTRICT	2.74	1,001	43.3%	7,026,238	7,019	49.7%
U-2 SANITATION DISTRICT	1.30	473	20.5%	2,563,711	5,420	18.1%
LVMWD	4.04	1,474	63.8%	9,589,949	6,506	67.8%
TRIUNFO WSD	2.30	838	36.2%	4,554,318	5,435	32.2%
TOTAL ALL PARTICIPANTS	6.33	2,312	100.0%	14,144,267	6,118	100.0%
RETURN FLOWS	1.04	380				
WESTLAKE WELLS	0.24	89				
	7.62	2,781				

FISCAL YEAR 2020-21 OPERATING BUDGET
ALLOCATION OF JOINT POWERS EXPENSES TO PARTICIPANTS

EXPENSES (REVENUES)	JPA EXPENSES BY ALLOCATION GROUPS					
	A	B	C	D	E	TOTAL
SEWER EXPENSE	213,049	0	0	0	0	213,049
TREATMENT RECLAMATION	0	5,792,291	2,490,609	0	0	8,282,900
TREATMENT COMPOSTING	0	3,806,205	1,825,857	0	0	5,632,062
TREATMENT INJECTION	0	174,102	133,343	0	0	307,445
PUMP STATIONS	0	1,116,120	0	0	0	1,116,120
TANKS/RESERVOIR WELLS	0	75,036	0	0	0	75,036
SYSTEM OPERATION	0	18,002	0	0	0	18,002
WATER SYSTEM	0	108,842	0	0	0	108,842
ADMINISTRATIVE EXPENSES	0	1,058,981	0	6,000	0	1,064,981
PWP DEMO	0	989,422	0	0	0	989,422
REVENUES	0	(2,458,589)	0	0	0	(2,458,589)
TOTAL EXPENSES	213,049	10,680,412	4,449,809	6,000	0	15,349,269

PARTICIPANTS SHARE	ALLOCATION OF EACH GROUP TO PARTICIPANTS											
	%	\$	%	\$	-1	\$	%	\$	%	\$		
U-1 SANITATION DISTRICT	36.3%	77,337	53.1%	6,120,227	42.1%	1,873,370	25.0%	1,500	82.2%	0	52.6%	8,072,434
U-2 SANITATION DISTRICT	3.1%	6,605	17.5%	2,017,024	21.0%	934,460	25.0%	1,500	0.0%	0	19.3%	2,959,589
RECYCLED WATER FUND				(688,926)							-4.5%	(688,926)
TOTAL LVMWD	39.4%	83,942	70.6%	7,448,325	63.1%	2,807,830	50.0%	3,000	82.2%	0	67.4%	10,343,097
TRIUNFO WSD	60.6%	129,107	29.4%	3,232,087	36.9%	1,641,979	50.0%	3,000	17.8%	0	32.6%	5,006,173
TOTAL ALLOCATION	100.0%	213,049	100.0%	10,680,412	100.0%	4,449,809	100.0%	6,000	100.0%	0	100.0%	15,349,269

GROUP

- A** Basis of allocation to each participant is participant's reserve capacity rights in the trunk sewer.
- B** Basis of allocation to each participant is participant's reserve capacity rights in the treatment plant and recycled water system.
- C** Basis of allocation to each participant is participant's flow into the treatment plant.
- D** Each participant is allocated an equal share.
- E** Basis of allocation is each participant's average monthly cash balance.

JOINT POWERS AUTHORITY
PARTICIPANT SEWAGE FLOWS and EXPENSE ALLOCATION
FY 2020-21

PARTICIPANT	PROJECTED SEWAGE FLOWS			ALLOCATION OF TOTAL EXPENSES TO PARTICIPANTS		
	MILLION GALLONS PER DAY (MGD)	MILLION GALLONS PER YEAR (MG)	PERCENT BASED ON FLOWS	TOTAL EXP	\$ PER MG	%
	(A)	(B)	(C)	(D)	(D) / (B)	
U-1 SANITATION DISTRICT	2.60	949	42.1%	7,554,276	7,960	49.2%
U-2 SANITATION DISTRICT	1.30	474	21.0%	2,788,821	5,884	18.2%
LVMWD	3.90	1,423	63.1%	10,343,097	7,269	67.4%
TRIUNFO WSD	2.28	833	36.9%	5,006,173	6,010	32.6%
TOTAL ALL PARTICIPANTS	6.18	2,256	100.0%	15,349,269	6,804	100.0%
RETURN FLOWS	1.13	414				
WESTLAKE WELLS	0.27	100				
	7.59	2,770				

FISCAL YEAR 2021-22 OPERATING BUDGET
ALLOCATION OF JOINT POWERS EXPENSES TO PARTICIPANTS

EXPENSES (REVENUES)	JPA EXPENSES BY ALLOCATION GROUPS					
	A	B	C	D	E	TOTAL
SEWER EXPENSE	214,960	0	0	0	0	214,960
TREATMENT RECLAMATION	0	5,832,047	2,555,935	0	0	8,387,982
TREATMENT COMPOSTING	0	3,851,648	1,818,464	0	0	5,670,112
TREATMENT INJECTION	0	175,536	134,371	0	0	309,907
PUMP STATIONS	0	1,247,995	0	0	0	1,247,995
TANKS/RESERVOIR WELLS	0	73,273	0	0	0	73,273
SYSTEM OPERATION	0	19,818	0	0	0	19,818
WATER SYSTEM	0	118,646	0	0	0	118,646
ADMINISTRATIVE EXPENSES	0	1,049,628	0	6,000	0	1,055,628
PWP DEMO	0	785,978	0	0	0	785,978
REVENUES	0	(2,608,034)	0	0	0	(2,608,034)
TOTAL EXPENSES	214,960	10,546,536	4,508,770	6,000	0	15,276,266
	A	B	C	D	E	TOTAL

PARTICIPANTS SHARE	ALLOCATION OF EACH GROUP TO PARTICIPANTS											
	%	\$	%	\$	1	\$	%	\$	%	\$		
U-1 SANITATION DISTRICT	36.3%	78,031	53.1%	6,049,139	42.4%	1,911,718	25.0%	1,500	82.2%	0	52.6%	8,040,388
U-2 SANITATION DISTRICT	3.1%	6,664	17.5%	1,993,596	20.8%	937,824	25.0%	1,500	0.0%	0	19.2%	2,939,584
RECYCLED WATER FUND				(724,199)							-4.7%	(724,199)
TOTAL LVMWD	39.4%	84,695	70.6%	7,318,536	63.2%	2,849,542	50.0%	3,000	82.2%	0	67.1%	10,255,773
TRIUNFO WSD	60.6%	130,265	29.4%	3,228,000	36.8%	1,659,228	50.0%	3,000	17.8%	0	32.9%	5,020,493
TOTAL ALLOCATION	100.0%	214,960	100.0%	10,546,536	100.0%	4,508,770	100.0%	6,000	100.0%	0	100.0%	15,276,267
	A		B		C		D		E		TOTAL	

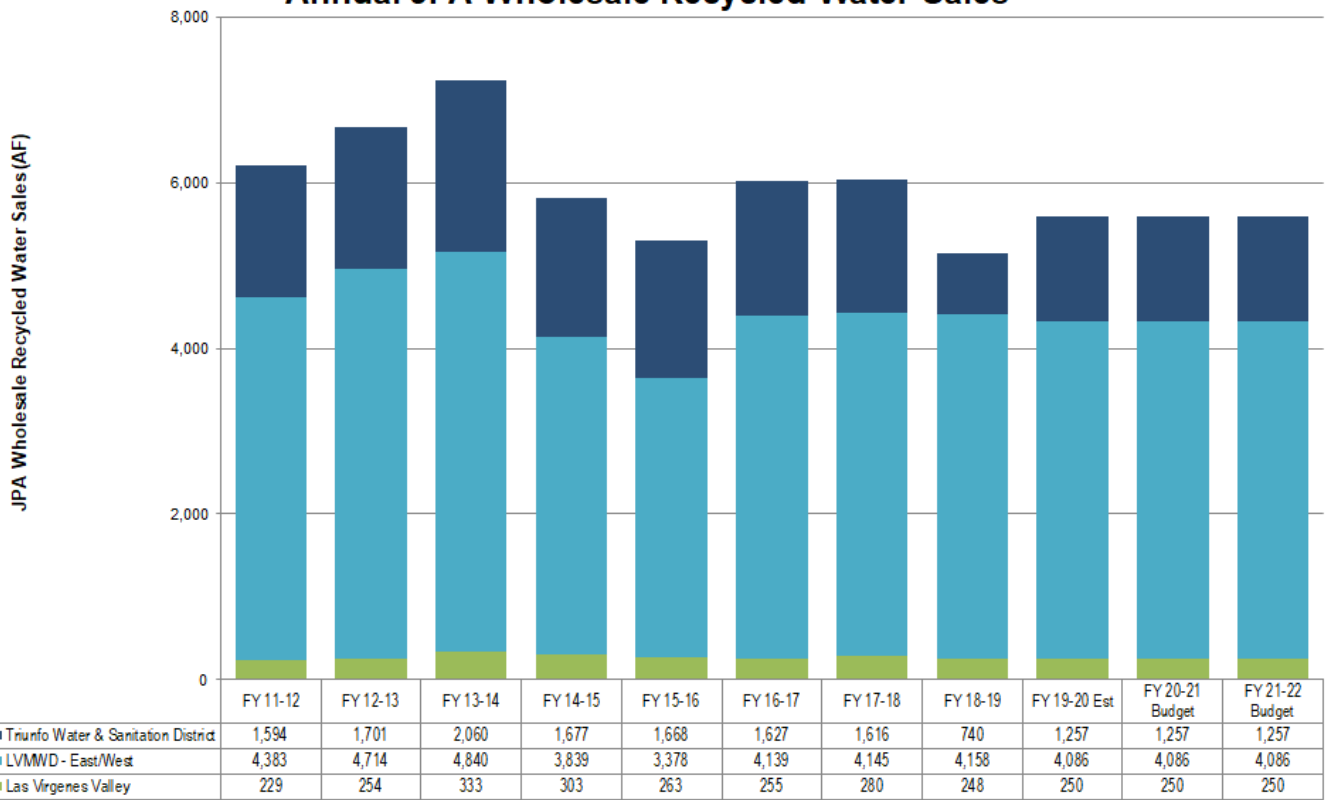
GROUP

- A** Basis of allocation to each participant is participant's reserve capacity rights in the trunk sewer.
- B** Basis of allocation to each participant is participant's reserve capacity rights in the treatment plant and recycled water system.
- C** Basis of allocation to each participant is participant's flow into the treatment plant.
- D** Each participant is allocated an equal share.
- E** Basis of allocation is each participant's average monthly cash balance.

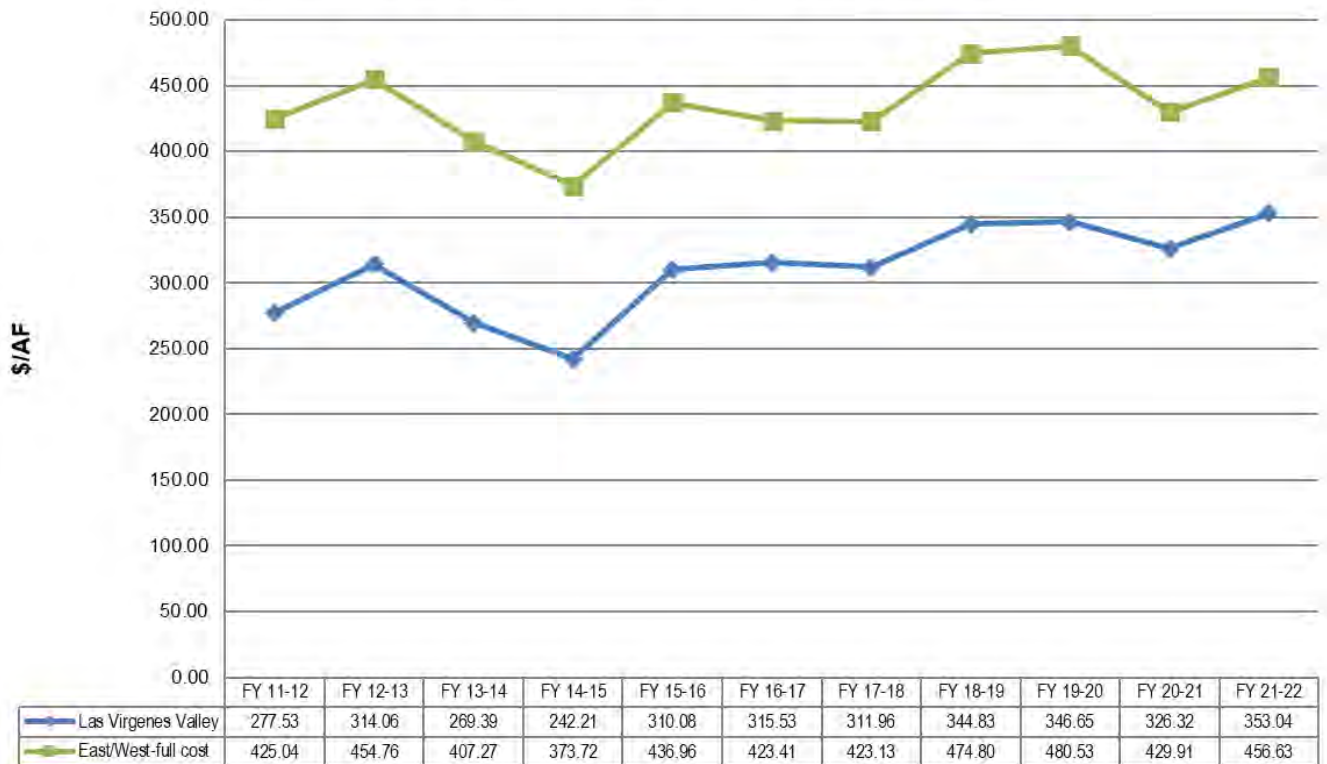
JOINT POWERS AUTHORITY
PARTICIPANT SEWAGE FLOWS and EXPENSE ALLOCATION
FY 2021-22

PARTICIPANT	PROJECTED SEWAGE FLOWS			ALLOCATION OF TOTAL EXPENSES TO PARTICIPANTS		
	MILLION GALLONS PER DAY (MGD)	MILLION GALLONS PER YEAR (MG)	PERCENT BASED ON FLOWS	TOTAL EXP	\$ PER MG	%
	(A)	(B)	(C)	(D)	(D) / (B)	
U-1 SANITATION DISTRICT	2.65	967	42.4%	7,495,700	7,751	49.1%
U-2 SANITATION DISTRICT	1.30	475	20.8%	2,760,073	5,811	18.1%
LVMWD	3.95	1,442	63.2%	10,255,773	7,112	67.2%
TRIUNFO WSD	2.30	838	36.8%	5,020,493	5,991	32.8%
TOTAL ALL PARTICIPANTS	6.25	2,280	100.0%	15,276,267	6,700	100.0%
RETURN FLOWS	1.12	409				
WESTLAKE WELLS	0.27	97				
	7.63	2,786				

Annual JPA Wholesale Recycled Water Sales



JPA Wholesale Recycled Water rates



RW WHOLESALE RATE COMPUTATIONS

FY 2020-21 Budgeted Costs	Total Cost	Base Cost	Add'l Pumping	East-West Cost
Pump Stations	1,117,771	564,271	553,500	
Reservoirs	75,169	75,169		
System Operations	18,020	18,020		
Distribution	109,056	109,056		
RW Operations	<u>1,320,016</u>			
RW Ops/JPA Ops	7.9%			
Total JPA Admin	1,046,346			
RW Administration	82,766	82,766		
subtotal: Operations & Admin	<u>1,402,782</u>	<u>849,282</u>		
Depreciation FY18-19	975,816	975,816	-	
Total Cost	\$ 2,378,598	\$ 1,825,098	\$ 553,500	

Costs per Acre Foot	\$ 326.32	\$ 103.59	\$ 429.91
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FY 2020-21 Estimated Deliveries

	Acre Feet	Rate	
LV Valley	250	\$ 326.32 /AF	\$ 81,580.00
LVMWD East	1,856	\$ 429.91 /AF	\$ 797,912.96
LVMWD West	2,230	\$ 429.91 /AF	\$ 958,699.30
Total LVMWD	<u>4,336</u>		<u>\$ 1,838,192.26</u>
TWSD	1,257	\$ 429.91 /AF	\$ 540,396.87
	<u>5,593</u>		<u>\$ 2,378,589.13</u>

RW WHOLESALE RATE COMPUTATIONS

FY 2021-22 Budgeted Costs	Total Cost	Base Cost	Add'l Pumping	East-West Cost
Pump Stations	1,249,507	696,007	553,500	
Reservoirs	73,395	73,395		
System Operations	19,836	19,836		
Distribution	118,842	118,842		
RW Operations	<u>1,461,580</u>			
RW Ops/JPA Ops	8.7%			
Total JPA Admin	1,037,019			
RW Administration	90,635	90,635		
subtotal:Operations & Admin	<u>1,552,215</u>	<u>998,715</u>		
Depreciation FY18-19	975,816	975,816	-	
Total Cost	\$ 2,528,031	\$ 1,974,531	\$ 553,500	
Costs per Acre Foot		\$ 353.04	\$ 103.59	\$ 456.63

FY 2020-21 Estimated Deliveries

	Acre Feet	Rate	
LV Valley	250	\$ 353.04 /AF	\$ 88,260.00
LVMWD East	1,856	\$ 456.63 /AF	\$ 847,505.28
LVMWD West	2,230	\$ 456.63 /AF	\$ 1,018,284.90
Total LVMWD	<u>4,336</u>		<u>\$ 1,954,050.18</u>
TWSD	1,257	\$ 456.63 /AF	\$ 573,983.91
	<u>5,593</u>		<u>\$ 2,528,034.09</u>

**Las Virgenes - Triunfo
Joint Powers Authority
Operations Summary**

	FY 16-17 Actual	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Budget	FY 19-20 Est. Actual	FY 20-21 Budget	FY 21-22 Budget
OPERATING REVENUES							
4235 RW Sales - LVMWD	\$1,369,024	\$1,603,106	\$1,503,857	\$1,838,299	\$1,882,618	\$1,838,192	\$1,954,050
4240 RW Sales - TWSD	688,676	678,150	564,870	849,097	579,991	540,397	573,984
4245 MWD Incentive - Local Projects	0	0	0	0	0	0	0
4505 Other Income from Operations	96,197	55,595	45,736	65,000	65,000	65,000	65,000
4510 Compost Sales	14,161	8,882	811	15,000	0	15,000	15,000
TOTAL OPERATING REVENUES	\$2,168,058	\$2,345,733	\$2,115,274	\$2,767,396	\$2,527,609	\$2,458,589	\$2,608,034
SOURCE OF SUPPLY							
5115 Purchased Water - Potable Suppl	34,124	0	0	0	30,020	0	0
OPERATIONS DIVISION EXPENSE							
5400 Labor	1,986,771	1,972,298	2,201,788	2,263,114	2,245,774	2,346,619	2,397,826
5405.1 Electricity	2,101,399	2,270,433	1,895,554	2,509,986	1,836,813	1,737,800	1,915,300
5405.2 Telephone	52,977	20,075	31,719	43,228	35,500	33,000	32,000
5405.3 Natural Gas	21,443	16,244	15,712	21,413	16,000	21,400	21,400
5405.4 Water	7,956	11,493	11,949	9,066	11,428	12,500	12,300
5410 Supplies/Material	72,756	80,218	81,596	79,648	73,430	80,950	80,950
5410.1 Fuel	26,208	20,065	17,805	29,298	12,000	30,050	30,100
5410.5 Ferric Chloride	42,204	37,853	35,505	54,456	49,000	60,000	60,000
5410.6 Defoamer/Deodorant	6,082	7,079	3,981	4,120	3,000	4,120	4,120
5410.7 Polymer	120,588	117,798	149,870	108,876	81,000	147,000	147,000
5410.8 Amendment	142,893	101,919	48,336	123,600	21,000	135,000	135,000
5410.9 Alum	6,864	6,917	11,127	9,489	14,000	12,000	12,000
5410.10 Sodium Hypochlorite	212,248	184,319	297,177	208,274	225,000	230,000	230,000
5410.11 Sodium Bisulfite	77,498	98,766	91,143	115,936	91,000	115,936	115,936
5410.13 Aqua Ammonia	31,675	27,657	30,616	31,669	19,000	31,699	31,699
5415 Outside Services	57,168	58,373	335,694	58,400	288,525	555,650	246,650
5417 Odor Control	143,703	141,619	75,610	200,850	57,000	185,000	185,000
5420 Permits and Fee	193,347	174,028	182,576	191,295	205,031	220,100	220,200
5425 Consulting Services	0	96,515	46,286	4,302	37,000	180,000	90,000
5430 Capital Outlay	23,994	0	98,630	65,000	88,000	155,000	155,000
Sub-total	\$5,327,774	\$5,443,669	\$5,662,674	\$6,132,020	\$5,409,501	\$6,293,824	\$6,122,481
MAINTENANCE DIVISION EXPENSE							
5500 Labor	1,211,888	1,228,843	1,231,514	1,400,989	1,215,833	1,252,844	1,274,732
5510 Supplies/Material	396,570	380,410	431,805	483,500	278,250	294,000	304,000
5515 Outside Services	437,628	350,741	362,045	341,450	351,700	374,450	437,450
5518 Building Maintenance	88,631	105,941	130,815	116,000	247,677	282,177	283,645
5520 Permits and Fee	580	1,211	0	500	0	500	500
5525 Consulting Services	2,252	0	0	0	0	0	0
5530 Capital Outlay	45,774	161,552	26,094	95,000	88,000	65,000	70,000
Sub-total	\$2,183,323	\$2,228,698	\$2,182,273	\$2,437,439	\$2,181,460	\$2,268,971	\$2,370,327
INVENTORY EXPENSES							
5536 Inventory Adjustment	(2,393)	6,134	153,421	4,840	2,200	5,000	5,000
Sub-total	(\$2,393)	\$6,134	\$153,421	\$4,840	\$2,200	\$5,000	\$5,000
PUBLIC INFORMATION							
6602 School Education Program	22,535	14,394	2,586	20,971	814	20,000	20,000
6604 Public Education Program	70,275	45,330	29,554	67,722	23,627	20,069	20,842
6606 Community Group Outreach	1,182	2,911	0	6,028	0	8,000	8,000
6608 Intergovernmental Coordination	4,146	1,098	411	5,298	0	5,000	5,000
Sub-total	\$98,138	\$63,733	\$32,551	\$100,019	\$24,441	\$53,069	\$53,842
RESOURCE CONSERVATION							
6788 District Sprayfield	251,449	283,186	314,316	321,779	250,000	270,000	275,000
6789 005 Discharge	277	387	10,917	400	400	400	400
6785 Watershed Programs	60,773	17,097	1,800	46,594	14,000	20,000	20,000
Sub-total	\$312,499	\$300,670	\$327,033	\$368,773	\$264,400	\$290,400	\$295,400

**Las Virgenes - Triunfo
Joint Powers Authority
Operations Summary**

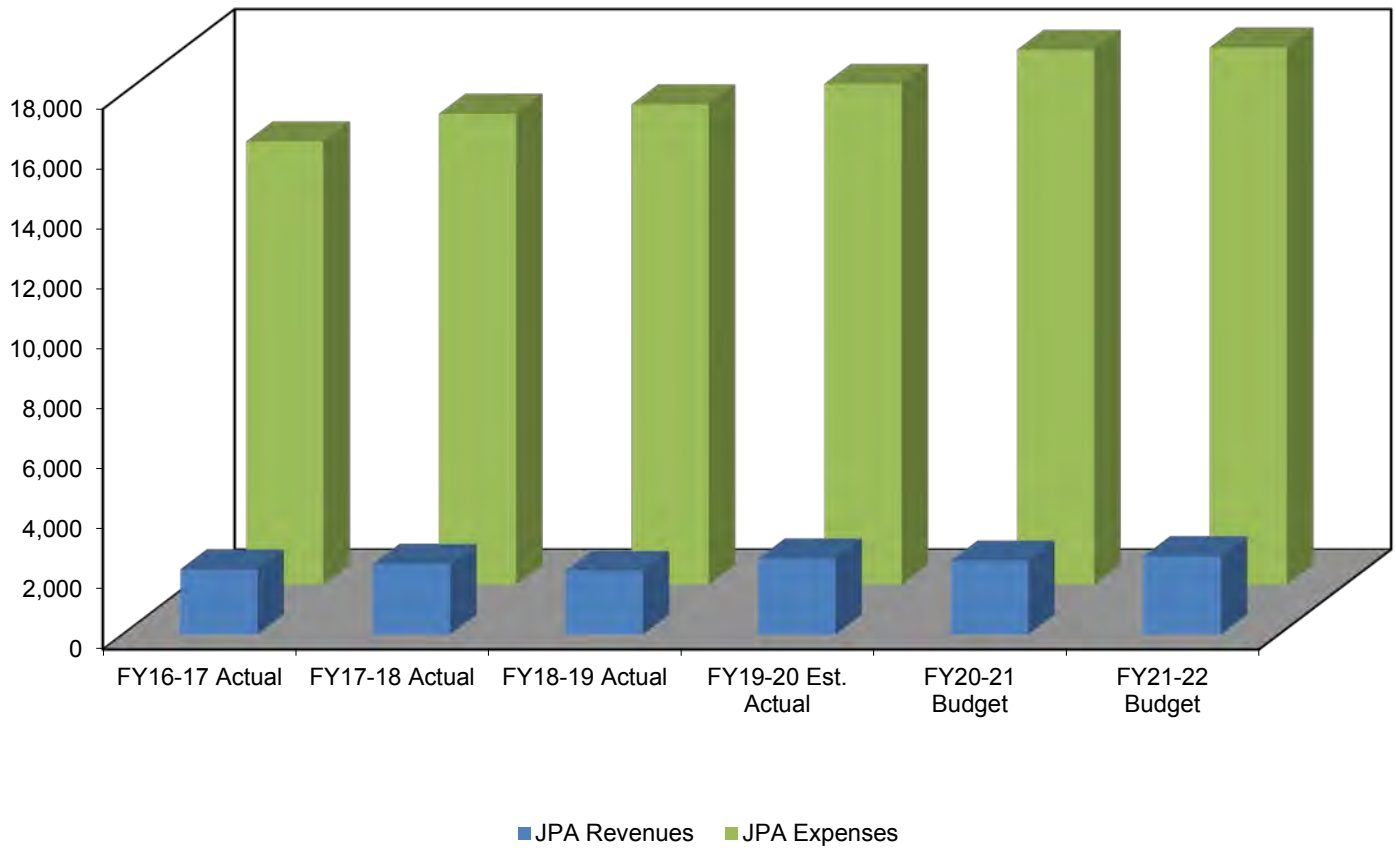
	FY 16-17 Actual	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Budget	FY 19-20 Est. Actual	FY 20-21 Budget	FY 21-22 Budget
SPECIALTY EXPENSES							
5700 SCADA Services	49,624	38,646	56,005	114,310	51,916	62,104	62,786
5710.2 Technical Services	0	0	1,313	646	12,287	13,763	16,164
5712 Compost Sales/Use Tax	2,922	3,246	2,989	4,000	4,000	4,000	4,000
5715.2 Other Lab Services	141,224	154,291	158,532	156,855	145,000	184,000	184,000
5715.3 Tapia Lab Sampling	125,705	130,352	131,436	151,302	123,246	187,269	193,001
7202 Allocated Lab Expense	378,015	399,644	441,847	449,138	521,277	529,280	531,736
Sub-total	\$697,490	\$726,179	\$792,122	\$876,251	\$857,726	\$980,416	\$991,687
ADMINISTRATIVE EXPENSES							
6872 Litigation/Outside Services*	83,990	49,115	206,946	25,000	135,000	0	0
6874 Litigation/District Costs*	0	0	0	0	0	0	0
6516 Other Professional Services	95,007	167,843	266,417	137,000	156,600	156,600	156,600
6517 Audit Fees	3,395	3,395	3,377	3,700	6,000	6,000	6,000
7110 Travel/Misc Staff Expense	248	0	0	0	0	0	0
7135.1 Property Insurance**	56,955	69,614	79,858	59,779	80,859	0	0
7135.4 Earthquake Insurance**	91,466	110,557	117,389	95,559	92,073	0	0
7145 Claims Paid	122,451	21,000	0	0	0	0	0
7153 TWSD Staff Services	0	0	0	5,000	5,500	6,000	6,000
7155 Other Expense	54,029	9,000	0	0	0	0	0
6260 Rental Charge - Facility Repl	371,357	351,674	377,618	363,316	355,453	363,316	363,316
6350 Allocated Insurance**	0	0	0	0	0	175,131	183,888
6351 Allocated Legal Services*	0	0	0	0	0	135,000	135,000
7203 Allocated Building Maint	83,651	89,824	153,010	88,804	92,424	115,392	96,642
7225 Allocated Support Services	3,528,201	4,099,146	3,906,942	4,713,915	4,691,661	4,825,693	4,908,437
7226 Allocated Operations Services	1,613,325	1,938,958	1,728,380	2,169,190	2,286,559	2,133,047	2,189,680
Sub-total	\$6,104,075	\$6,910,126	\$6,839,937	\$7,661,264	\$7,902,128	\$7,916,179	\$8,045,563
TOTAL EXPENSES	\$14,755,030	\$15,679,209	\$15,990,011	\$17,580,606	\$16,671,876	\$17,807,859	\$17,884,300
NET OPERATING EXPENSE	\$12,586,972	\$13,333,476	\$13,874,737	\$14,813,210	\$14,144,267	\$15,349,269	\$15,276,266

* Litigation was moved to Allocated Legal Services

** Property and Liability Insurance was moved to Allocated Insurance

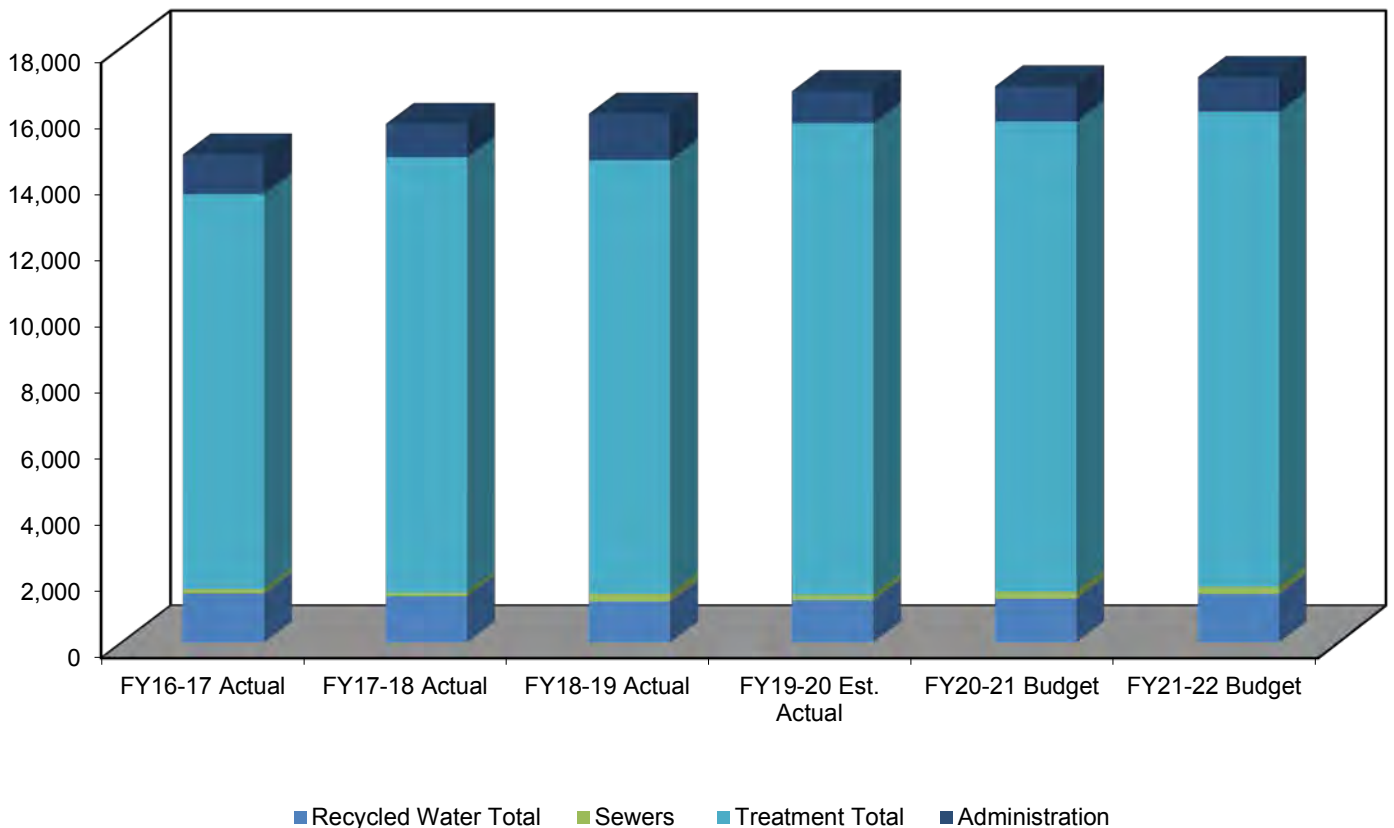
**Las Virgenes - Triunfo
Joint Powers Authority
Operations Summary
(Dollars in Thousands)**

	FY16-17 Actual	FY17-18 Actual	FY18-19 Actual	FY19-20 Est. Actual	FY20-21 Budget	FY21-22 Budget
JPA Revenues	2,168	2,346	2,115	2,528	2,459	2,608
JPA Expenses	14,755	15,679	15,990	16,671	17,808	17,884
Net Operating Expense	12,587	13,333	13,875	14,143	15,349	15,276



**Las Virgenes - Triunfo
Joint Powers Authority
Operating Expense Summary
(Dollars in Thousands)**

	FY16-17 Actual	FY17-18 Actual	FY18-19 Actual	FY19-20 Est. Actual	FY20-21 Budget	FY21-22 Budget
Pump Stations	1,214	1,189	1,113	1,112	1,116	1,248
Tank, Res, Wells	117	86	74	56	75	73
System Ops	28	20	15	9	18	20
Distribution	113	97	27	96	109	119
Recycled Water Total	1,472	1,392	1,229	1,273	1,318	1,460
PWP - Demonstration Proj.	0	0	0	0	989	786
Sewers	135	109	230	160	213	215
Reclamation	7,192	7,967	7,662	8,740	8,283	8,388
Composting	4,463	4,962	5,194	5,281	5,632	5,670
Centrate Treatment	297	245	271	246	307	310
Treatment Total	11,952	13,174	13,127	14,267	14,222	14,368
Administration	1,196	1,005	1,405	971	1,065	1,056
Total JPA Operations	14,755	15,680	15,991	16,671	17,807	17,885



JOINT POWERS AUTHORITY

Operating Revenues – 751000

LINE ITEM EXPLANATIONS

4235 Recycled Water Sales - LVMWD – Wholesale recycled water sales to Las Virgenes Municipal Water District. Wholesale rates are set to recover the costs of operating and administering the Recycled Water backbone distribution system. An additional amount, equal to the value of annual depreciation expense on the recycled water distribution system, is included in the wholesale recycled water rate.

Annual sales to each JPA partner is projected using the prior 3 years' average purchases by each JPA partner and adjusted as necessary for weather and outage conditions. For FY 2020-21 sales are projected to be 5,001 AF. For FY 2021-22 sales are projected to be 4,835 AF.

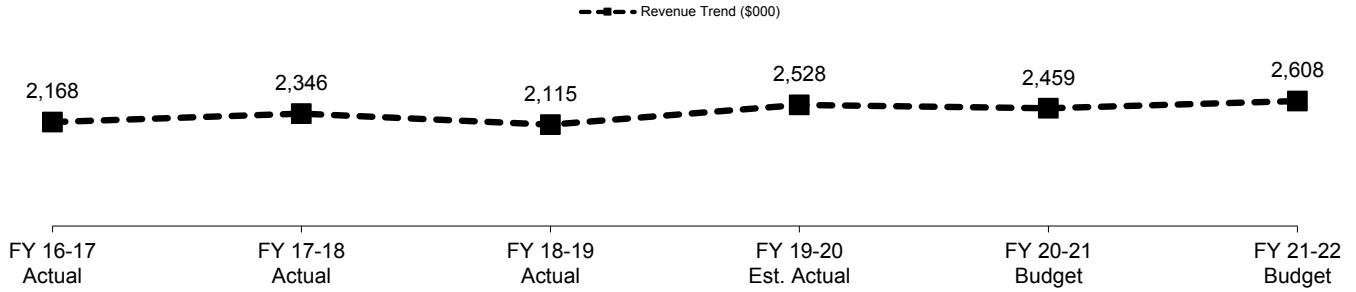
4240 Recycled Water Sales - TWSD – Wholesale recycled water sales to Triunfo Water and Sanitation District. Wholesale rates are set in the same manner as described above.

4505 Other Income from Operations – Primarily rental of tank sites to cellular telephone providers.

4510 Compost Sales – Commercial sales of compost produced at the Rancho Las Virgenes Composting Facility.

**Las Virgenes - Triunfo
Joint Powers Authority
Operating Revenues**

	FY 16-17 Actual	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Budget	FY 19-20 Est. Actual	FY 20-21 Budget	FY 21-22 Budget
OPERATING REVENUES							
4235 RW Sales - LVMWD	\$1,369,024	\$1,603,106	\$1,503,857	\$1,838,299	\$1,882,618	\$1,838,192	\$1,954,050
4240 RW Sales - TWSD	688,676	678,150	564,870	849,097	579,991	540,397	573,984
4505 Other Income from Operations	96,197	55,595	45,736	65,000	65,000	65,000	65,000
4510 Compost Sales	14,161	8,882	811	15,000	0	15,000	15,000
TOTAL OPERATING REVENUES	\$2,168,058	\$2,345,733	\$2,115,274	\$2,767,396	\$2,527,609	\$2,458,589	\$2,608,034



JOINT POWERS AUTHORITY

RW Pump Stations – 751100

FUNCTION

To provide appropriate training, operating, preventive maintenance and maintenance and repair programs to preserve Joint Powers Authority (JPA) assets and to ensure the Effluent, East and West recycled water pump stations are operated and maintained safely, efficiently and cost-effectively to supply adequate water throughout the recycled water distribution system.

SIGNIFICANT CHANGES

No significant changes are anticipated for FY20-21 or FY21-22.

OPERATING EXPENSE LINE ITEM EXPLANATIONS

- 5400 Labor – Primarily labor hours worked by Water Treatment and Production and Water Reclamation personnel to operate and provide preventive maintenance to equipment and facilities at the various Joint Powers Authority pump stations.

- 5405.1 Energy – Energy costs for recycled water pump stations. Energy costs include electrical pumping charges from the Tapia plant (SCE), recycled water pump station electrical pumping charges (SCE), and the purchase of lower cost solar generated electricity from Solar City.

- 5410 Supplies/Materials – Funds to purchase supplies and materials used during annual preventive maintenance on JPA RW pump control valves.

- 5430 Funds to purchase valve parts and recycled water pump station related capital items.

MAINTENANCE EXPENSE LINE ITEM EXPLANATIONS

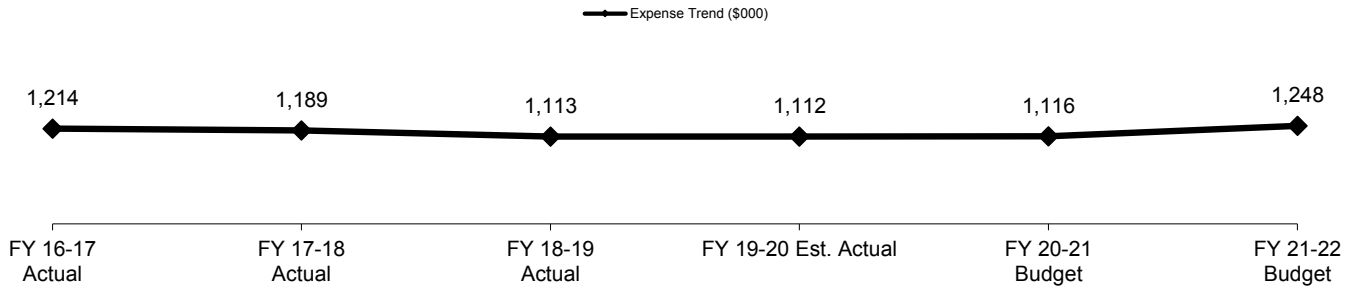
- 5500 Labor – Primarily labor hours worked by Maintenance Section personnel to perform major maintenance and repair tasks to pumps, motors, and other equipment at Joint Powers Authority (JPA) recycled water pump stations.

- 5510 Supplies/Materials – Funds to purchase supplies and materials used by staff for maintenance of JPA recycled water pump stations.

- 5515 Outside Services – Funds to hire any maintenance providers required to assist in maintaining the JPA recycled water pump stations. Expense is primarily related to pest control activities at JPA RW pump stations. Additional funding for FY 21-22 is for recycled water pump station paintings and coatings work.

**Las Virgenes - Triunfo
Joint Powers Authority
RW Pump Stations - 751100**

	FY 16-17 Actual	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Budget	FY 19-20 Est. Actual	FY 20-21 Budget	FY 21-22 Budget
OPERATIONS DIVISION EXPENSE							
5400 Labor	\$32,759	\$33,838	\$26,909	\$38,222	\$24,037	\$30,763	\$28,287
5405.1 Electricity	975,191	1,039,925	848,108	1,167,000	874,000	800,000	900,000
5405.2 Telephone	0	53	0	0	0	0	0
5405.4 Water	161	417	265	0	150	200	0
5410 Supplies/Material	20,775	23,848	7,031	14,000	13,500	14,000	14,000
5415 Outside Services	4,923	985	600	0	3,025	8,000	8,000
5430 Capital Outlay	0	0	0	15,000	0	15,000	15,000
Sub-total	\$1,033,809	\$1,099,066	\$882,913	\$1,234,222	\$914,712	\$867,963	\$965,287
MAINTENANCE DIVISION EXPENSE							
5500 Labor	32,937	5,849	66,279	28,434	59,476	52,924	55,271
5510 Supplies/Material	45,414	11,600	15,822	7,000	4,500	7,000	7,000
5515 Outside Services	10,973	508	20,718	1,250	750	1,250	34,250
Sub-total	\$89,324	\$17,957	\$102,819	\$36,684	\$64,726	\$61,174	\$96,521
ADMINISTRATIVE EXPENSES							
7225 Allocated Support Services	62,378	48,561	87,263	74,106	90,894	118,613	118,108
7226 Allocated Operations Services	28,523	23,118	39,584	34,102	41,826	68,370	68,079
Sub-total	\$90,901	\$71,679	\$126,847	\$108,208	\$132,720	\$186,983	\$186,187
TOTAL EXPENSES	\$1,214,034	\$1,188,702	\$1,112,579	\$1,379,114	\$1,112,158	\$1,116,120	\$1,247,995



JOINT POWERS AUTHORITY

RW Tanks, Reservoirs and Wells – 751200

FUNCTION

To provide appropriate training, operating, preventive maintenance and maintenance and repair programs on a timely basis to preserve Joint Powers Authority (JPA) assets and to ensure Joint Powers Authority tanks, reservoirs, and wells are operated safely, efficiently and cost-effectively to provide adequate storage for daily and emergency uses of recycled water.

SIGNIFICANT CHANGES

No significant changes are anticipated for FY 20-21 or FY 21-22

SOURCE OF SUPPLY

5115 Purchased Water – Potable water supplement required in the Joint Powers Authority distribution system for maintenance needs. During the rehabilitation of Reservoir 2 in FY 14-15, 89.06 acre-feet of potable water was purchased to meet the operational challenges presented by the temporary loss of storage capacity.

OPERATING EXPENSE LINE ITEM EXPLANATIONS

5400 Labor – Funds for labor hours worked by Water Treatment and Production employees and Water Reclamation staff to operate and provide preventive maintenance at recycled water storage tanks and reservoirs and at well sites used to supplement inflow to Tapia WRF.

5405.1 Electricity – Funds for electrical energy used to power equipment at Cordillera Tank and to operate Westlake Wells 1 and 2.

5405.2 Telephone – Funds for a SCADA communications used at Cordillera Tank site.

5410 Supplies and Material – Funds miscellaneous supplies and materials for system operation including erosion/runoff control, weed control and maintenance supplies.

5415 Outside Services – Funds to hire appropriate outside service providers to assist with the annual cleaning of Cordillera, Indian Hills, Reservoir 2 and Reservoir 3 to maintain the quality of the water within the recycled water distribution system. Includes funds for weed abatement and landscape maintenance.

5420 Permits and Fees – Well 1 & 2 water rights.

MAINTENANCE EXPENSE LINE ITEM EXPLANATIONS

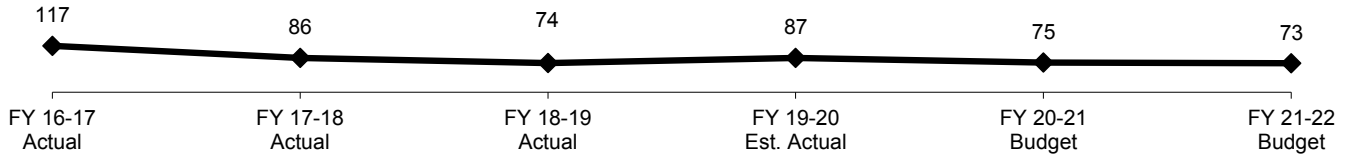
5500 Labor – Primarily labor hours worked by Maintenance Section personnel to provide maintenance.

5510 Supplies/Materials – Items required by staff to maintain the tanks, reservoirs and wells in the recycled water system.

**Las Virgenes - Triunfo
Joint Powers Authority
RW Tanks, Reservoirs and Wells - 751200**

	FY 16-17 Actual	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Budget	FY 19-20 Est. Actual	FY 20-21 Budget	FY 21-22 Budget
SOURCE OF SUPPLY							
5115 Purchased Water - Potable Suppl	\$34,124	\$0	\$0	\$0	30,020	\$0	\$0
OPERATIONS DIVISION EXPENSE							
5400 Labor	10,863	11,915	8,202	17,715	5,975	7,982	7,183
5405.1 Electricity	16,025	15,038	15,426	18,000	14,700	16,000	16,000
5405.2 Telephone	1,343	855	0	1,000	1,000	1,000	0
5405.4 Water	133	174	265	0	278	300	300
5410 Supplies/Material	1,352	2,412	523	2,500	1,600	2,500	2,500
5415 Outside Services	23,500	19,656	28,681	25,000	19,500	25,000	25,000
5420 Permits and Fee	0	900	0	0	100	0	100
Sub-total	\$53,216	\$50,950	\$53,097	\$64,215	\$43,153	\$52,782	\$51,083
MAINTENANCE DIVISION EXPENSE							
5500 Labor	5,081	12,357	1,057	14,598	2,000	6,000	6,000
5510 Supplies/Material	18	0	59	0	0	0	0
5515 Outside Services	1,155	1,073	4,617	1,200	950	1,200	1,200
Sub-total	\$6,254	\$13,430	\$5,733	\$15,798	\$2,950	\$7,200	\$7,200
ADMINISTRATIVE EXPENSES							
7225 Allocated Support Services	16,195	14,985	11,302	36,419	7,318	9,550	9,509
7226 Allocated Operations Services	7,405	7,132	3,771	16,759	3,368	5,505	5,481
Sub-total	\$23,600	\$22,117	\$15,073	\$53,178	\$10,686	\$15,054	\$14,990
TOTAL EXPENSES	\$117,194	\$86,497	\$73,903	\$133,191	\$86,809	\$75,036	\$73,273

Expense Trend (\$000)



JOINT POWERS AUTHORITY

RW System Operation – 751300

FUNCTION

To provide appropriate training, operating, preventive maintenance, and maintenance and repair programs to ensure preservation of district assets and proper operation of the recycled water distribution system, including water quality review, operation of Supervisory Control and Data Acquisition (SCADA) systems, water usage data collection and storage and other necessary programs.

SIGNIFICANT CHANGES

No significant changes are anticipated for FY20-21 or FY21-22.

OPERATING EXPENSE LINE ITEM EXPLANATIONS

5400 Labor – Primarily labor hours worked by Water Treatment and Production personnel to operate the distribution system, provide system reporting, and operate the SCADA system as these tasks relate to recycled water.

5420 Permits/Fees –This line item also includes bridge rental fees from the County of Los Angeles.

MAINTENANCE EXPENSE LINE ITEM EXPLANATIONS

5500 Labor – Primarily labor hours worked by Maintenance Section personnel to provide maintenance and electronic services.

SPECIALTY EXPENSE LINE ITEM EXPLANATIONS

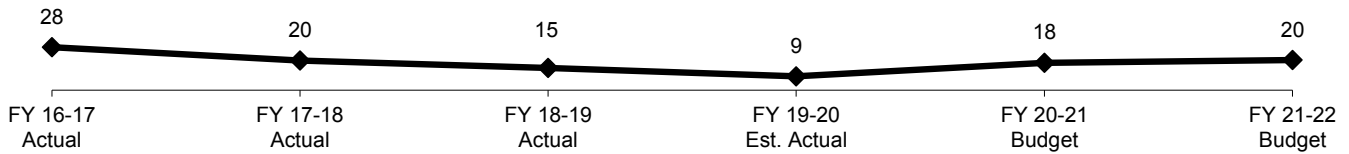
5700 SCADA Services – Labor and materials costs for services provided by Information Systems to maintain the SCADA system.

5710.2 Technical Services – The costs for any labor hours by Technical Services personnel for general assistance would be accumulated in this account.

**Las Virgenes - Triunfo
Joint Powers Authority
RW System Operations - 751300**

	FY 16-17 Actual	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Budget	FY 19-20 Est. Actual	FY 20-21 Budget	FY 21-22 Budget
OPERATIONS DIVISION EXPENSE							
5400 Labor	\$11,093	\$6,479	\$6,550	\$15,044	\$6,200	\$6,000	\$7,000
5420 Permits and Fee	88	88	88	100	88	100	100
Sub-total	\$11,181	\$6,567	\$6,638	\$15,144	\$6,288	\$6,100	\$7,100
MAINTENANCE DIVISION EXPENSE							
5500 Labor	291	212	0	261	851	784	803
5510 Supplies/Material	0	10	0	1,000	500	8,000	8,000
Sub-total	\$291	\$222	\$0	\$1,261	\$1,351	\$8,784	\$8,803
SPECIALTY EXPENSES							
5700 SCADA Services	0	192	0	3,238	0	1,000	1,000
5710.2 Technical Services	0	0	0	0	0	0	803
Sub-total	\$0	\$192	\$0	\$3,238	\$0	\$1,000	\$1,803
ADMINISTRATIVE EXPENSES							
7225 Allocated Support Services	11,601	8,547	5,563	19,141	1,031	1,343	1,340
7226 Allocated Operations Services	5,304	4,071	2,523	8,808	475	774	772
Sub-total	\$16,905	\$12,618	\$8,086	\$27,949	\$1,506	\$2,118	\$2,112
TOTAL EXPENSES	\$28,377	\$19,599	\$14,724	\$47,592	\$9,145	\$18,002	\$19,818

Expense Trend (\$000)



JOINT POWERS AUTHORITY

RW Distribution System – 751700

FUNCTION

To provide appropriate training, operating, preventive maintenance, and maintenance and repair programs to preserve Joint Powers Authority assets and to ensure the safe and reliable delivery of recycled water to the two Joint Powers Authority customers, Las Virgenes and Triunfo.

SIGNIFICANT CHANGES

No significant changes are anticipated for FY20-21 or FY21-22.

OPERATING EXPENSE LINE ITEM EXPLANATIONS

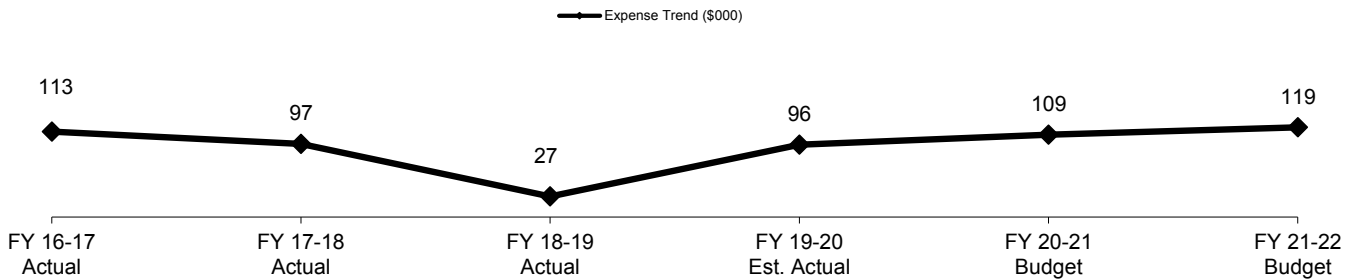
- 5400 Labor – Labor hours performed by Water Treatment and Production employees to perform preventive maintenance work associated with the recycled water distribution system. Preventive maintenance includes operating, testing, and overhauling recycled water main line valves, blow-offs, and air-vacuum valves.
- 5410 Supplies/Materials – Funds to purchase items needed during minor preventive maintenance tasks within the distribution system.
- 5415 Outside Services – Funds for raising valve boxes, manhole covers, and maintaining appurtenances.

MAINTENANCE EXPENSE LINE ITEM EXPLANATIONS

- 5500 Labor – Primarily labor hours worked by Construction Section personnel to provide maintenance and pipeline location in the recycled water distribution pipeline system.
- 5510 Supplies/Materials – Items required by staff to maintain the recycled water distribution system, such as valves, pipe, slurry backfill, etc. and to purchase materials for emergency repairs.
- 5515 Outside Services – Funds to hire any maintenance providers required to assist in maintaining the recycled water distribution system and to provide for emergency repairs as required.
- 5520 Permits/Fees – Funds to pay for various public works encroachment permits for repairs and inspections required by the cities and other regulatory agencies.

**Las Virgenes - Triunfo
Joint Powers Authority
RW Distribution System - 751700**

	FY 16-17 Actual	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Budget	FY 19-20 Est. Actual	FY 20-21 Budget	FY 21-22 Budget
OPERATIONS DIVISION EXPENSE							
5400 Labor	\$484	\$1,803	\$1,433	\$1,324	\$1,936	\$2,586	\$2,327
5410 Supplies/Material	60	945	0	500	100	500	500
5415 Outside Services	0	0	0	0	0	0	10,000
Sub-total	\$544	\$2,748	\$1,433	\$1,824	\$2,036	\$3,086	\$12,827
MAINTENANCE DIVISION EXPENSE							
5500 Labor	29,625	17,700	6,793	26,724	7,637	8,087	8,250
5510 Supplies/Material	5,689	3,262	2,070	4,000	1,900	8,000	8,000
5515 Outside Services	31,469	40,614	4,688	20,000	67,000	65,000	65,000
5520 Permits and Fee	580	1,211	0	500	0	500	500
Sub-total	\$67,363	\$62,787	\$13,551	\$51,224	\$76,537	\$81,587	\$81,750
ADMINISTRATIVE EXPENSES							
7225 Allocated Support Services	30,934	21,063	8,431	32,984	11,750	15,332	15,268
7226 Allocated Operations Services	14,143	10,027	3,825	15,176	5,407	8,838	8,801
Sub-total	\$45,077	\$31,090	\$12,256	\$48,160	\$17,157	\$24,169	\$24,069
TOTAL EXPENSES	\$112,984	\$96,625	\$27,240	\$101,208	\$95,730	\$108,842	\$118,646



JOINT POWERS AUTHORITY

Pure Water Demonstration Project – 751750

FUNCTION

The Pure Water Demonstration Project will be a nominal 100 gallon per minute (gpm) facility that will test fully advanced treatment processes of microfiltration (MF), reverse osmosis (RO), ultraviolet disinfection (UV) and advanced oxidation (AOP) on the JPA's tertiary treated recycled water to produce purified water suitable for surface water augmentation.

SIGNIFICANT CHANGES

The demonstration project will initiate operations in FY 20-21.

REVENUES

4421 Metropolitan Water District (artificial intelligence study: \$35,000; Bureau of Reclamation Grant: \$300,000) in Fiscal Year 20-21.

OPERATING EXPENSE LINE ITEM EXPLANATIONS

5400 Labor – Primarily labor hours worked by Water Treatment, Production, and Water Reclamation personnel to operate and provide preventive maintenance to demonstration project equipment.

5405.2 Energy – Energy costs to power pumps, filtration, and disinfection processes.

5410 Supplies/Materials – Funds to purchase items used during preventative maintenance and demonstration project equipment.

5415 Funds for research and testing and for artificial intelligence (A.I.) study (\$70,000 in FY 20-21).

MAINTENANCE EXPENSE LINE ITEM EXPLANATIONS

5500 Labor – Primarily labor hours worked by Maintenance Section personnel to perform maintenance and repair tasks to pumps, motors, and other equipment and to develop maintenance protocols for full-scale water purification facility.

5510 Supplies/Materials – Funds to purchase supplies and materials used by staff for maintenance of the pure water demonstration facility.

5515 Outside Services – Funds to hire

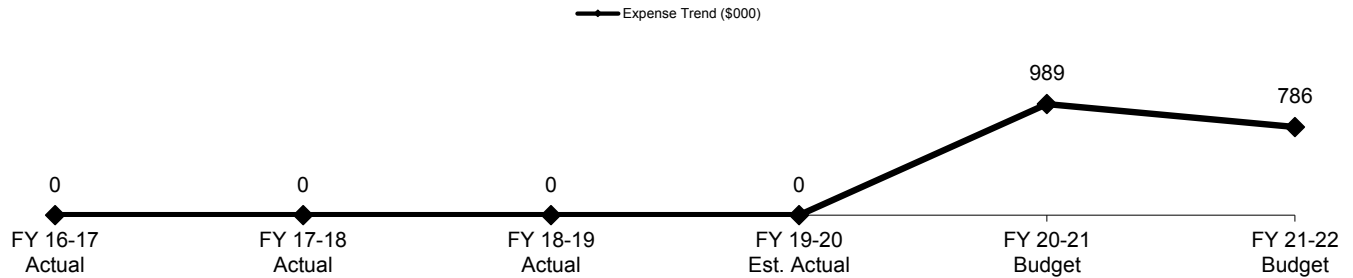
5518 Building Maintenance

5715.2 Other Laboratory Serv

5715.3 Tapia Lab Sampling

**Las Virgenes - Triunfo
Joint Powers Authority
Pure Water Demonstration Project- 751750**

	FY 16-17 Actual	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Budget	FY 19-20 Est. Actual	FY 20-21 Budget	FY 21-22 Budget
OPERATIONS DIVISION EXPENSE							
5400 Labor	\$0	\$0	\$0	\$0	\$0	\$79,400	\$124,000
5405.1 Electricity	0	0	0	0	0	39,000	39,000
5410.1 Fuel	0	0	0	0	0	5,100	5,100
5415 Outside Services	0	0	0	0	0	370,000	50,000
5425 Consulting Services	0	0	0	0	0	50,000	50,000
Sub-total	\$0	\$0	\$0	\$0	\$0	\$543,500	\$268,100
MAINTENANCE DIVISION EXPENSE							
5500 Labor	0	0	0	0	0	75,000	75,000
5510 Supplies/Material	0	0	0	0	0	10,000	10,000
5515 Outside Services	0	0	0	0	0	20,000	20,000
5518 Building Maintenance	0	0	0	0	0	20,000	20,000
Sub-total	\$0	\$0	\$0	\$0	\$0	\$125,000	\$125,000
SPECIALTY EXPENSES							
5715.2 Other Lab Services	0	0	0	0	0	30,000	30,000
5715.3 Tapia Lab Sampling	0	0	0	0	0	10,000	10,000
Sub-total	\$0	\$0	\$0	\$0	\$0	\$40,000	\$40,000
ADMINISTRATIVE EXPENSES							
7225 Allocated Support Services	0	0	0	0	0	192,390	241,670
7226 Allocated Operations Services	0	0	0	0	0	88,532	111,208
Sub-total	\$0	\$0	\$0	\$0	\$0	\$280,922	\$352,878
TOTAL EXPENSES	\$0	\$0	\$0	\$0	\$0	\$989,422	\$785,978



JOINT POWERS AUTHORITY

Sewers – 751800

FUNCTION

To provide sewer maintenance service in those portions of the trunk sewer system which are shared by Las Virgenes Municipal Water District and Triunfo Sanitation District.

SIGNIFICANT CHANGES

Funding of \$100,000 in line item 5515 for Sanitary Sewer Monitoring Program is included for FY 20-21.

OPERATING EXPENSE LINE ITEM EXPLANATIONS

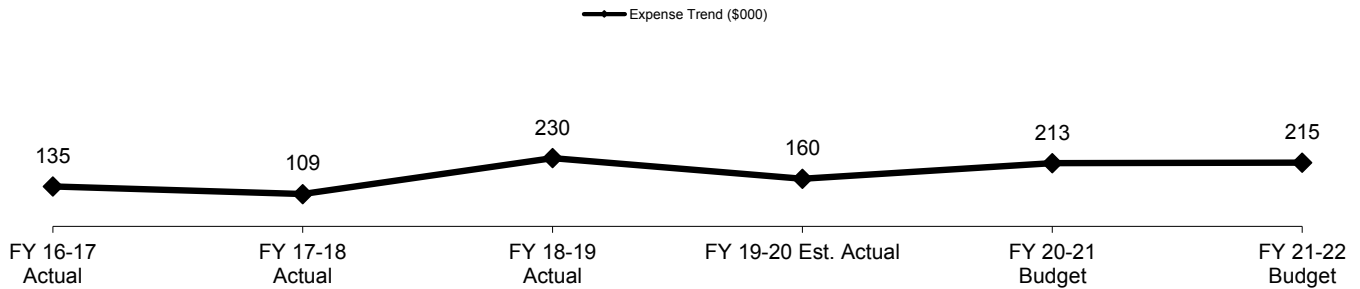
- 5400 Labor – Account used to accrue labor hours worked by Reclamation Treatment personnel for oversight of sewer system located within the Joint Powers Authority (U-1 Sanitation District) area.
- 5405 Utilities – These sub-accounts provide funds for the utilities used at the metering stations.
- 5420 Permits – Anticipated fees include County of Los Angeles pipeline rental fee and state water board permit fees .

MAINTENANCE EXPENSE LINE ITEM EXPLANATIONS

- 5500 Labor – Primarily labor hours worked by maintenance personnel in the Joint Powers Authority sewers located within the Joint Powers Authority (U-1 Sanitation District) area.
- 5510 Supplies/Materials – Items required by staff in maintaining the trunk sewer system. Increased funding is to replace manhole rings and covers.
- 5515 Outside Services – Funds to hire maintenance providers for emergency clean up and repairs, sewer flow monitoring, line cleaning and video inspection services. For FY 20-21 \$100,000 is included for sanitary sewer monitoring and closed circuit television (CCTV) work.

**Las Virgenes - Triunfo
Joint Powers Authority
Sewers - 751800**

	FY 16-17 Actual	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Budget	FY 19-20 Est. Actual	FY 20-21 Budget	FY 21-22 Budget
OPERATIONS DIVISION EXPENSE							
5400 Labor	\$535	\$0	\$2,787	\$227	\$3,488	\$3,888	\$4,029
5405.1 Electricity	293	295	254	350	113	300	300
5405.4 Water	0	0	0	200	0	0	0
5420 Permits and Fee	472	472	472	472	472	8,000	8,000
Sub-total	\$1,300	\$767	\$3,513	\$1,249	\$4,303	\$12,188	\$12,329
MAINTENANCE DIVISION EXPENSE							
5500 Labor	41,066	31,495	55,165	41,873	43,442	45,375	47,438
5510 Supplies/Material	286	196	238	2,500	350	2,000	2,000
5515 Outside Services	30,230	27,192	80,804	30,000	24,000	30,000	30,000
Sub-total	\$71,582	\$58,883	\$136,207	\$74,373	\$67,792	\$77,375	\$79,438
SPECIALTY EXPENSES							
5710.2 Technical Services	0	0	1,313	0	1,789	2,004	2,237
5715.2 Other Laboratory Services	0	0	0	0	0	0	0
Sub-total	\$0	\$0	\$1,313	\$0	\$1,789	\$2,004	\$2,237
ADMINISTRATIVE EXPENSES							
7225 Allocated Support Services	42,533	33,401	61,043	49,566	59,052	77,062	76,729
7226 Allocated Operations Services	19,449	15,902	27,690	22,807	27,174	44,420	44,228
Sub-total	\$61,982	\$49,303	\$88,733	\$72,373	\$86,226	\$121,482	\$120,956
TOTAL EXPENSES	\$134,864	\$108,953	\$229,766	\$147,995	\$160,110	\$213,049	\$214,960



JOINT POWERS AUTHORITY

Treatment/Reclamation – 751810

FUNCTION

To properly operate and maintain the wastewater treatment process in order to meet regulatory requirements and protect public health.

SIGNIFICANT CHANGES

No significant changes are anticipated for FY20-21 or FY21-22.

OPERATING EXPENSE LINE ITEM EXPLANATIONS

- 5400 Labor – Primarily labor hours worked by treatment personnel to operate and maintain the plant.
- 5410.10 Sodium Hypochlorite – Usage expected to be at same levels.
- 5410.11 Sodium Bisulfite – Usage contingent upon discharge flows to Malibu Creek.
- 5410.13 Aqua Ammonia – Bulk deliveries to District facilities result in cost savings.
- 5415 Outside Services – Funds for maintenance and specialty services for safety equipment, instruments, grit and rags disposal, service contracts for analyzers, etc.
- 5417 Odor Control – Carbon replacement
- 5420 Permits/Fees – Funds NPDES and Non-NPDES permits from Regional Water Quality Control Board and SCAQMD permits for general plant operation, generators and air pollution control devices. Includes miscellaneous permits from other agencies.
- 5425 Consulting Services – Funds for consultant’s assistance during permit process.
- 5430 Capital Outlay – Funds for filter media replacement .

MAINTENANCE EXPENSE LINE ITEM EXPLANATIONS

- 5500 Labor – Primarily labor hours worked by Maintenance Section personnel to provide maintenance services.
- 5510 Supplies/Materials – Items required for staff for maintenance of plant facilities and equipment.
- 5515 Outside Services – Funding for repair and maintenance of mechanical equipment including generators, blowers and switchgears.
- 5518 Bldg. Maintenance – Costs related to maintaining the basic buildings and site and which are not process related.
- 5525 Consulting Services – Funds for assistance in maintaining PLCs.
- 5530

EFFLUENT DISPOSAL LINE ITEM EXPLANATIONS

- 6788 District Sprayfields – Contractor, equipment, supply, and staff costs associated with maintaining farm fields, catch basins, roads, fences and equipment, disposing of effluent as needed due to permit requirements or distribution system upsets, and harvesting vegetation to remove nitrogen applied via irrigation on the Rancho Farm fields.
- 6789 005 Discharge – Pumping, energy and lab costs associated with disposal of effluent through 005. Due to the high turbidity of water available from RW Reservoir #2, the District did not discharge through 005. Following completion of Reservoir #2 improvements discharge through 005 will resume as needed.

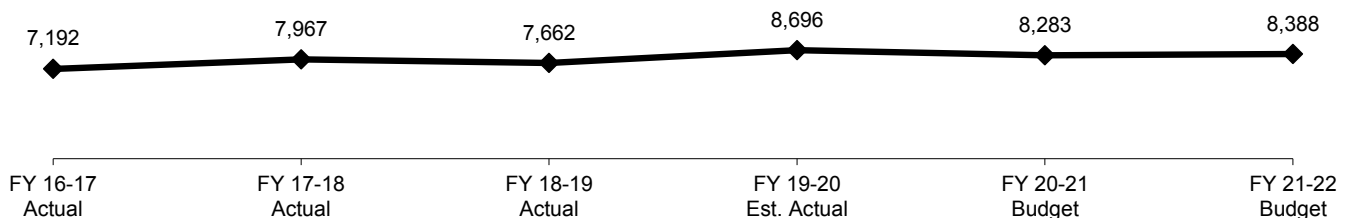
SPECIALTY EXPENSE LINE ITEM EXPLANATIONS

- 5700 SCADA Services – Labor and materials costs for services provided by Information Systems to maintain the SCADA system.
- 5715.2 Other Laboratory Services – Reflects outside laboratory testing. Increase due to annual bioassessment for Malibu Creek and Los Angeles River as required by the NPDES permit.
- 5715.3 Tapia Lab Sampling – Tapia laboratory staff costs for obtaining samples from the reclamation process.
- 7202 Allocated Lab Expense – Tapia laboratory costs for testing samples. Costs are based on total number of in-house tests performed for treatment divided by total number of tests performed in-house.

**Las Virgenes - Triunfo
Joint Powers Authority
Treatment/Reclamation - 751810**

	FY 16-17 Actual	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Budget	FY 19-20 Est. Actual	FY 20-21 Budget	FY 21-22 Budget
OPERATIONS DIVISION EXPENSE							
5400 Labor	\$1,129,884	\$1,102,930	\$1,279,747	\$1,273,237	\$1,331,612	\$1,336,000	\$1,335,000
5405.1 Electricity	699,722	797,216	648,935	877,204	653,000	487,500	525,000
5405.2 Telephone	22,609	3,137	17,199	19,568	22,000	20,000	20,000
5405.3 Natural Gas	9,741	8,743	11,395	10,082	12,000	10,000	10,000
5405.4 Water	3,747	5,263	5,837	3,392	5,000	5,500	5,500
5410 Supplies/Material	20,786	26,337	43,442	35,020	34,000	35,000	35,000
5410.1 Fuel	18,979	16,598	10,558	20,600	10,000	17,000	17,000
5410.5 Ferric Chloride	42,204	37,853	35,505	54,456	49,000	60,000	60,000
5410.6 Defoamer/Deodorant	6,082	7,079	3,981	4,120	3,000	4,120	4,120
5410.9 Alum	6,864	6,917	11,127	9,489	14,000	12,000	12,000
5410.10 Sodium Hypochlorite	212,248	184,319	297,177	208,274	225,000	230,000	230,000
5410.11 Sodium Bisulfite	77,498	98,766	91,143	115,936	91,000	115,936	115,936
5410.13 Aqua Ammonia	31,675	27,657	30,616	31,669	19,000	31,699	31,699
5415 Outside Services	28,745	37,732	48,133	30,900	57,000	120,650	120,650
5417 Odor Control	41,963	42,226	38,596	46,350	33,000	40,000	40,000
5420 Permits and Fee	91,189	89,767	91,082	101,365	101,300	102,000	102,000
5425 Consulting Services	0	96,515	46,286	4,302	37,000	40,000	40,000
5430 Capital Outlay	23,994	0	98,630	50,000	88,000	100,000	100,000
Sub-total	\$2,467,930	\$2,589,055	\$2,809,389	\$2,895,964	\$2,784,912	\$2,767,405	\$2,803,905
MAINTENANCE DIVISION EXPENSE							
5500 Labor	604,558	665,960	488,598	704,929	554,198	550,000	542,000
5510 Supplies/Material	210,976	192,150	180,230	240,000	198,000	130,000	140,000
5515 Outside Services	205,253	213,480	94,820	137,000	121,000	125,000	135,000
5518 Building Maintenance	37,573	51,195	87,276	60,000	151,304	160,804	166,630
5530 Capital Outlay	9,774	28,462	26,094	55,000	88,000	65,000	70,000
Sub-total	\$1,068,134	\$1,151,247	\$877,018	\$1,196,929	\$1,112,502	\$1,030,804	\$1,053,630
EFFLUENT DISPOSAL							
6788 District Sprayfield	251,449	283,186	314,316	321,779	250,000	270,000	275,000
6789 005 Discharge	277	387	10,917	400	400	400	400
Sub-total	\$251,726	\$283,573	\$325,233	\$322,179	\$250,400	\$270,400	\$275,400
SPECIALTY EXPENSES							
5700 SCADA Services	46,631	32,454	44,094	91,618	51,916	61,104	61,786
5710.2 Technical Services	0	0	0	517	3,460	3,875	4,325
5715.2 Other Lab Services	135,739	147,436	149,325	146,294	143,000	143,000	143,000
5715.3 Tapia Lab Sampling	114,536	120,856	120,068	139,344	110,210	160,000	165,000
7202 Allocated Lab Expense	344,163	363,855	402,279	408,917	474,596	475,000	475,000
Sub-total	\$641,069	\$664,601	\$715,766	\$786,690	\$783,182	\$842,979	\$849,111
ADMINISTRATIVE EXPENSES							
7225 Allocated Support Services	1,896,260	2,228,931	2,045,414	2,508,634	2,530,000	2,437,656	2,454,968
7226 Allocated Operations Services	867,096	1,049,788	889,119	1,154,400	1,235,000	933,656	950,968
Sub-total	\$2,763,356	\$3,278,719	\$2,934,533	\$3,663,034	\$3,765,000	\$3,371,312	\$3,405,936
TOTAL EXPENSES	\$7,192,215	\$7,967,195	\$7,661,939	\$8,864,796	\$8,695,996	\$8,282,900	\$8,387,982

Expense Trend (\$000)



JOINT POWERS AUTHORITY

Treatment/Composting – 751820

FUNCTION

To provide for the operation and maintenance of facilities for the conversion of biosolids to a reusable compost product while meeting all state and federal regulatory requirements and the goal of conserving resources.

SIGNIFICANT CHANGES

Funding for biofilter monitoring (\$90,000 in line 5425) is included for FY 20-21.

OPERATING EXPENSE LINE ITEM EXPLANATIONS

- 5400 Labor – Primarily labor hours worked at the Composting Facility by Composting Facility personnel to operate and provide preventive maintenance.
- 5405 Utilities – These sub-accounts provide funds for electric and natural gas, telephone and water.
- 5410 Supplies/Material – Funds for miscellaneous chemicals and supplies required to operate the Composting Facility. Significant increase in citric acid cost as well as additional dewatering due to an increase in solids.
- 5410.7 Polymer used in the dewatering process.
- 5410.8 Amendment – Amendment usage increased due to extended dewatering and centrifuge run time. Amendment cost based on purchase of materials from new vendor.
- 5415 Outside Services – Funds for emissions monitoring services. Costs in FY 18-19 and FY 19-20 included biosolids disposal services.
- 5417 Odor Control – Bio filter media changes out annually.
- 5420 Permits/Fees – SCAQMD permit fees for general plant operation and LA County Department of Public Health solid waste fees.

MAINTENANCE EXPENSE LINE ITEM EXPLANATIONS

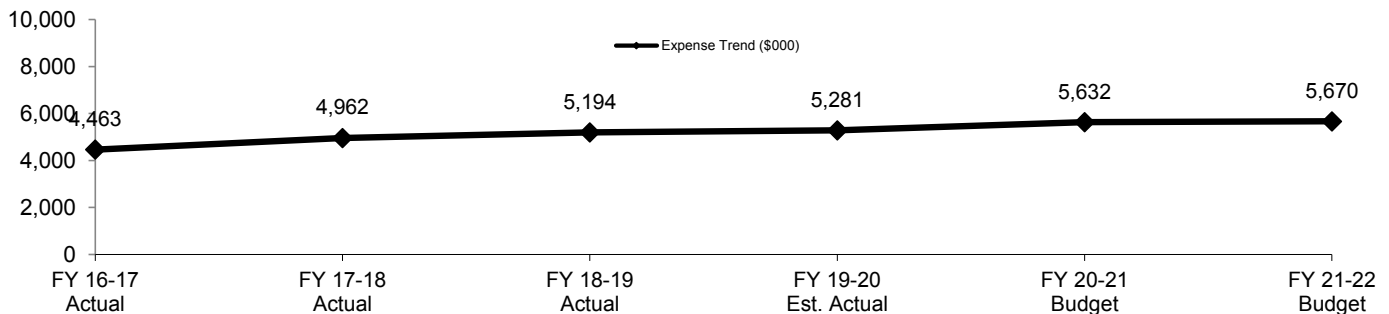
- 5500 Labor – Primarily labor hours worked by Maintenance Section personnel to provide maintenance services. Includes hours for RCPO staff to manage landscape contract.
- 5510 Supplies/Materials – Items required for staff to maintain plant facilities and equipment. FY16-17 budget includes funding to maintain facilities at current levels.
- 5515 Outside Services – Funds to hire any maintenance providers to assist in maintaining plant facilities including annual gas monitoring and facility maintenance.
- 5518 Bldg. Maintenance – Costs related to maintaining the basic buildings and site and which are not process related.

SPECIALTY EXPENSE LINE ITEM EXPLANATIONS

- 5700 SCADA Services – Labor and materials costs for services provided by Information Systems to maintain the DCS system.
- 5710.2 Technical Services – The costs for any labor hours by Technical Services personnel.
- 5712 Sales/Use Tax Expense – Required tax remittance on imputed value of RLV Community Compost supplied.
- 5715.2 Other Laboratory Services – Reflects outside laboratory testing associated with marketing compost.
- 5715.3 Tapia Lab Sampling – Tapia laboratory staff costs for obtaining samples from the composting process are direct charged to this account.
- 7202 Allocated Lab Expense – Tapia laboratory costs for testing samples. Costs are based on total number of in-house tests performed for composting divided by total number of tests performed in-house.

**Las Virgenes - Triunfo
Joint Powers Authority
Treatment/Composting - 751820**

	FY 16-17 Actual	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Budget	FY 19-20 Est. Actual	FY 20-21 Budget	FY 21-22 Budget
OPERATIONS DIVISION EXPENSE							
5400 Labor	\$799,729	\$815,333	\$876,160	\$912,831	\$872,526	\$880,000	\$890,000
5405.1 Electricity	351,883	353,173	317,993	375,950	231,000	325,000	365,000
5405.2 Telephone	29,025	16,030	14,520	22,660	12,500	12,000	12,000
5405.3 Natural Gas	11,702	7,501	4,317	11,331	4,000	11,400	11,400
5405.4 Water	2,712	4,209	3,909	4,469	4,000	4,800	4,800
5410 Supplies/Material	28,982	25,794	29,724	27,628	24,000	28,450	28,450
5410.1 Fuel	7,229	1,253	4,338	4,807	1,000	4,950	5,000
5410.7 Polymer	120,588	117,798	149,870	108,876	81,000	147,000	147,000
5410.8 Amendment	142,893	101,919	48,336	123,600	21,000	135,000	135,000
5415 Outside Services	0	0	258,280	2,500	209,000	32,000	33,000
5417 Odor Control	101,740	99,393	37,014	154,500	24,000	145,000	145,000
5420 Permits and Fee	32,271	13,460	15,047	19,858	16,000	20,000	20,000
5430 Capital Outlay	0	0	0	0	0	40,000	40,000
Sub-total	\$1,628,754	\$1,555,863	\$1,759,508	\$1,769,010	\$1,500,026	\$1,875,600	\$1,836,650
MAINTENANCE DIVISION EXPENSE							
5500 Labor	459,605	481,074	594,660	555,759	542,588	508,000	533,000
5510 Supplies/Material	130,135	161,371	230,902	214,000	71,000	114,000	114,000
5515 Outside Services	134,053	57,778	133,943	135,000	134,000	115,000	135,000
5518 Building Maintenance	51,058	54,746	43,539	56,000	96,373	101,373	97,015
5525 Consulting Services	2,252	0	0	0	0	0	0
5530 Capital Outlay	36,000	133,090	0	40,000	0	0	0
Sub-total	\$813,103	\$888,059	\$1,003,044	\$1,000,759	\$843,961	\$838,373	\$879,015
SPECIALTY EXPENSES							
5700 SCADA Services	2,993	6,000	11,911	19,454	0	0	0
5710.2 Technical Services	0	0	0	129	7,038	7,884	8,799
5712 Compost Sales/Use Tax	2,922	3,246	2,989	4,000	4,000	4,000	4,000
5715.2 Other Lab Services	3,525	4,334	8,093	7,440	0	8,000	8,000
5715.3 Tapia Lab Sampling	769	884	498	638	0	800	800
7202 Allocated Lab Expense	11,284	11,930	13,189	13,407	15,560	18,093	18,912
Sub-total	\$21,493	\$26,394	\$36,680	\$45,068	\$26,598	\$38,777	\$40,511
ADMINISTRATIVE EXPENSES							
7225 Allocated Support Services	1,372,144	1,688,044	1,648,049	1,781,118	1,954,000	1,924,656	1,941,968
7226 Allocated Operations Services	627,437	803,187	746,318	819,609	956,000	954,656	971,968
Sub-total	\$1,999,581	\$2,491,231	\$2,394,367	\$2,600,727	\$2,910,000	\$2,879,312	\$2,913,936
TOTAL EXPENSES	\$4,462,931	\$4,961,547	\$5,193,599	\$5,415,564	\$5,280,585	\$5,632,062	\$5,670,112



JOINT POWERS AUTHORITY

Centrate Treatment – 751830

FUNCTION

To operate the centrate treatment facilities to allow Tapia WRF to meet its effluent nutrient requirements in the NPDES permit. The farm remains available for biosolids injection in emergency conditions.

SIGNIFICANT CHANGES

No significant changes are anticipated for FY20-21 or FY 21-22.

OPERATING EXPENSE LINE ITEM EXPLANATIONS

5400 Labor – Labor hours for farm operations including centrate treatment and potential biosolids injection.

5410.1 Fuel – Diesel fuel for use on site.

5420 Permits and Fees – RWQCB permit fees for biosolids injection and SCAQMD permits for the generator, carbon scrubber, and biofilter..

MAINTENANCE EXPENSE LINE ITEM EXPLANATIONS

5500 Labor – Primarily labor hours worked by Maintenance Section personnel to provide maintenance services.

5515 Outside Services – Funds to hire any maintenance providers required to assist in building maintenance such as janitor, alarms, trash collection, etc. Increased funding due to maintenance of equipment associated with centrate treatment. Other services include compressor maintenance; refuse disposal, pest control and security services.

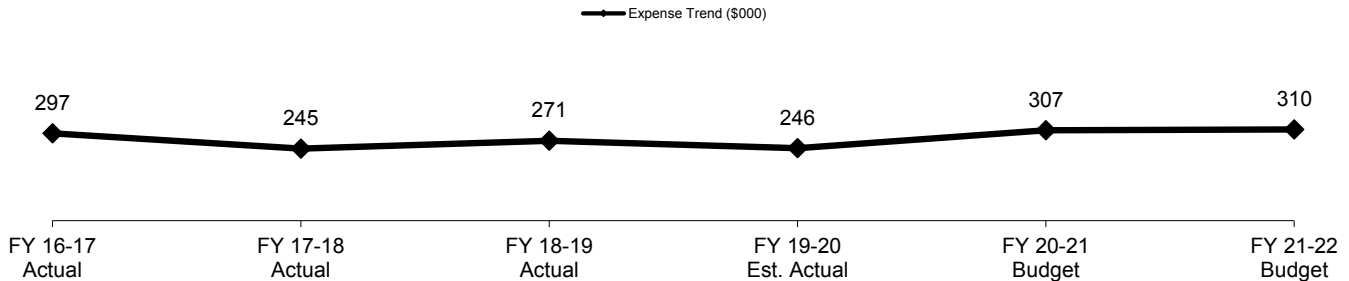
SPECIALTY EXPENSE LINE ITEM EXPLANATIONS

5710.2 Technical Services – The costs for any labor hours by Technical Services personnel for assistance would be accumulated in this account.

5715 Laboratory Services – Tapia Laboratory service and outside laboratory service costs are charged to these accounts.

**Las Virgenes - Triunfo
Joint Powers Authority
Treatment/Centrate Treatment - 751830**

	FY 16-17 Actual	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Budget	FY 19-20 Est. Actual	FY 20-21 Budget	FY 21-22 Budget
OPERATIONS DIVISION EXPENSE							
5400 Labor	\$0	\$0	\$0	\$3,797	\$0	\$0	\$0
5405.1 Electricity	58,285	64,786	64,838	71,482	64,000	70,000	70,000
5405.4 Water	1,203	1,430	1,673	1,005	2,000	1,700	1,700
5410 Supplies/Material	801	882	876	0	0	500	500
5410.1 Fuel	0	2,214	2,909	3,891	1,000	3,000	3,000
5420 Permits and Fee	69,327	69,341	75,887	69,500	87,071	90,000	90,000
Sub-total	\$129,616	\$138,653	\$146,183	\$149,675	\$154,071	\$165,200	\$165,200
MAINTENANCE DIVISION EXPENSE							
5500 Labor	38,725	14,196	18,962	28,411	5,641	6,674	6,970
5510 Supplies/Material	4,052	11,821	2,484	15,000	2,000	15,000	15,000
5515 Outside Services	24,495	10,096	22,455	17,000	4,000	17,000	17,000
Sub-total	\$67,272	\$36,113	\$43,901	\$60,411	\$11,641	\$38,674	\$38,970
SPECIALTY EXPENSES							
5715.2 Other Lab Services	1,960	2,521	1,114	3,121	2,000	3,000	3,000
5715.3 Tapia Lab Sampling	10,400	8,612	10,870	11,320	13,036	16,469	17,201
7202 Allocated Lab Expense	22,568	23,859	26,379	26,814	31,121	36,187	37,824
Sub-total	\$34,928	\$34,992	\$38,363	\$41,255	\$46,157	\$55,656	\$58,025
ADMINISTRATIVE EXPENSES							
7225 Allocated Support Services	44,433	24,240	31,110	48,489	23,289	30,395	30,266
7226 Allocated Operations Services	20,316	10,797	11,573	22,312	10,717	17,520	17,446
Sub-total	\$64,749	\$35,037	\$42,683	\$70,801	\$34,005	\$47,915	\$47,712
TOTAL EXPENSES	\$296,565	\$244,795	\$271,130	\$322,142	\$245,874	\$307,445	\$309,907



JOINT POWERS AUTHORITY

Administration – 751840

FUNCTION

To fund general and administrative expenses specific to Joint Powers Authority operations.

SIGNIFICANT CHANGES

No significant changes are anticipated for FY20-21 or FY21-22.

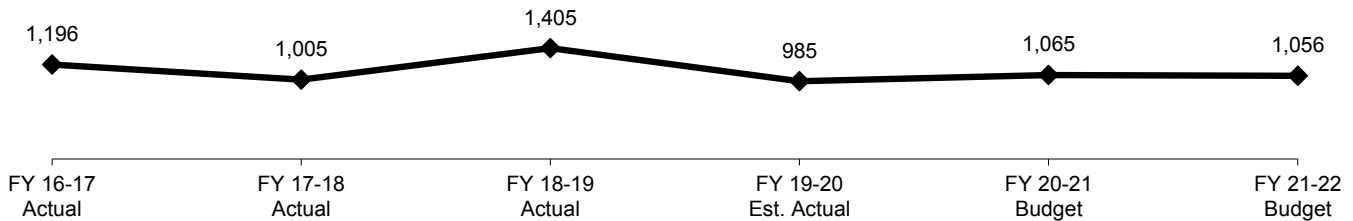
LINE ITEM EXPLANATIONS

- 5400 Labor – The costs for any labor hours worked on administrative function.
- 6602 School Education Program – Wastewater education initiatives, programs and tours. Also includes programs designed to accommodate home-school students.
- 6604 Public Education Program – Quarterly tours of Rancho/Tapia; Malibu Creek Watershed and regulatory issue outreach; JPA activities and display advertising related to watershed, compost promotion, pharmaceutical disposal education, etc.
- 6606 Community Group Outreach – JPA related publications and community group outreach related to watershed stewardship and NPDES permit, and speaker's bureau expenses.
- 6608 Intergovernmental Coordination – Programmed funds include support for intergovernmental activities such as legislative monitoring and activities with the state legislature, county, cities, school districts, federal agencies and regulatory bodies.
- 6785 Watershed Programs – Watershed Management: Staff participation and technical assistance managing water resources (primarily surface water quality) in the Malibu Creek and upper Los Angeles River watersheds. Also includes funding for Collaborative Research projects related to the Malibu Creek TMDL issue.
- 6872 Litigation – Outside Services – All litigation, settlements, attorney fees, court costs and legal costs for general litigation that are solely for the Joint Powers Authority.
- 6874 Litigation – District Costs – Costs for employee depositions, trial appearance, etc. for Joint Powers Authority lawsuit cases.
- 6516 Other Professional Services – Federal and State Regulatory Advocacy for securing funding and providing input on regulatory issues.
- 6517 Audit Fees – Joint Powers Authority's share of costs related to financial statement audit.
- 7110 Travel/Misc. Staff Expense – Travel and other expenses directly incurred in support of JPA issues.
- 7135 General Insurance – Property insurance costs.
- 6260 Rental Charge – Facilities Replacement – Internal charge to set aside funds for future facilities replacement.

**Las Virgenes - Triunfo
Joint Powers Authority
Administration - 751840**

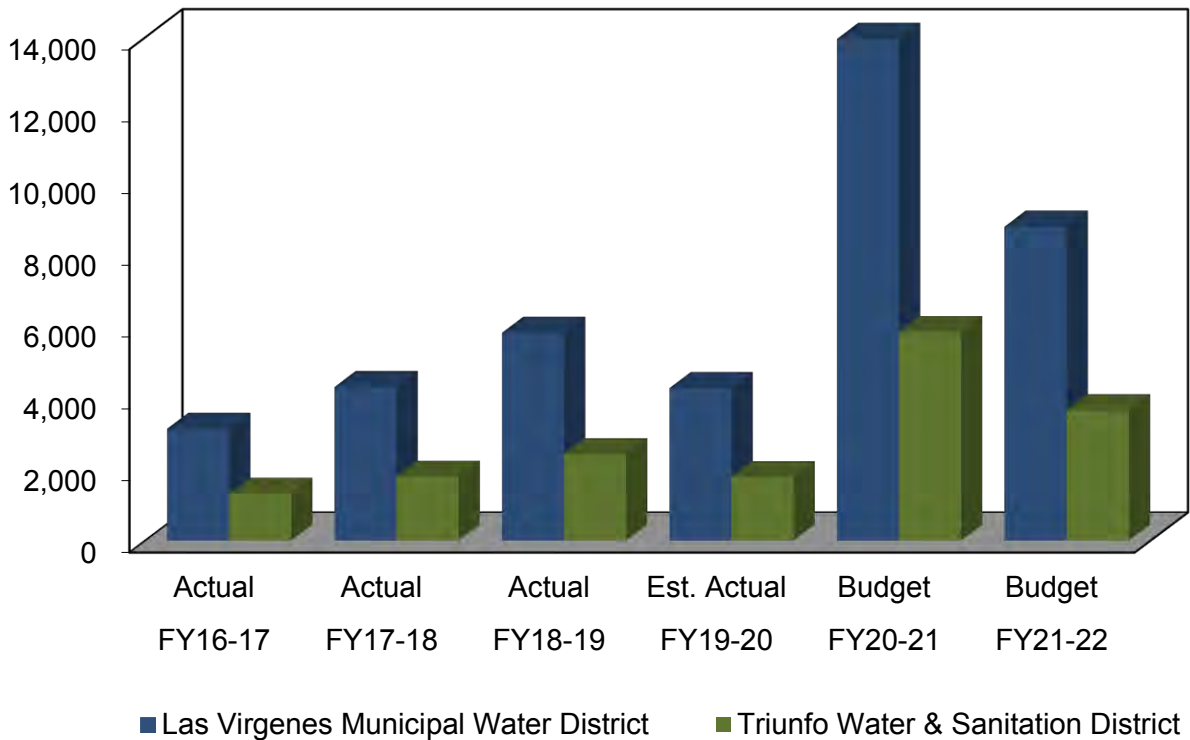
	FY 16-17 Actual	FY 17-18 Actual	FY 18-19 Actual	FY 19-20 Budget	FY 19-20 Est. Actual	FY 20-21 Budget	FY 21-22 Budget
OPERATIONS DIVISION EXPENSE							
5400 Labor	\$1,424	\$0	\$0	\$717	\$0	\$0	\$0
Sub-total	\$1,424	\$0	\$0	\$717	\$0	\$0	\$0
INVENTORY EXPENSES							
5536 Inventory Adjustment	(2,393)	6,134	153,421	4,840	2,200	5,000	5,000
Sub-total	(\$2,393)	\$6,134	\$153,421	\$4,840	\$2,200	\$5,000	\$5,000
PUBLIC INFORMATION							
6602 School Education Program	22,535	14,394	2,586	20,971	814	20,000	20,000
6604 Public Education Program	70,275	45,330	29,554	67,722	23,627	20,069	20,842
6606 Community Group Outreach	1,182	2,911	0	6,028	0	8,000	8,000
6608 Intergovernmental Coordination	4,146	1,098	411	5,298	0	5,000	5,000
Sub-total	\$98,138	\$63,733	\$32,551	\$100,019	\$24,441	\$53,069	\$53,842
RESOURCE CONSERVATION							
6785 Watershed Programs	60,773	17,097	1,800	46,594	14,000	20,000	20,000
Sub-total	\$60,773	\$17,097	\$1,800	\$46,594	\$14,000	\$20,000	\$20,000
ADMINISTRATIVE EXPENSES							
6872 Litigation/Outside Services	83,990	49,115	206,946	25,000	135,000	0	0
6516 Other Professional Services	95,007	167,843	266,417	137,000	156,600	156,600	156,600
6517 Audit Fees	3,395	3,395	3,377	3,700	6,000	6,000	6,000
7110 Travel/Misc Staff Expense	248	0	0	0	0	0	0
7135.1 Property Insurance	56,955	69,614	79,858	59,779	80,859	0	0
7135.4 Earthquake Insurance	91,466	110,557	117,389	95,559	92,073	0	0
7145 Claims Paid	122,451	21,000	0	0	0	0	0
7153 TWSD Staff Services	0	0	0	5,000	5,500	6,000	6,000
7155 Other Expense	54,029	9,000	0	0	0	0	0
6260 Rental Charge - Facility Repl	371,357	351,674	377,618	363,316	355,453	363,316	363,316
Allocated Insurance	0	0	0	0	0	175,131	183,888
Allocated Legal Services	0	0	0	0	0	135,000	135,000
7203 Allocated Building Maint	83,651	89,824	153,010	88,804	92,424	115,392	96,642
7225 Allocated Support Services	51,723	31,374	8,767	163,458	14,326	18,696	18,612
7226 Allocated Operations Services	23,652	14,936	3,977	75,217	6,592	10,777	10,728
Sub-total	\$1,037,924	\$918,332	\$1,217,359	\$1,016,834	\$944,828	\$986,912	\$976,786
TOTAL EXPENSES	\$1,195,866	\$1,005,296	\$1,405,131	\$1,169,004	\$985,469	\$1,064,981	\$1,055,628

Expense Trend (\$000)



**Las Virgenes - Triunfo
Joint Powers Authority
Capital Improvement Projects
Annual Expenditures
(Dollars in Thousands)**

	FY16-17 Actual	FY17-18 Actual	FY18-19 Actual	FY19-20 Est. Actual	FY20-21 Budget	FY21-22 Budget
Las Virgenes MWD	3,125	4,287	5,793	4,256	13,957	8,740
Triunfo WSD	1,308	1,785	2,412	1,772	5,812	3,639
	4,433	6,072	8,205	6,028	19,769	12,379



*Estimated and Projected expenditures represent working capital requirements for each fiscal year.

CIP Projects FY 2020-21 and FY 2021-22

Sanitation

SCADA System Communications Upgrade-10520

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Migration of the existing communication system from a serial radio network to an Ethernet based radio network. Provide redundant data paths for uninterrupted communication. Eliminate need to rely on telephone company equipment.	32,447.00	93,100.00	60,653.00

Sanitation-100 %		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	-	-	-	527,942.56	
	TWSD Share Amount (29.4%)	-	-	-	219,851.44	
	Project Totals	-	-	-	747,794.00	840,894.00

Tapia Programmable Logic Controller Upgrades-10567

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: This project replaces programmable logic controllers (PLC's) with newer PLCs and provides necessary equipment upgrades (fiber optics, network switches and programming) to complete the installation. This is a program project which addresses Tapia in the first two years and centrate treatment in the third year. Design will occur in the first year for all facilities.	136,665.00	1,311,560.00	1,174,895.00

Sanitation-100 %		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	839,038.64	1,668,514.51	-	-	
	TWSD Share Amount (29.4%)	349,401.36	694,820.49	-	-	
	Project Totals	1,188,440.00	2,363,335.00	-	-	2,500,000.00

Summer Season TMDL Compliance-10619

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: In February 2017 the SWRCB adopted the Implementation Plan for the 2013 TMDL. The plan provides for compliance with summer time limits within five years. The options for compliance include a "side stream" treatment plant, the use of potable water and nutrient trading in the watershed. This CIP funds the selection, preliminary studies, outreach, CEQA analysis, preliminary design and final design for summer time compliance. Project 10611 (Duct Bank Infrastructure Upgrade) was added to this program for the FY19-20 planning period. Construction of a 1 MGD "side stream" treatment facility at Tapia to treat potable water for stream flow augmentation. Project is currently in 80% final design.	318,175.00	1,449,985.00	1,131,810.00

	FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
Sanitation-100 %					
LV Share Amount (70.6%)	1,050,097.34	1,849,155.20	-	-	
TWSD Share Amount (29.4%)	437,292.66	770,044.80	-	-	
Project Totals	1,487,390.00	2,619,200.00	-	-	2,937,375.00

Pure Water Project-10635

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: This project funds preliminary studies, outreach, CEQA analysis, preliminary design and final design. The 2018 project cost estimate (\$121M) was updated using an annual inflationary factor of 3%.	648,654.00	3,456,482.00	2,807,828.00

	FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
Sanitation-100 %					
LV Share Amount (70.6%)	2,959,673.43	4,942,000.00	5,824,156.88	-	
TWSD Share Amount (29.4%)	1,232,498.57	2,058,000.00	2,425,357.12	-	
Project Totals	4,192,172.00	7,000,000.00	8,249,514.00	146,243,486.00	162,141,654.00
Project Offset			(1,424,537.15)		
			Net Project	160,717,116.85	

A/B Bus Electrical Modification-10661

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Study the feasibility of reconfiguring the Tapia electrical switch gear and then hire electrical team to make the modifications. Construction cost estimates will be developed following the completion of the feasibility study.	-	100,000.00	100,000.00

	FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
Sanitation-100 %					
LV Share Amount (70.6%)		70,600.00	-	-	
TWSD Share Amount (29.4%)		29,400.00	-	-	
Project Totals	-	100,000.00	-	-	100,000.00

Rancho Las Virgenes Storm Water Diversion-10668

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Replacement of two storm water diversion structures at the Rancho Las Virgenes Composting Facility. Structures have lifted and need to be addressed. The drainage from the V-ditch goes to a discharge point in Las Virgenes Creek. There is a concern that sludge and/or reclaimed water entering into the V-ditch could enter the creek via the drainage from the V-ditch. An Open/Close valve should be installed at the drainage area so that operators control the contents of the V-ditch. A sump pump system with discharge piping should be included so that the contents can be pumped either to the field of offsite.	3,746.00	41,767.00	38,021.00

	FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
Sanitation-100 %					
LV Share Amount (70.6%)	74,154.71	100,997.54	83,025.60	-	
TWSD Share Amount (29.4%)	30,880.29	42,058.46	34,574.40	-	
Project Totals	105,035.00	143,056.00	117,600.00	-	264,402.00

Develop Seating Area at Tapia-10669

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Develop tour seating area and climate appropriate landscaping at Tapia adjacent to the control building.	14,035.00	25,000.00	10,965.00

Sanitation-100 %	FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
LV Share Amount (70.6%)	-	7,741.29	-	-	
TWSD Share Amount (29.4%)	-	3,223.71	-	-	
Project Totals	-	10,965.00	-	-	25,000.00

Centrate 24" Valve Replacement

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Replace two (2) buried 24-inch Miliken valves at the centrate facility.	-	264,000.00	264,000.00

Sanitation-100 %	FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
LV Share Amount (70.6%)	17,650.00	204,034.00	-	-	
TWSD Share Amount (29.4%)	7,350.00	84,966.00	-	-	
Project Totals	25,000.00	289,000.00	-	-	289,000.00

Rancho Las Virgenes Digester Cleaning and Repair-10680

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Rehabilitation and repair of Digester No. 2 at Rancho Compost Facility.	2,235,428.00	2,235,428.00	-

	FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
Sanitation-100 %					
LV Share Amount (70.6%)	438,468.36	438,468.36	-	-	
TWSD Share Amount (29.4%)	182,591.64	182,591.64	-	-	
Project Totals	621,060.00	621,060.00	-	-	2,856,488.00

Rancho Fire Repair- Woolsey Fire-10689

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Repair compost and cure building, fire damaged windows and roofing, mechanical equipment, irrigation system, electrical, architectural facade, biofilter and other damaged items.	682,985.00	1,989,455.00	1,306,470.00

	FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
Sanitation-100 %					
LV Share Amount (70.6%)	125,385.60	1,047,753.42	-	-	
TWSD Share Amount (29.4%)	52,214.40	436,316.58	-	-	
Project Totals	177,600.00	1,484,070.00	-	-	2,167,055.00
Project Offset		-	-		
			Net Project	2,167,055.00	

JPA Facility Repairs-Woolsey Fire-10692

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Repair JPA owned fire damaged facilities, property and equipment. Damage include irrigation systems at Rancho Compost Facility and Reservoir 2. Budget for design under CIP# 10691.	3,864.00	878,612.00	874,748.00

Sanitation-100 %		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	-	617,572.09	-	-	
	TWSD Share Amount (29.4%)	-	257,175.91	-	-	
	Project Totals	-	874,748.00	-	-	878,612.00
	Project Offset		-	-		
				Net Project	878,612.00	

Tapia Effluent Pump Station-10702

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Remove or abandon in place existing 4160 volt feeders currently suspended from the top slab of the Effluent Pump Station wet well, underneath the existing MCCs. Perform electrical design and replace the overhead 4160 volt feeders. Ensure coordination with 480 volt switch gear improvements.	-	100,000.00	100,000.00

Sanitation-100 %		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	-	70,600.00	279,576.00	-	
	TWSD Share Amount (29.4%)	-	29,400.00	116,424.00	-	
	Project Totals	-	100,000.00	396,000.00	-	496,000.00

Tapia Tertiary Filter Rehab-10703

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Tertiary Filters concrete rehabilitation. Approximately 25 locations that require a 1 square foot patching with rebar repair. Replace 45 metal plates (2' X 4') on the filter deck and fix concrete around the plates with proper joint sealer. Also include the repair of an electrical panel in the Filter gallery. Replace existing electric actuators at filter structure with new electric actuators. Program plant control system to function with both remote PLC control of actuators and local actuator control. Upgrade local controls to replace old filter annunciator panels which are currently located on the top	-	60,000.00	60,000.00

Sanitation-100 %		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	-	-	-	55,915.20	
	TWSD Share Amount (29.4%)	-	-	-	23,284.80	
	Project Totals	-	-	-	79,200.00	79,200.00

Rancho Reliability Improvements-201839

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Replace or rehabilitate facilities and equipment at the Rancho facility based on failure, beyond useful life, or obsolescence. Specific projects are identified for each fiscal year.	-	-	-

Sanitation-100 %		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	93,192.00	93,192.00	93,192.00	-	
	TWSD Share Amount (29.4%)	38,808.00	38,808.00	38,808.00	-	
	Project Totals	132,000.00	132,000.00	132,000.00	1,056,000.00	1,320,000.00

Tapia Water Reclamation Facility Improvements-201840

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Replace or rehabilitate facilities and equipment at the Tapia Water Reclamation facility based on failure, end of useful life, or obsolescence. Specific projects are identified for each fiscal year.	-	-	-

Sanitation-100 %	FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
LV Share Amount (70.6%)	93,192.00	93,192.00	93,192.00	-	
TWSD Share Amount (29.4%)	38,808.00	38,808.00	38,808.00	-	
Project Totals	132,000.00	132,000.00	132,000.00	1,056,000.00	1,320,000.00

Tapia Influent Pump Replacement-201854

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Replacement of two (2) influent pumps with dry pit submersible pumps. Dry pit submersible pumps will improve staff's ability to maintain and improve staff safety when performing maintenance. This project was identified in the 2017 Carollo study.	-	-	-

Sanitation-100 %	FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
LV Share Amount (70.6%)	-	-	279,576.00	-	
TWSD Share Amount (29.4%)	-	-	116,424.00	-	
Project Totals	-	-	396,000.00	924,000.00	1,320,000.00

Lift Station No.1 Pump Replacement-201855

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Replacement of (3) pumps	-	-	-

Sanitation-100 %	FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
LV Share Amount (70.6%)	-	-	279,576.00	-	
TWSD Share Amount (29.4%)	-	-	116,424.00	-	
Project Totals	-	-	396,000.00	-	396,000.00

Lift Station No.2 Pump Replacement-201856

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Replacement of (3) pumps	-	-	-

Sanitation-100 %	FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
LV Share Amount (70.6%)	-	-	279,576.00	-	
TWSD Share Amount (29.4%)	-	-	116,424.00	-	
Project Totals	-	-	396,000.00	-	396,000.00

Tapia Hypochlorite Tank Replacement-201857

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Replace the three fiberglass sodium hypochlorite tanks at Tapia. They are over 20 years old and beyond their expected life span. Leaks have been frequently developing and repairs are costly and difficult.	-	-	-

Sanitation-100 %		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	136,399.20	136,399.20	-	-	
	TWSD Share Amount (29.4%)	56,800.80	56,800.80	-	-	
	Project Totals	193,200.00	193,200.00	-	-	193,200.00

Tapia Secondary Clarifier Rehab-201858

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Repair the secondary clarifiers. The current launders are leaking and need to have the wall seal repaired. Replacement on the inlet diffusers and skimming tubes is also necessary as they are corroded and leaking. Re-caulking the expansion joints and structural repairs to catwalks are needed as they are separating from the wall.	-	-	-

Sanitation-100 %		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	-	-	-	198,386.00	
	TWSD Share Amount (29.4%)	-	-	-	82,614.00	
	Project Totals	-	-	-	281,000.00	281,000.00

Tapia Effluent Meter Replacement-201859

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: With the summertime compliance project being constructed next year, the 001 out fall meter will be removed. Additionally, the Tapia groundwater meter has aged out and the 003 meter needs to be replaced. These meters are regulatory required. This project replaces the 001, 003 and the Tapia groundwater effluent meters.	-	-	-

Sanitation-100 %	FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
LV Share Amount (70.6%)	23,298.00	23,298.00	-	-	
TWSD Share Amount (29.4%)	9,702.00	9,702.00	-	-	
Project Totals	33,000.00	33,000.00	-	-	33,000.00

Tapia Sludge Wet Well Re-Circulation-201860

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: The re-circulation (mixing) piping at the Tapia sludge wet wells is corroded and develops leaks. This project replaces this piping.	-	-	-

Sanitation-100 %	FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
LV Share Amount (70.6%)	-	-	44,336.80	-	
TWSD Share Amount (29.4%)	-	-	18,463.20	-	
Project Totals	-	-	62,800.00	-	62,800.00

Tapia Air Line Repair-201861

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description:			
The air line which conveys compressed air to the treatment process has leaks which not only allow air to escape, but also allow contaminants to enter into the pipeline and potentially the air diffusers. A large portion of this line was repaired, however a section of the pipeline was not addressed. This section needs to be addressed to stop leakage and protect the diffuser membranes.	-	-	-

Sanitation-100 %		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	-	-	35,300.00	-	
	TWSD Share Amount (29.4%)	-	-	14,700.00	-	
	Project Totals	-	-	50,000.00	-	50,000.00

Rancho Valving In Street Replacement- 201862

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description:			
Replace the broken or damaged R.E.W. and Potable Water valving throughout the facility.	-	-	-

Sanitation-100 %		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	-	-	178,971.00	-	
	TWSD Share Amount (29.4%)	-	-	74,529.00	-	
	Project Totals	-	-	253,500.00	-	253,500.00

Multi Site Security Assessment and Improvement- JPA-201866

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Security Assessment of various District sites and facilities. This will include access controls and security camera installations and improvements.	26,000.00	26,000.00	-

Sanitation-100 %		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	22,870.16	22,870.16	22,610.71	-	
	TWSD Share Amount (29.4%)	9,523.84	9,523.84	9,415.79	-	
	Project Totals	32,394.00	32,394.00	32,026.50	-	90,420.50

Tapia Gantry Crane-201875

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Design, build and construct gantry crane for future maintenance of aeration basin diffusers.	-	-	-

Sanitation-100 %		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	-	-	81,613.36	-	
	TWSD Share Amount (29.4%)	-	-	33,986.40	-	
	Project Totals	-	-	115,599.76	-	115,599.76

Tapia Flow Equalization-201904

		Prior Year Expenditures	Prior Year Appropriations	Carryforward		
Project Description:						
This project consists of the development of a preliminary design report to evaluate the storage and conveyance of Tapia primary effluent to help store and equalize the diurnal peak flows that Tapia sees between dry and wet weather events. This maximizes effluent available for the AWT and also improves and provides consistent water quality for the feed water to the						
		-	-	-		
Sanitation-100 %						
		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	70,600.00	70,600.00	176,500.00	4,878,460.00	
	TWSD Share Amount (29.4%)	29,400.00	29,400.00	73,500.00	2,031,540.00	
	Project Totals	100,000.00	100,000.00	250,000.00	6,910,000.00	7,260,000.00

Tapia HVAC Replacement-201906

		Prior Year Expenditures	Prior Year Appropriations	Carryforward		
Project Description:						
Replace existing 40-year old HVAC at Tapia.						
		-	-	-		
Sanitation-100 %						
		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	214,624.00	214,624.00	-	-	
	TWSD Share Amount (29.4%)	89,376.00	89,376.00	-	-	
	Project Totals	304,000.00	304,000.00	-	-	304,000.00

Rancho Generator Study and Purchase-201907

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Commission study/design of backup generator requirements followed by purchase and installation of recommended equipment	-	-	-

Sanitation-100 %		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	214,624.00	214,624.00	194,390.04	-	
	TWSD Share Amount (29.4%)	89,376.00	89,376.00	80,949.96	-	
	Project Totals	304,000.00	304,000.00	275,340.00	-	579,340.00

Concrete Corrosion/Crack Repair-Tapia-201912

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Repair failing concrete at the Tapia Water Reclamation Facility	-	-	-

Sanitation-100 %		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	46,596.00	46,596.00	46,596.00	-	
	TWSD Share Amount (29.4%)	19,404.00	19,404.00	19,404.00	-	
	Project Totals	66,000.00	66,000.00	66,000.00	66,000.00	198,000.00

Lift Station Improvements- 201914

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Repair and rehabilitate aging lift stations.	-	-	-

Sanitation-100 %		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	105,900.00	105,900.00	783,660.00	-	
	TWSD Share Amount (29.4%)	44,100.00	44,100.00	326,340.00	-	
	Project Totals	150,000.00	150,000.00	1,110,000.00	1,110,000.00	2,370,000.00

Fire Hardening- JPA Facilities-201915

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Fire hardening strategy for JPA facilities includes preventative measures and protection systems for both internal and external sources of fire. Potential facility improvements include: 1) Employing advanced detectors and utilizing a plant fire safety systems; and 2) evaluation and, if feasible, installation of a perimeter fire defense system. Fire Hardening also includes creating larger defensible space around critical structures and providing wider access roads and preventative improvements to facilities.	-	-	-

Sanitation-100 %		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	186,384.00	186,384.00	186,384.00	-	
	TWSD Share Amount (29.4%)	77,616.00	77,616.00	77,616.00	-	
	Project Totals	264,000.00	264,000.00	264,000.00	2,112,000.00	2,640,000.00

Discharge Point Rehab-201918

	Prior Year Expenditures	Prior Year Appropriations	Carryforward		
Project Description:					
Evaluate and repair failed 003 Discharge point pipeline (into Malibu Creek). Contract for inspection, an engineering study and a design report to determine the most cost effective means to repair failed 24" potable water pipeline from the Tapia Water Reclamation Facility to Malibu Creek. The pipeline will be used to supply potable supplement to the Malibu Creek during low flow periods.Approximately one (1) mile of pipeline needs to be and preventative improvements to facilities.	-	-	-		
Sanitation-100 %					
	FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
LV Share Amount (70.6%)	543,125.80	543,125.80	-	-	
TWSD Share Amount (29.4%)	226,174.20	226,174.20	-	-	
Project Totals	769,300.00	769,300.00	-	-	769,300.00

Grit Chamber Mixing System Replacement-60030

	Prior Year Expenditures	Prior Year Appropriations	Carryforward		
Project Description:					
Replace grit chamber mixing system with a more efficient mixing system.	-	-	-		
Sanitation-100 %					
	FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
LV Share Amount (70.6%)	-	-	-	93,898.00	
TWSD Share Amount (29.4%)	-	-	-	39,102.00	
Project Totals	-	-	-	133,000.00	133,000.00

New RAS Wet Well and Pumps-60031

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Replace RAS wet well and pumps to increase pumping capacity and reliability.	-	-	-

Sanitation-100 %		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	84,720.00	84,720.00	-	790,720.00	
	TWSD Share Amount (29.4%)	35,280.00	35,280.00	-	329,280.00	
	Project Totals	120,000.00	120,000.00	-	1,120,000.00	1,240,000.00

Centrate Tank Inspection and Rehabilitation Assesment-70019

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Tank inspections and recommendations for rehabilitation.	-	-	-

Sanitation-100 %		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	7,060.00	7,060.00	-	-	
	TWSD Share Amount (29.4%)	2,940.00	2,940.00	-	-	
	Project Totals	10,000.00	10,000.00	-	-	10,000.00

Trunk Sewer System Improvements-99983

Project Description:
 Replace or rehabilitate trunk sewer system components based on CCTV, condition assessment & SSMP, end of useful life, or obsolescence. Specific projects are identified for each fiscal year (see project 201877 for FY 20-21 related activity).

	Prior Year Expenditures	Prior Year Appropriations	Carryforward		
	-	-	-		
Sanitation-100 %					
	FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
LV Share Amount (70.6%)	-	-	783,660.00	-	
TWSD Share Amount (29.4%)	-	-	326,340.00	-	
Project Totals	-	-	1,110,000.00	-	1,110,000.00

Sanitation Summary

	7,869,300.00			
	Carryforward	Appropriations	FY 20-21 Budget	FY 21-22 Appropriations
LV Share Amount (70.6%)	5,555,725.80	7,347,053.25	12,860,021.57	8,740,169.16
TWSD Share Amount (29.4%)	2,313,574.20	3,059,537.75	5,355,306.43	3,639,673.95
	7,869,300.00	10,406,591.00	18,215,328.00	12,379,843.11

Recycled Water

Canyon Oaks Park RW Main Extension-10629

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Extension to serve the City of Westlake Village's Oak Canyon Park and eliminate a long private service line to Yerba Buena School. Funding from Prop 84 IRWM 2015.	7,451.00	399,780.00	392,329.00

Recycled-100 %		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	-	276,631.98	-	-	
	TWSD Share Amount (29.4%)	-	115,198.02	-	-	
	Project Totals	-	391,830.00	-	-	399,281.00
	Project Offset		(106,090.00)	Net Project	293,191.00	

Cordillera Tank Rehab-10665

	Prior Year Expenditures	Prior Year Appropriations	Carryforward
Project Description: Rehabilitation of Cordillera Tank including interior and exterior coating, valve and appurtenance upgrades and replacements, restoration of deteriorated asphalt, and work to ensure up-to-date compliance for safety and water quality equipment.	39,879.00	1,201,267.00	1,161,388.00

Recycled-100 %		FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations	Future Year Appropriations	Project Total
	LV Share Amount (70.6%)	-	819,939.93	-	-	
	TWSD Share Amount (29.4%)	-	341,448.07	-	-	
	Project Totals	-	1,161,388.00	-	-	1,201,267.00

Recycled Water Summary

	Carryforward	FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations
LV Share Amount (70.6%)	1,022,024.66	-	1,096,571.91	-
TWSD Share Amount (29.4%)	425,602.34	-	456,646.09	-
	1,447,627.00	-	1,553,218.00	

Santitation Summary

	Carryforward	Appropriations	FY 20-21 Budget	FY 21-22 Appropriations
LV Share Amount (70.6%)	5,555,725.80	7,347,053.25	12,860,021.57	8,740,169.16
TWSD Share Amount (29.4%)	2,313,574.20	3,059,537.75	5,355,306.43	3,639,673.95
	7,869,300.00	10,406,591.00	18,215,328.00	12,379,843.11

Grand Total

	Carryforward	FY 20-21 Appropriations	FY 20-21 Budget	FY 21-22 Appropriations
LV Share Amount (70.6%)	6,577,750.46	7,347,053.25	13,956,593.48	8,740,169.16
TWSD Share Amount (29.4%)	2,739,176.54	3,059,537.75	5,811,952.52	3,639,673.95
	9,316,927.00	10,406,591.00	19,768,546.00	12,379,843.11

June 1, 2020 JPA Board Meeting

TO: JPA Board of Directors

FROM: Finance & Administration

Subject : Tapia Water Reclamation Facility SCADA System Upgrade Project: Award

SUMMARY:

The JPA uses a Supervisory Control and Data Acquisition (SCADA) system for its wastewater treatment and wholesale recycled water operations. The SCADA system provides automation of processes, alarm protocols, data collection for analysis and reporting, and remote control and monitoring capabilities. The SCADA system consists of field instruments, programmable logic controllers (PLCs), a communication network and a human machine interface (HMI).

Most of the PLCs installed at the Tapia Water Reclamation Facility are obsolete and no longer available or supported by the manufacturers. The JPA's existing HMI is also obsolete and cumbersome due to its age and modifications that have been made over many years. As a result, staff has been planning an upgrade of the JPA's SCADA system through a phased approach that would begin at Tapia.

In December 2019, staff circulated a request for proposals inviting qualified firms to provide SCADA controls upgrade and integration services, together with upgrades to the communications network, for the Tapia Water Reclamation Facility SCADA System Upgrade Project. The scope of work consists of replacing and reprogramming the SCADA process controls and upgrading the communication network, while adhering to existing JPA SCADA standards. Staff recommends accepting the proposal by The RoviSys Company (RoviSys), which includes standardizing on Rockwell Automation PLCs and the Schneider Wonderware Systems HMI Platform.

RECOMMENDATION(S):

Accept the proposal and authorize the Administering Agent/General Manager to execute a professional services agreement with The RoviSys Company, in the amount of \$2,417,333, for the Tapia Water Reclamation Facility SCADA System Upgrade Project.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

Sufficient funds for the work are available in the proposed Fiscal Year 2020-21 JPA Budget. The cost of the project will be allocated 70.6% to LVMWD and 29.4% to Triunfo Water & Sanitation District.

DISCUSSION:

The JPA uses a Supervisory Control and Data Acquisition (SCADA) system for its wastewater treatment and wholesale recycled water operations. The SCADA system provides automation of processes, alarm protocols, data collection for analysis and reporting, and remote control and monitoring capabilities. The SCADA system consists of field instruments, programmable logic controllers (PLCs), a communication network and a human machine interface (HMI).

Most of the PLCs installed at the Tapia Water Reclamation Facility are obsolete and no longer available or supported by the manufacturers. The JPA's existing HMI is also obsolete and cumbersome due to its age and modifications that have been made over many years. As a result, staff has been planning an upgrade of the JPA's SCADA system through a phased approach that would begin at Tapia.

In the mid-1990s, the JPA had trouble with the proprietary software and hardware used to control its SCADA systems. As a result, the JPA implemented Wonderware InTouch SCADA software as its HMI to communicate with all of the different PLCs installed throughout the wastewater and wholesale recycled water systems.

In early 2018, staff conducted an evaluation of the SCADA system aimed at standardizing the PLCs and HMI to provide consistency in the equipment and programming. Based on the conclusions from the evaluation, staff developed and issued a Request for Proposals (RFP) for the Tapia SCADA System Upgrade Project using either Rockwell Automation PLCs with the Schneider Wonderware HMI or Schneider Modicon PLCs with the Schneider Wonderware HMI. In October 2018, the Board accepted a proposal from Wunderlich-Malec to assist the JPA in developing as-built documentation of the SCADA infrastructure at the Tapia Water Reclamation Facility and bidding documents for the Tapia SCADA System Upgrade Project.

On December 12, 2019, the JPA issued a Request for Proposals (RFP) from qualified consulting firms with demonstrated expertise and experience in providing SCADA control system upgrade and integration services, together with communication network systems upgrades, for the project. The scope of work consists of replacing and reprogramming the SCADA process controls and upgrading the communication network systems at Tapia, while adhering to existing JPA standards for PLCs, HMI/SCADA programming and tag naming.

Consultant Selection:

An evaluation committee including staff from Water Reclamation, Facilities, Engineering and Information Systems reviewed the four proposals based on project approach, project understanding, experience and cost. The committee short-listed two firms for interviews: Wunderlich-Malec and The RoviSys Company. Based on the interviews and presentations, RoviSys emerged as the most qualified firm for the project based on its demonstrated

expertise and experience in providing SCADA control system upgrade and integration services.

Prepared by: Ivo Nkwenji, Information Systems Manager

ATTACHMENTS:

RoviSys Fee Proposal

Cost Proposal

1 Proposal Assumptions

RoviSys assumptions made during the development of this cost proposal are listed below.

1.1 General Assumptions

1. The procurement of instrumentation will be on “time and material” basis.
2. The RoviSys interpretation of the hardware and software requirements identified in the RFP is outlined in the Bill of Material section.
3. The nature of the “security system” is unknown and work associated with it has not been included in this proposal.
4. This proposal includes pricing that is only valid for 30 – 60 days. As the design effort is expected to span several months, new proposals may be required prior to procurement activities.
5. RoviSys has not included any engineering services to document the functionality of the existing SCADA and networking systems.
6. RoviSys is assuming that LVMWD is tax exempt for services and NOT tax exempt for hardware. 10% tax was used for this estimate.

1.2 Design Assumptions

1. RoviSys has not included any hours for development of P&IDs. It is assumed P&IDs have been developed by others.
2. Since RoviSys is not planning to modify field wiring, there is no need for loop drawings. This proposal does not include loop drawings.
3. RoviSys is assuming 40 total HMI graphics, not including faceplates and pop-ups.
4. This proposal does not include any engineering service to modify the business network or any portion of the network above the DMZ.
5. RoviSys has included 12 VLANs in the design and implementation of the new PCIS network.
6. RoviSys has not included using the servers as an operator workstation.
7. RoviSys has included time and effort for two (2) pre-design workshops (user requirements and high-performance graphics).
8. RoviSys has included time and effort for one (1) design workshop (SCADA and network FS)
9. RoviSys is assuming that control requirements will be provided by LVMWD through discussion and available documentation.
10. RoviSys has not included any services for report development.
11. The original IO counts used in the development of this proposal were provided in Amendment 3. Based on details determined during the job walk, RoviSys has reduced this count by 15% to account for PLCs that may not be connected to the SCADA system.

I/O Count

IO Type - Hardwired	Qty
Analog Inputs	367
Analog Outputs	132
Digital Inputs	1438
Digital Outputs	640
Total Hardwired I/O	2577

12. The PLCs included in this proposal's scope of services are listed in the flowing table

PLC (Location)	PLC/RIO Upgrade
PLC 02 (CP100)	PLC with Local CpLX IO
PLC 03 (Effluent PS)	PLC with Local CpLX IO
PLC 05 (Chemical)	PLC with Local CpLX IO
PLC 06 (Control Rm)	PLC with Local CpLX IO
PLC 04 (Filters)	PLC with Local CpLX IO
PLC 11 (Filter 1)	PLC with Local CpLX IO
PLC 15 (Filter 5)	PLC with Local CpLX IO
PLC 19 (Filter 9)	PLC with Local CpLX IO
PLC 23 (Lift Station 1)	PLC with Local CpLX IO
PLC 24 (Lift Station 2)	PLC with Local CpLX IO
PLC 26 (Headworks)	PLC with Local CpLX IO
PLC 29 (CP1000)	PLC with Local CpLX IO
PLC 96 (Cent 96) (Quantum)	PLC with Local CpLX IO
PLC 36 (CP1000)	PLC with Local CpLX IO; new subpanel
PLC 08 (Sludge PS)	PLC with Point IO
PLC 37 (Chemical Area)	PLC with Point IO
PLC 39 (Ammonia)	PLC with Point IO
PLC 12 (Filter 2)	CpLX Remote IO rack (back to PLC 11)
PLC 13 (Filter 3)	CpLX Remote IO rack (back to PLC 11)
PLC 14 (Filter 4)	CpLX Remote IO rack (back to PLC 11)
PLC 16 (Filter 6)	CpLX Remote IO rack (back to PLC 15)

PLC (Location)	PLC/RIO Upgrade
PLC 17 (Filter 7)	CpLX Remote IO rack (back to PLC 15)
PLC 18 (Filter 8)	CpLX Remote IO rack (back to PLC 15)
PLC 20 (Filter 10)	CpLX Remote IO rack (back to PLC 19)
PLC 21 (Filter 11)	CpLX Remote IO rack (back to PLC 19)
PLC 22 (Filter 12)	CpLX Remote IO rack (back to PLC 19)
PLC 33H (CP100)	CpLX Remote IO rack (back to PLC 2)
PLC 34 (CP100)	CpLX Remote IO rack (back to PLC 2)
PLC 01 (CP1000)	CpLX Remote IO rack (back to PLC 36)
PLC 07 (CP1000)	CpLX Remote IO rack (back to PLC 36)
PLC 09 (CP1000)	CpLX Remote IO rack (back to PLC 36)
PLC 25 (Chemical)	CpLX Remote IO rack (back to PLC 5)
PLC 95 (Cent 01)	CpLX Remote IO rack (back to PLC 96)
Effluent Pump 1 (By PLC03)	Point IO (back to PLC 3)
Effluent Pump 1 (By PLC03)	Point IO (back to PLC 3)
Effluent Pump 1 (By PLC03)	Point IO (back to PLC 3)
PLC 35 (CP100)	Point IO (back to PLC 2)
PLC 42 (Vibe LS2)	Point IO (back to PLC 23)
PLC 43 (Vibe LS1)	Point IO (back to PLC 24)
PLC 27 (Bar Screen 1)	Point IO (back to PLC 26)
PLC 28 (Bar Screen 2)	Point IO (back to PLC 26)
PLC 41 (Vibe)	Point IO (back to PLC 3)
PLC 45 Eff (Vibe)	Point IO (back to PLC 3)
PLC 38 (Chemical Area)	Point IO (back to PLC 38)
PLC 10 (Filters)	Point IO (back to PLC 4)
Generator (CP1000)	Keep existing PLC; update program
PLC 97 (Cent 97) (AB)	Keep existing PLC; update program
Air Process (Main) (Not Action)	Keep existing PLC; update program
Air Process (Remote)	Keep existing RIO; update program

PLC (Location)	PLC/RIO Upgrade
Balance Pond 1 (By PLC04)	Removed from scope
Balance Pond 2 (By PLC04)	Removed from scope
Balance Pond 3 (By PLC04)	Removed from scope
Ground Water Observation Well	Removed from scope
Hoffmans (By PLC02)	Removed from scope
Muffin Monster	Removed from scope
Muffin Monster	Removed from scope
Headworks Grit Conveyor	Removed from scope
Primary Drive No 1	Removed from scope
Primary Drive No 2	Removed from scope
Primary Drive No 3	Removed from scope
Roots 1 (Blower 1)	Removed from scope
Roots 2 (Blower 2)	Removed from scope
Roots Air Bleed Control (Airbleed)	Removed from scope
Roots Panel View	Removed from scope
Sausage Maker No 1 (Compactor)	Removed from scope
Sausage Maker No 2 (Compactor)	Removed from scope
Secondary Drive Watch Dog No 1	Removed from scope
Secondary Drive Watch Dog No 2	Removed from scope
Secondary Drive Watch Dog No 3	Removed from scope
Secondary Drive Watch Dog No 4	Removed from scope
Secondary Drive Watch Dog No 5	Removed from scope
Surge Tank (PLC 3)	Removed from scope

1.3 Implementation Assumptions

1. RoviSys is including one resource for commissioning based on the assumption that LVMWD can provide a maintenance or I&C technician to assist in the field.
2. Process Controllers (PLC) may be shut down for 12-hour periods during commissioning activities.
3. Request to change graphics after the factory acceptance test may result in a change order.
4. The PLC design includes PLC to remote IO racks via Ethernet. It is assumed that the locations of designated RIO panels have a pathway (such as conduit) to the appropriate PLC.
5. The RFP requires trending for “500 Trends”. RoviSys is assuming this means 500 pens (data values). RoviSys is also assuming 8 pens per trend.
6. Wonderware Intouch systems can be customized in many ways including scripting. Finding and reverse engineering scripting can be a very timely process. For this proposal RoviSys is not including any services to reverse engineer scripting.
7. In all cases it is assumed that the existing PLC enclosures can be reused.
8. Using the PLC list and information gathered during the job walk, RoviSys has determined 20 Unique PLC/Process Areas, and 25 that represent duplicate systems. These quantities are used throughout the proposal for estimating efforts.
9. Onsite support includes:
 - a. 45 days for PLC/Panel installations (1 engineer)
 - b. 63 days for network installation activities (1 engineer)
 - c. 20 days of startup (2 engineers, 20 PLC systems)
 - d. 20 days of commissioning (1 engineer, 20 PLC systems)
 - e. 10 days of site acceptance testing (1 engineer, 20 PLC systems)
10. RoviSys is including 20 Factory Acceptance Tests for up to 4 hours each.

1.4 Control System Hardware & Software Assumptions

1. RoviSys is providing pricing for ONLY Rockwell platforms.
2. RoviSys has included desktop monitors for the four (4) Thin Client stations. No touchscreens are included in this proposal.
3. RoviSys has included licensing for 100 Assets with the Asset Management software.

1.5 Electrical Construction Assumptions

1. This proposal includes subcontractor services for pulling not more than 1000 meters of new 24 strand single mode fiber. RoviSys has assumed conduits can be used for all fiber other than the one denoted in the Fiber Network Architecture drawing. One new fiber drop shall reuse an existing enclosure and conduit.
2. The one new fiber conduits will not exceed 350 feet total.
3. It is assumed that all conduit runs will be completed without excavation.
4. Wiring between PLC and termination blocks will be replaced and relabeled.
5. No field wiring modifications will be required.
6. Demolished equipment will be turned over to LVMWD for disposal.
7. Spare 120 VAC power circuit are available at necessary process areas and retrofitting these panels with additional breakers is not included in the proposed scope.

2 Total Project Cost

The following tables outline the Rockwell and Schneider solutions. Please note design, implementation, and platform independent hardware and software costs stay consistent.

Scope Item	Price
Design	\$437,420
Implementation	\$594,090
Platform Independent Hardware/Software	\$285,994
Rockwell Hardware/Software	\$189,065
Taft Electrical Services	\$714,000
Tax on Hardware (10%)	\$57,006
New Customer Discount	(\$80,000)
Total Cost	\$2,197,575

NOTE: Travel & Living expenses are invoiced on an "as-incurred" basis with no markup.

3 Service Cost Details

Refer to Excel Sheet

4 Platform Independent Hardware/Software

Model	Manufacturer	Software	Qty	Price
Total Cost				\$285,994
ThinManager				\$8,632
6200T-KB	Rockwell	ThinManager Client, 24VDC	4	
1606-XLE80E	Rockwell	Single-Phase Power Supply	4	
9541-TMF1-TMA	Rockwell	ThinManager, perpetual license 1 year.	4	
Wonderware Software				\$57,200
SYSPLT-10-N-17	Aveva	System Platform 2017, 50K /12K History	1	
CF-ADD-WW	Aveva	Customer FIRST 38264 Exp. 12/31/2020	1	
Servers and Workstations				\$49,136
PowerEdge R7425	Dell	Servers and Accessories	2	
Precision 5820	Dell	Workstation and Accessories	8	
Latitude 7200	Dell	Tablet and Industrial Case	5	
P2719HC	Dell	27in Monitor	9	
Panel Build and Minor Components				\$5,500
Multiple	Multiple	PLC 36 Subpanel	1	

Network Hardware				\$121,660
WS-C3850-12S-S	Cisco	Cisco Catalyst 3850 Switch 12 fiber, stackable	2	
ASA5506-X-K9	Cisco	Cisco ASA Firewall	2	
GLC-TE	Cisco	SFP; Transceiver Module ASA GLCTE Enet	4	
ASA5506-RackMount	Cisco	Rack Mount Shelf, ASA Firewall (hold two)	1	
WS-C2960X-24PS-LPP	Cisco	Cisco Catalyst 2960X 24 pt Managed, POE	18	
C2960X-Stack	Cisco	Flex Stack Plus module	18	
IE2000-8TC-G-L	Cisco	Cisco IE 2000, 8x Ethernet 2x Gig SFP	32	
PWR-IE50W-AC	Cisco	24VDC Power Supply	32	
GLC-LH-SMD	Cisco	SFP; Transceiver Module SM Fiber LC/LC	36	
SR42UBWDVRT	Tripplite	42U Floor Rack with Cable management	1	
CN-CCH-02U	Corning	LANscape 2U Fiber Patch Panel	1	
SMART1500LCD	Tripplite	Tripplite SmartPro 1500VA UPS Rack	10	
SRW15US	Tripplite	15U Wall Mount, Swing Open, Vented	9	
CN-CCH-01U	Corning	LANscape 1U Fiber Patch Panel	9	
WS-C3850-12S-S	Cisco	Cisco Catalyst 3850 Switch 12 fiber	2	
Multiple	Multiple	Multiple Components		
Wireless Network Hardware				\$43,866
JY926AAE	Aruba	Device Management 3 Year Subscription	26	
JY929AAE	Aruba	Cloud Services 3 Year Subscription	26	
Q9H63A	Aruba	AP-515 (US) Unified AP (Indoor)	16	
R1C72A	Aruba	AP-MNT-MP10-E AP mount brkt 10-pack	1	
R3J19A	Aruba	AP-MNT-E AP mt brkt individual wall-box	5	
JZ173A	Aruba	AP-375 (US) Outdoor 11ac AP	5	
JZ183A	Aruba	AP-377 (US) Outdoor 11ac AP	5	
JW052A	Aruba	AP-270-MNT-V1 AP-270 Outdoor Mount	10	
JW620A	Aruba	PD-MOUNT-OD Outdoor PoE Injector Mt	10	
Q8N53A	Aruba	1000BASE-SX LC Conn SFP Temp Xceiver	5	
Q8N54A	Aruba	CKIT-OD-SFP SFP Outdoor Accessory Kit	5	
JW081A	Aruba	Weatherized AC Power 5m Cable	5	

5 Rockwell Hardware/Software

Model	Hardware	Qty	Price
Total Cost			\$189,065
PLC and PLC IO			14
1769-L30ER	CompactLogix 5370 L3, 2 ENet, 1MB 8 IO	10	
1769-PA2	120/240V AC Power Supply (5V @ 2 Amp)	10	
1769-IF4I	4 Channel Analog Isolated Input	20	
1769-OF4CI	4 Channel Analog Current Isolated Output	10	
1769-IA16	16 Point 120 VAC Input Module	10	
1769-IA8I	8 Point Isolated 120 VAC Input	10	
1769-OW8I	8 Point Isolated AC/DC Relay Out	20	
1606-XLE80E	Single-Ph Power Supply 80W, 24DC, 3.3A	10	

Remote PLC IO		16	\$64,299
1769-AENTR	Compact I/O 1769-AENTR ENet Adapter	12	
1769-PA2	120/240V AC Power Supply (5V @ 2 Amp)	12	
1769-IF4I	4 Channel Analog Isolated Input	12	
1769-OF4CI	4 Channel Analog Current Isolated Output	24	
1769-IA16	16 Point 120 VAC Input Module	12	
1769-IA8I	8 Point Isolated 120 VAC Input	12	
1769-OW8I	8 Point Isolated AC/DC Relay Out	24	
1606-XLE80E	Single-Ph Power Supply 80W, 24DC, 3.3A	12	
PLC and Micro IO		3	\$11,158
1769-L30ER	CompactLogix 5370 L3, 2 ENet, 1MB 8 IO	5	
1769-PA2	120/240V AC Power Supply (5V @ 2 Amp)	5	
1794-PS3	85-264 VAC To 24 VDC 3A Power Supply	5	
1734-AENT	1734 EtherNet/IP Adapter	5	
1734-FPD	Field Power Distributor	10	
1734-IA4	120V AC 4-Point Input Module	20	
1734-OW4	4-Point Relay Output Module	15	
1734-IE4C	4-Channel High-Density Analog Input	5	
1734-OE2C	2-Point Analog Current Output Module	5	
1734-TOP	Terminal Base, 8-point, Screw Clamp	45	
1606-XLE80E	Single-Ph Power Supply 80W, 24DC, 3.3A	5	
Remote Micro IO		12	\$27,743
1794-PS3	85-264 VAC To 24 VDC 3A Power Supply	9	
1734-AENT	1734 EtherNet/IP Adapter	9	
1734-FPD	Field Power Distributor	18	
1734-IA4	120V AC 4-Point Input Module	36	
1734-OW4	4-Point Relay Output Module	27	
1734-IE4C	4-Channel High-Density Analog Input	9	
1734-OE2C	2-Point Analog Current Output Module	9	
1734-TOP	Terminal Base, 8-point, Screw Clamp	81	
1606-XLE80E	Single-Ph Power Supply 80W, 24DC, 3.3A	9	
Software			\$18,992
9528-ASTCAP0100E	FactoryTalk AssetCentre 100 assets	1	
9528-ASTDRROKENE	FactoryTalk AssetCentre Disaster Recovery	1	
9528-ASTSRVRENE	FactoryTalk AssetCentre Server	1	
9324-RLD700NXENE	Studio 5000 Professional Edition	1	

6 Hourly Fee Schedule

6.1 RoviSys 2020 Engineering Rates

2020 Rate Table	
Project Manager	\$ 171
Sr Engineer	\$ 161
Project Engineer	\$ 142
Lead SW Developer	\$ 150
Engineer	\$ 125
Graphics Tech	\$ 111
CAD Technician	\$ 99
Sr Consultant	\$ 180
IT Specialist	\$ 165
Network Engineer	\$ 185
Field	\$ 163
Field Lead	\$ 185
Field Weekend	\$ 244

NOTICE

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June 1, 2020 JPA Board Meeting

TO: JPA Board of Directors

FROM: Facilities & Operations

Subject : Tapia Water Reclamation Facility Outfall Rehabilitation Project: Award of Design

SUMMARY:

One of the capital improvement projects included in the proposed Fiscal Year 2020-21 JPA Budget is the Tapia Water Reclamation Facility Outfall (Discharge Point No. 003) Rehabilitation Project. The outfall for Discharge Point No. 003 was constructed in 1979 to convey final effluent from Tapia to a constructed wetland on the opposite side of Malibu Canyon Road. Although the constructed wetland is no longer in operation, the outfall is still necessary to discharge final effluent during high-flow periods caused by rain events. The outfall consists of approximately 2,250 linear feet of 24-inch 10-gauge steel pipe with asphalt coating and wrapping.

During the past winter, staff noticed that flows discharged to the outfall were backing up in the pipeline. As a result, a CCTV consultant was brought in to conduct a video inspection of the interior of the pipeline. The inspection revealed holes in the pipeline that allowed soil to drop through and visibly cause water to back up. The pipeline was also shown to have areas of severe scaling, and the original asphalt coating was completely deteriorated. Attached are photos illustrating the pipeline condition from the CCTV inspection.

To further evaluate the pipeline and perform needed repairs, a request for proposals for design was issued and advertised on April 6, 2020. Four proposals were received by the May 7, 2020 due date. Staff evaluated the submittals and recommends accepting the proposal from MKN & Associates, Inc., in the amount of \$80,937.

RECOMMENDATION(S):

Authorize the Administering Agent/General Manager to execute a professional services agreement with MKN & Associates, Inc., in the amount of \$80,937, to complete the design of the Tapia Water Reclamation Facility Outfall Rehabilitation Project.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

Sufficient funding for the work is provided in the proposed Fiscal Year 2020-21 JPA Budget. The cost of the project will be allocated 70.6% to LVMWD and 29.4% to Triunfo Water & Sanitation District.

DISCUSSION:

The proposed Fiscal Year 2020-21 JPA Budget includes the Tapia Water Reclamation Facility Outfall (Discharge Point No. 003) Rehabilitation Project. The outfall for Discharge Point No. 003 was constructed in 1979 to convey final effluent from Tapia to a constructed wetland on the opposite side of Malibu Canyon Road. Although the constructed wetland is no longer in operation, the outfall is still necessary to discharge final effluent during high-flow periods caused by rain events.

During large rain events, the water level in Malibu Creek rises above the primary outfall for Tapia (Discharge Point No. 001) and backpressure causes a reduction in the flow that can be discharged through the outfall. When this condition occurs, the outfall for Discharge Point No. 003 is placed into service. Effluent can continue to be discharged through the 003 outfall because it joins Malibu Creek at a lower elevation further downstream. The 003 outfall is also used for the discharge of groundwater pumped from beneath Tapia's chlorine contact channel and balancing pond. The outfall consists of approximately 2,250 linear feet of 24-inch 10-gauge steel pipe with asphalt coating and wrapping.

During the past winter, staff noticed that the flow of groundwater was backing up in the 003 outfall pipeline. In January 2020, a CCTV consultant was hired to conduct a video inspection of the pipeline. Although the CCTV consultant was not able to video the entire length of the pipeline, the portion that was inspected was shown to have holes where soil had dropped inside the pipe and caused water to back up. Also, the inspection revealed areas of the pipeline with severe scaling and deterioration of the original asphalt coating. At one location, a joint seal was shown to be hanging into the pipe, which indicates a very severely corroded joint.

To address the condition of the 003 outfall, a Request for Proposals (RFP) was developed for further evaluation of its condition and design the required repairs. The RFP was issued on April 6, 2020 and advertised on the LVMWD website. Four proposals were received by the May 7, 2020 due date. Staff evaluated the submittals and recommends accepting the proposal from MKN & Associates, Inc., in the amount of \$80,937.

Following is a summary of the costs for the four proposals:

AECOM	\$163,737
Cannon	\$258,435
Cordoba	\$120,381
MKN	\$80,937

Prepared by: Brett Dingman, Water Reclamation Manager

ATTACHMENTS:

Outfall 003 CCTV Photo No. 1

Outfall 003 CCTV Photo No. 2

Alignment of Outfall 003

MKN Proposal

Distance: 610.0 ft.
BSV - Broken Soil Visible
Clock from: 1 o'clock
Clock to: 4 o'clock
Rating: 5
Dimension 1:
Dimension 2:
%

distance: 619.0 ft.
BSV = Broken Soil Visible
Clock from: 8 o'clock
Clock to: 11 o'clock
Rating: 5
Dimension 1:
Dimension 2:
3/0



Las Virgenes Municipal Water District is not responsible for the accuracy of this presentation. This presentation is for illustrative purposes only. Verify the physical location of all property lines, water lines and ancillary information prior to use.

0 150 300 600
Feet

Outfall 003 Line

1 inch = 150 feet 100





TRIUNFO
WATER & SANITATION DISTRICT



PROPOSAL FOR

**Tapia Water Reclamation Facility:
003 Outfall Rehabilitation Design**

Submittal Due Date: May 7, 2020 at 3:00pm
Brett Dingman | Water Reclamation Manager
Las Virgenes Municipal Water District
4232 Las Virgenes Road | Calabasas, California 91302



WATER - WASTEWATER - REUSE

May 7, 2020

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

Subject: Request for Proposal for Tapia WRF 003 Outfall Rehabilitation Design

We are pleased to submit our proposal to provide engineering services for the Las Virgenes Municipal Water District's (District) Tapia Water Reclamation Facility (WRF) Project. This proposal presents MKN's approach to the successful and expedited completion of this project. The following summarizes why we are confident that our firm can provide the District with the best value while also meeting all schedule and quality goals:

Experienced and Available Project Team

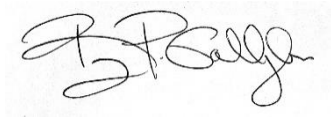
- MKN staff have completed work at *over 30+ WWTPs and 200+ miles of pipeline.*
- Our team has extensive pipeline rehabilitation experience, *including recent CIPP projects in Ventura County.*
- *Our team has reviewed the design and identified ways to minimize construction cost.* Based on our review of the existing outfall, construction of manhole access points is the best approach to minimize risk and enable a thorough inspection and effective rehabilitation. Though this deviates from the requested scope, we believe it will ultimately lower the overall project cost and reduce project risk. This approach is further detailed in our Project Approach.

We are very excited about the opportunity to work with the District and appreciate your consideration of this proposal. Should you have any additional questions please contact me at (805) 947-4972 or via email rlippincott@mknassociates.us.

Sincerely,



Ryan Lippincott, P.E.
Project Manager



Ryan Gallagher, P.E.
Principal

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SECTION 1 – FIRM BACKGROUND

MKN's Client Centric Origins

Michael K. Nunley & Associates, Inc. (MKN) is a water, wastewater and recycled water engineering firm located and focused exclusively in Southern California. MKN's offices are located in Ventura, Santa Clarita, Irvine, Arroyo Grande, Bakersfield and Fresno.

Our firm was formed and has *grown to nearly 40 professional engineers*, planners, construction managers/inspectors and support staff because of the need from agencies similar to Las Virgenes Municipal Water District (District). Since 2012, MKN has focused on meeting a growing need by public agencies for responsive, technically capable consultants who are committed to a long-term relationship based on excellence.

Water is our Focus

Water is all that we do. For the District, this means that everything from our contract set up to quality control program is tailored around municipal water, wastewater and reuse projects. *This means our processes are streamlined to ensure the highest quality with the lowest overhead.*

Our principals have decades of experience in management and leadership roles for some of the highest ranked engineering firms in the world, and we are excited to bring our expertise to the District.

MKN practice groups include Treatment, Infrastructure, Program Management, Planning and Hydraulic Modeling, and Construction Management.

Proven Local Experience

Our local Ventura County office is only a short distance to the Tapia Water Reclamation Facility, and our team is experienced at the facility. Our team members have completed multiple projects at Tapia. In addition, our team members have completed various projects at wastewater treatment plants in the surrounding area, including:

- Thousand Oaks HCTP
- Camarillo WWTP
- Camrosa Water District's WRF
- City of Oxnard WWTP
- Santa Paula WRF

Beyond these local facilities, our team members *have worked at 30+ WWTPs*.

Specific to pipeline design and rehabilitation, *MKN staff have completed over 200 miles of pipeline*, including various rehabilitation methods and trenchless construction.

MKN staff have experience at Tapia:

- Condition Assessment, 5 YR CIP
- Tapia WRF Fiscal Year 2017-18 Rehabilitation Project
- Tapia WRF Channel Mixing Improvements

SECTION 2 – PROJECT UNDERSTANDING AND APPROACH

We Understand Your Needs

The existing Outfall Pipeline to 003 was constructed in 1979 and is showing signs of deterioration. The CCTV inspection performed in January captured only a portion of the full 2,250 feet of pipeline but identified at least one area in need of rehabilitation. The District is seeking a complete inspection of the pipeline, identification of the best rehabilitation options and implementation of the preferred alternative with no impact to ongoing operations.

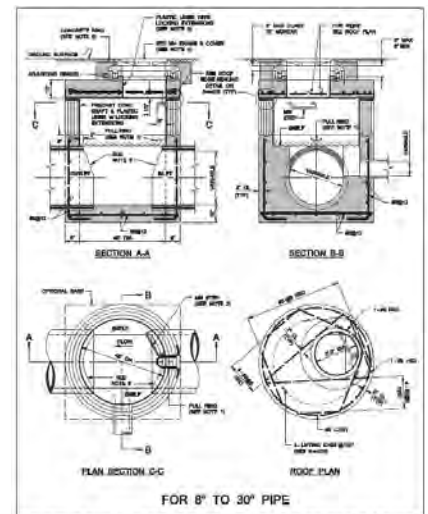
Due to the multiple bends, no CCTV Company will be able to guarantee a complete inspection of the outfall without access points. Installing permanent access points facilitates a complete CCTV inspection, the subsequent rehabilitation, and future inspections. It is the key to success on this project.

CCTV Inspection

The previous inspection identified only a single area of structural defect. However, only a portion of the pipe was inspected. It is essential to complete the inspection for the remaining sections to more clearly define the full scope of the rehabilitation. For this portion of the work, MKN has partnered with National Plant Services (NPS) who have **completed over 20 million linear feet** of pipeline CCTV/Sonar/Laser inspection service work to municipal clients in just the last 10 years.

As discussed with National Plant Services and several rehabilitation contractors, access points will be required due to the existing bends and butterfly valve. **CCTV vendors are reluctant to navigate sharp bends as the cable will rub along the inner wall of the bend causing too much friction to travel and potentially damaging the cable.** Similarly, pipeline rehab contractors cannot cleanly line through 90-degree bends. Since access points will likely be required for the future rehabilitation, installing them ahead of the CCTV provides the following benefits:

1. **Full Picture of Condition** – Without these access points the CCTV Contractor is likely to mobilize only to be limited by the bends which minimizes the realistic conceptualization of the actual condition of the pipeline and could delay the construction of the new rehabilitation system.
2. **Simplify Construction** – With these access points installed, the future CIPP Contractor could complete their work entirely without excavation. Furthermore, since the full line will have been inspected, there will be minimal surprises that could potentially lead to delays or change orders.
3. **Future Access** – Future inspections will be facilitated by having permanent access points.



MKN will leverage LACSD Standard Plans for the Manhole Access Points if LVMWD does not have applicable drawings.

To address this issue, MKN proposes to design access points to be bid by the District for installation, **prior to the inspection**. MKN anticipates up to three locations for the access points and will confirm the location as part of the Kickoff Meeting. The procurement document for the

access points will leverage existing standard drawings from Los Angeles County Sanitation Districts (Detail S-a-201 for Standard Manholes and S-a-229 for Standard 36-inch Pressure Manhole Frame and Cover). **This will limit design effort which will be completed through a two-step process, draft and final.**

Immediately following the installation or potentially during construction of the access points, MKN’s subconsultant, National Plant Services, will be mobilized to conduct the CCTV inspection of the entire length of the outfall.

Rehabilitation Assessment Technical Memorandum

With the data necessary to properly assess the pipeline acquired, MKN’s NASSCO certified pipeline experts will evaluate options for rehabilitation. As requested, this assessment will consider various options for rehabilitation, from trenchless to traditional open cut replacement.

MKN has reviewed the scope of work, as-builts and other available information to prepare the following scope of work. Based on previous experience the lowest cost options will likely be point repairs, spray on liners or cured in place pipelines. **Figure 1** illustrates several example rehabilitation methods with associated costs, benefits and challenges.

Figure 1 – Example Pipeline Rehabilitation Summary

Lining Method	Example Manufacturer	Pipe Size (in.)	Approximate Cost (Per LF)*	Materials	Benefits	Disadvantages
CIPP Lining	SEKISUI Nordipipe® (Class IV)	6 – 48	\$100-\$125	Woven polyester and polyurethane	<ul style="list-style-type: none"> Fast installation Minimum surface disruption Minimum annular space between host pipe and liner (no grouting required) Increased Hazen-Williams C-factor VOC free Cost-effective 	<ul style="list-style-type: none"> Certified installers not available in every area Internal pressure rating limitations Materials need to be monitored for temperature Bend limitations
	Aqua-Pipe® (Class IV)	6 – 24	\$105-\$125	Needled felt, glass fiber, epoxy resin		
	Insituform InsituMain™ (Class IV)	6 – 60	\$120-\$140	Polyester fiber, fiberglass, epoxy resin		
Spray-on Lining	3m Skotchtite™ (Class III)	4 – 24	\$125-\$140	Polyurea	<ul style="list-style-type: none"> Quick cure-time Little to no effort required for service connection re-establishment Minimal surface disturbance Cost-effective Typical maintenance/repair applicable following installation 	<ul style="list-style-type: none"> Limited number of installers/manufacturers Potential defects of liner due to applicator issues Material may slump in invert of pipe
	Quest Inspar Pipe Armor® (Class IV)	6 – 174	\$120 – 135	Polyurea		

* Approximate installed costs for 6-inch pipe designed to a structural level. Costs can vary greatly depending upon specific site location, total length of pipe, condition of host pipe, installer, amount of bends and fittings and water service connections.

The final recommendation will be based on the specific needs of the District as well as results of the CCTV inspection. Based on our review of the existing conditions and experience with pipeline rehabilitation, we believe the following key issues will need to be resolved as part of the TM.

- Work Within Existing 20’ Easement** – The 1979 As-Builts note a “Proposed 20’ R/W Easement” along the latter 1,400 feet of the pipeline which appears to be located in the Malibu State Park. For CIPP lining, this area would be adequate for construction.
- Reducers at Inline Valve** – An existing isolation valve located 100 feet from the outfall includes reducers which create a conflict for several trenchless methods. The presence of the valve at this location would require open trench access or removal and replacement of the valve.

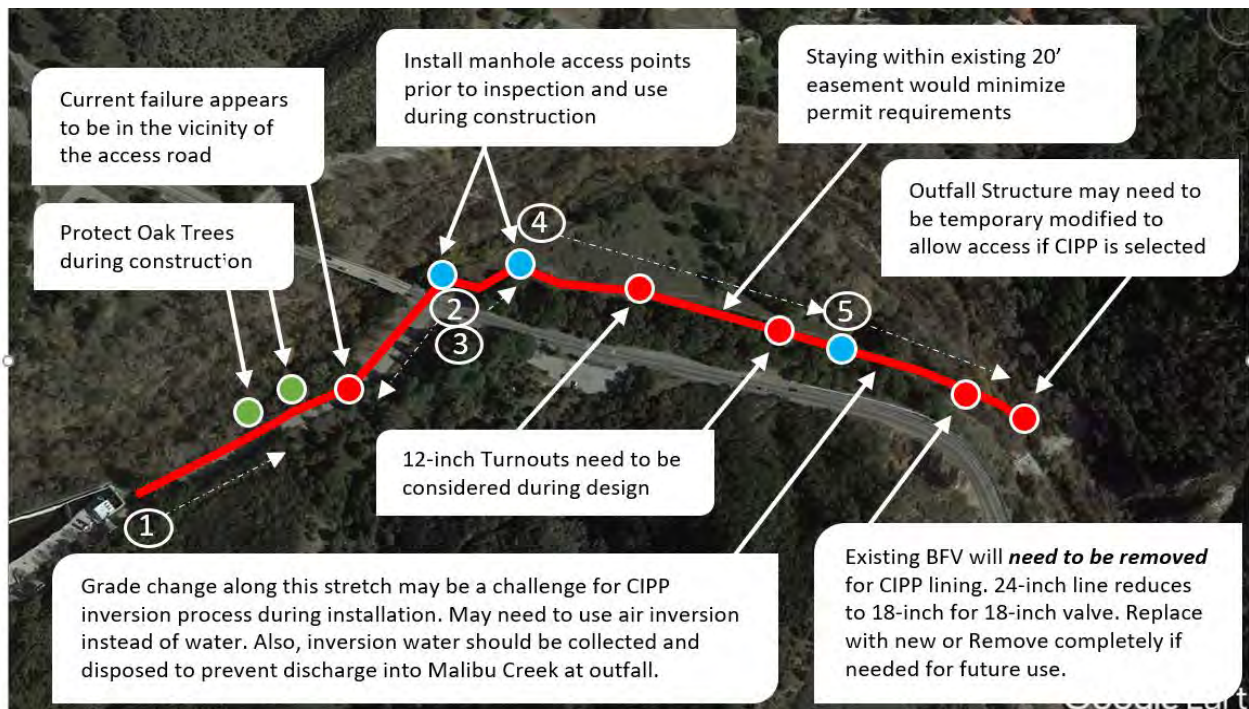
3. **Existing Turnouts Eliminated or Maintained** – The pipeline includes two 12-inch turnouts along the alignment. These will need to be considered as part of the design if the District desires to maintain access to these turnouts.
4. **Temporarily Modify Outfall Structure** – The current outfall structure consists of a 4' x 4' concrete vault which may need to be replaced or temporarily modified to allow access for construction. This cost will be considered as part of the alternatives analysis.
5. **Bends Require Access Points** – The pipeline includes multiple bends, with at least two exceeding 45 degrees which is the threshold for CIPP. These areas would require access points. As stated earlier, we propose that these are constructed prior to the CCTV inspection to facilitate access during the condition assessment phase and construction.

MKN has included scope to design these manhole structures and noted the approximate locations in Figure 2 below. Based on our discussions with CIPP Contractors and experience in CIPP design, we have confirmed that CIPP will require five separate runs which are shown in Figure 2.

6. **Coordination with Summer Compliance Project.** The Tapia WRF Summer Discharge Compliance Project included a survey effort that covers a significant portion of the pipeline alignment. We propose to utilize this information which was collected through an onsite survey completed in July 2019. In addition, the construction of these projects will need to be coordinated as they both have the potential to impact traffic along the Tapia WRF Access Road.

These issues will be further discussed at the Project Kickoff Meeting and fully resolved as part of the Rehabilitation Assessment Technical Memorandum. **Figure 2** illustrates these issues.

Figure 2 – Project Issues Summary



SECTION 3 – SCOPE OF WORK

Task 1 – Project Management, Meetings, QA/QC

Overall project management, which includes supervision of in-house staff, planning and monitoring of contract budget and schedule, and coordination with the District and MKN's project team will be conducted by the MKN Project Manager.

Anticipated coordination meetings include:

- Kickoff Meeting - (PM, Designer) – At this meeting, the scope, schedule and budget will be reviewed. At this meeting the outline of the Rehabilitation Technical Memorandum (TM) will be reviewed along with the recommended access points.
- Draft Design Review No. 1 - (PM, Designer) Review District comments to draft procurement documents for the **access manholes**.
- TM Review Meeting – (PM, Designer) Review TM findings. Confirm recommendations and next steps for design.
- Draft Design Review No. 2 – (PM, Designer) Review District comments to draft procurement documents for the **pipeline rehabilitation**.

MKN will provide senior technical review and implement our quality assurance and quality control (QA/QC) measures throughout the project.

Task 2 – Access Point Design and Construction

Following approval of the access point locations, MKN shall produce draft and final construction documents including technical specification and drawings for the three locations.

The drawings are anticipated to include the following:

1. Title Sheet
2. Notes, Abbreviations and Legend
3. Site Plan (using available CAD and GIS)
4. Details 1 – Manhole Details (3 locations)

MKN shall deliver DRAFT and FINAL construction documents in PDF format.

MKN shall provide bid and construction phase services for this effort, for a level of effort not to exceed 20 hrs.

Task 3 – CCTV Inspection and Report

Following or during construction of the access points, MKN subconsultant National Plant Services (NPS) will conduct the inspection. NPS will have a jet/vac truck on site to assist with cleaning if necessary to remove obstructions blocking the CCTV camera, and if possible, to string tag lines through the outfall, which will be used to pull the CCTV tractor through the pipeline. Water for the jet/vac trucks to be provided by LVMWD. The level of effort includes two days with a 3-person crew.

National Plant Services has provided sewer inspection services since 1981 and has completed over 20 million linear feet of pipeline CCTV. All field personnel are PACP/MACP/LACP certified.

A Technical Memorandum (TM) will be compiled that summarizes the condition of the pipeline based on the inspection report (included as Attachment to TM), alternatives analysis of rehabilitation methods with costs and recommendations for the preferred approach to rehabilitation. The TM will include a Draft and Final, and will be submitted in PDF format.

Task 4 – Final Design

Following approval of the recommended rehabilitation, MKN shall produce draft and final construction documents including technical specification and drawings.

The drawings are anticipated to include the following:

1. Title Sheet
2. Notes, Abbreviations and Legend
3. Alignment Rehab Plan (using available CAD and GIS, and previous survey)
4. Details 1 – Outfall Repair, Valve Replacement
5. Details 2 – Pipeline Rehab details

MKN shall deliver DRAFT and FINAL documents in PDF format.

Task 5 – Bid Phase Services

MKN will provide technical support during the bid period; this effort is anticipated to include up to three (3) questions by prospective bidders. MKN will assist the District in tabulating and comparing bids, and evaluating bidder qualifications and adherence to contract requirements.

Task 6 – Construction Phase Services

Task 6.1 Project Management and Construction Meetings

MKN will attend the pre-construction meeting and subsequent coordination meetings. The latter are assumed to be by phone, and attendance to two (2) meetings is anticipated.

MKN's Project Manager will provide budget and quality oversight, and interface with the District on a monthly basis.

Task 6.2 RFIs and Change Orders

MKN shall analyze and make recommendations to District staff regarding contract change orders and plan revisions requested during the course of the construction project. Change orders will be evaluated from an engineering perspective. Budget will be included for up to one (1) change orders.

MKN shall review, coordinate with District staff and respond to contractor's Request for Information (RFIs). When appropriate, suggestions and alternatives will be provided to the contractor and/or District staff. A log of RFIs will be maintained. Up to three (3) RFIs are included.

Task 6.3 Shop Drawing Review

MKN will receive and review technical documents submitted by the Contractor. Submittals will be reviewed by MKN for general conformance to the Contract Documents. Subsequent to MKN's review, we will return the submittal to the Contractor. MKN will maintain a log of shop drawings that have been submitted, and the disposition. Up to three (3) submittals are anticipated.

Exclusions/Assumptions

- District to provide existing easement and GIS information (pipeline, property lines and topography).
- District to provide source CAD files for survey related to the Tapia WRF Summer Compliance Project.
- Design will be based on publicly available record drawings, GIS and topography. No survey will be conducted.
- No utility research will be conducted. Contractor will be responsible for contacting DigAlert before construction. District to provide utilities identified during excavation and provide utility contact information.
- No potholing will be completed. Contractor will be responsible for potholing prior to construction.
- All deliverables will be electronic submittals.
- Design is based on a Cured-in-Place Pipe (CIPP) Structural liner.
- It is assumed that the District can cease discharge to the outfall during construction, eliminating the need for Contractor bypassing operations during the CCTV inspection.

SECTION 4 – PROJECT TEAM

Ryan Lippincott, PE – Project Manager



Ryan Lippincott has over 10 years of experience working in the water sector for engineering consultants, special districts, and contractors. His experience includes water and wastewater infrastructure and civil design projects, construction management, planning, estimating, startup management, preliminary design, and constructability analysis on municipal and industrial infrastructure projects. He has a proven track record of project oversight during design and construction and has the unique ability to remain focused on the project objective to efficiently and effectively complete the project.

- Tapia WRF Rehabilitation, LVMWD (**Tapia WRF Experience**)
- Garibaldi Lateral, Merced Irrigation District (**24-inch pipeline construction**)
- Bell Canyon High Pressure Pipeline (**pipeline design**)
- Phase IV Recycled Water Pipeline, VCWWD #1 (**pipeline design**)

Keenan Bull, PE – Senior Project Engineer



Keenan Bull has over 19 years of experience in civil engineering as a design engineer and project manager for private and municipal water and wastewater treatment operations, water distribution systems, wastewater collection systems, large-diameter pipelines, water conveyance systems, and water storage facilities. Proficiencies include the design, planning, and construction/retrofit of water pumping stations; water and wastewater treatment facility yard piping; aboveground water storage tanks; and buried or exposed transmission and distribution pipelines.

- CIBCSD Silverstrand Beach Rehabilitation, Oxnard (**CIPP**)
- Overpass Pipeline Rehabilitation, Dana Point (**CIPP**)
- Palos Verdes RW Pipeline, West Basin (**pipeline and valves**)
- EchoWater Flow EQ Project, Sac Region County SD (**large diameter pipeline**)

Joseph Reichmuth, PE – Quality Control



Joseph is a Senior Engineer with nearly 20 years of design and construction experience with an emphasis in pipeline design, ranging from condition assessment and rehabilitation to planning and design. Pipelines include various trenchless construction methods, such as horizontal directional drilling and jack-and-bore, and pipeline sizes up to 42-inches. **Mr. Reichmuth is also NASSCO ITCP – Cured in Place Pipe certified.**

- CIBCSD Silverstrand Beach Rehabilitation, Oxnard (**CIPP**)
- Overpass Pipeline Rehabilitation, Dana Point (**CIPP**)
- Arroyo Grande Creek Sewer Rehabilitation (**2,400 feet of CIPP**)
- El Camino Real Storm Drain Rehabilitation (**24-inch CIPP**)

SECTION 5 – PROJECT EXPERIENCE

MKN has completed numerous wastewater projects where we performed the condition assessment, preliminary engineering, detailed design, bid phase services, and construction management as presented in the table below. On the following pages, we have included detailed project descriptions for some of our recent projects where we have performed condition assessment and design services, on-call engineering services, and construction management services.

Agency	Project Name	Preliminary Engineering	Condition Assessment	Design	Bid Phase Services	Construction Eng. Serv.
	El Camino Real Sewer Improvements		✓	✓	✓	✓
	WWTP Influent Piping Modifications		✓	✓		
	Lift Station No. 2 Replacement	✓	✓	✓		
	Collection System Master Plan Update	✓	✓			
	Main Street Trunk Main	✓				
	WWTP Influent Piping	✓	✓			
	WWTP Influent Piping Design		✓	✓	✓	✓
	Sewer System Master Plan Update	✓				
	Highland Sewer Line Extension	✓		✓		
	Frontage Road Trunk Sewer		✓	✓	✓	✓
	Collection System Model Update	✓				
	East Side Lift Station & Force Main	✓	✓	✓	✓	✓
	Manhole Investigation & Rehabilitation	✓	✓			
	Collection System Development Review	✓				
	Various Sewer Rehabilitation Projects		✓	✓	✓	✓
	Various Sewer Pipeline Projects		✓	✓	✓	✓
	Wastewater Trunk Line Upsize Along Olson Ave to WWTP	✓	✓	✓	✓	✓
	Pesante Sewer Replacement		✓	✓	✓	✓
	Brentwood Sewer Extension Project		✓	✓	✓	✓

Wastewater Trunk Line Replacement

OWNER: City of Reedley

SERVICES PROVIDED: Preliminary Engineering, Design, Bid Phase Service, Construction Phase Services

REFERENCE: Martha Cardoso, Wastewater Systems Supervisor
maratha.cardoso@reedley.ca.gov | 559.637.4233

John Robertson, Former City Engineer for City of Reedley

john.robertson@parkcity.org | 435.615.5075

MKN designed the replacement of the existing 21” gravity sewer influent line to the City’s WWTP, which included an inverted siphon, with a new 36” gravity sewer that avoided the need of a new siphon. The project included three diversion structures with non-rising stem stainless steel slide gates. As part of the design process, MKN developed a Basis of Design Report (BDR) that included the design criteria for the pipeline, projected wastewater flows, presented the design concepts and selected alignment, bypassing requirements and concept bypass plans, traffic handling requirements, trench and backfill requirements, and permitting requirements.

Arroyo Grande Creek Sewer Rehabilitation

OWNER: City of Arroyo Grande

SERVICES PROVIDED: Condition Assessment, Design and Construction Management Services

REFERENCE: Jill McPeck, Capital Improvement Project Manager jmcpeek@arroyogrande.org | 805.473.5444



The City of Arroyo Grande completed a Wastewater Master Plan in 2012 and identified several sections of the sewer collection system requiring rehabilitation.

MKN was selected by the City to perform a condition assessment on one of these identified sections to provide *recommendations for point repairs and to provide construction documents for installation of a cured-in-place-pipe for a 2,500 foot section of pipeline along the bank of the Arroyo Grande Creek*. This line also crossed through several backyards limiting the available workspace for installation of the new liner. Construction documents provided the Contractor with detailed exhibits showing allowed points of entry and detailed specs for bypass pumping due to the close proximity of the creek and the City’s concern for sewage spills.

East Side Lift Station and Force Main

OWNER: Templeton Community Services District

SERVICES PROVIDED: Preliminary Engineering, Design, Bid Phase Service, Construction Phase Services

REFERENCE:

Tina Mayer, PE, District Engineer
t1m@templeton.org | 805.434.4915

The Templeton Community Services District investigated the technical and economic feasibility of several capital improvement alternatives to the existing methods and facilities used for wastewater collection and treatment. Included in this investigation, the District evaluated the feasibility of collecting and conveying all wastewater from within the District to the District's Meadowbrook WWTP.

To achieve this goal MKN designed two new lift stations with solids handling pumps ranging in size from 70 Hp to 25 Hp and rehabilitation of an existing lift station including installation of 150 Hp solids handling pumps. **Associated force mains for the new lift stations have a combined length of over 2.5 miles. Force main construction included three creek crossings and a crossing under Highway 101. In addition to open cut trenching of the force main the design included both HDD and jack and bore construction techniques.**

Freeway Overpass Pipeline Rehabilitation (CIPP)

OWNER: South Coast Water District

SERVICES PROVIDED: Design for CIPP

REFERENCE: Taryn Kjolsing, Principal Engineer,
(949) 541-1327, tkjolsing@scwd.org



South Coast Water District selected MKN to design a replacement pipeline for an existing 10-inch AC pipeline within a 16-inch steel casing. The 400 foot section of pipe, located in the Via California crossing over the 5 Freeway, had failed and required immediate replacement. Key elements of the design include the following:

- **Expedited Delivery.** MKN received the Notice to Proceed on January 6, 2020 and returned the draft design documents and specifications on January 22, 2020 – less than three weeks from the start date.
- **Project Savings.** To reduce cost and schedule, MKN recommended consideration of Certa-Lok restrained joint PVC in lieu of the District standard fusible PVC. Following a technical review with District staff, the recommendation was accepted.
- **Technical Experience.** The project required design of the new Certa-Lok restrained joint PVC and also a **CIPP liner for the existing 16-inch steel casing.**

Sewer Pipeline Rehabilitation - Various (CIPP)

OWNER: Channel Islands Beach Community Services District

SERVICES PROVIDED: Design for CIPP

REFERENCE: Pete Martinez, General Manager, 805-827-3000, pmartinez@cibcsd.com



MKN received the Notice to MKN support Channel Islands Community Services District to conducting a system wide collection condition assessment, which included CCTV and cleaning off all 44,200 feet of gravity sewer pipeline and 84 manholes. Utilizing the results of the CCTV inspection, MKN prepared an implementation plan identifying critical areas for spot repair, relining and replacement. The total estimated cost of improvements was noted at \$730,000.

MKN initiated design for Phase 1 which includes the following:

1. 21 Manhole rehabilitations
2. One section of 8-inch pipeline replacement
3. **17 pipeline segments for spot repair (11 total) or full liner (3,500 ft total of CIPP)**

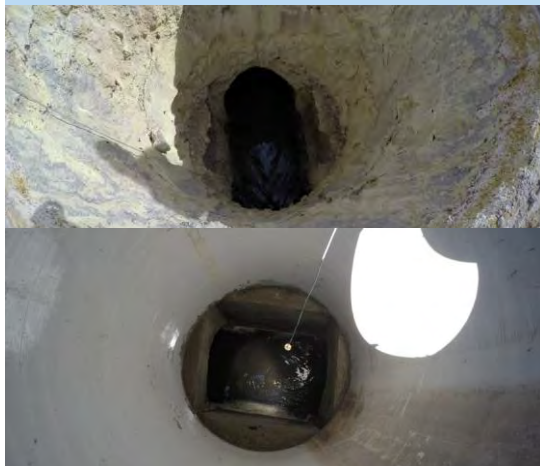
The estimated construction for Phase 1 is approximately \$475,000.

Outfall Sewer Manhole Assessment

OWNER: North of the River Sanitary District

SERVICES PROVIDED: Condition Assessment, Observation & Recordation and Technical Assessment

REFERENCE: Patrick Ostly, General Manager 661.399.6411



North of River Sanitary District (District) operates a wastewater treatment plant (WWTP) that is connected to the District's service area via a 17-mile gravity sewer line referred to as the Outfall Sewer. The Outfall Sewer pipeline is constructed out of HDPE pipe and has concrete manholes at regular intervals along the alignment. The pipeline diameter varies from 33 inches at its beginning to 54 inches at the WWTP.

The District hired MKN to develop a condition survey of the manholes along the Outfall Sewer to both record and address corrosion issues. Following this investigation MKN produced a summary report for the District's that include an investigation information and recommendations for repairs and other possible solutions to the corrosion issue. The last phase of the project will include development of construction documents and technical specifications based on the recommendations of the summary report and District comments.

NATIONAL PLANT SERVICES RECENT PAST PROJECTS LIST (PARTIAL)			
AGENCY	SCOPE OF WORK	PROJECT SIZE	PROJECT COST
City of Carlsbad, CA	Inspection of large diameter interceptors through easements and wetland areas	18,000	\$70,000
City of Auburn, CA	Inspection of 60,000 LF of large diameter sewer interceptors	60,000	\$400,000
Los Angeles County Flood Maintenance Division	On Call Contract to perform all storm maintenance work	millions of feet	12,000,000 (over all years)
DSRSD, Dublin, CA	On Call Contract to perform various clean and CCTV work	On Call	\$50,000 per year
San Francisco Public Utilities Commission, CA	On Call Contract to perform cleaning, CCTV, injection grouting, and point repairs to reduce infiltration	On Call - 3 Year	\$3,000,000
Redwood City, CA	Various projects of various sizes. We are getting ready to start another clean and CCTV project of 78,000 LF	On Call	various
EBMUD Consent Decree Advisory Group Field Services Contract, CA	Multi-Year On-call contract clean, CCTV, flow monitoring	On Call	\$3,000,000
City of Alameda, CA	Multiple projects under the EBMUD CDAG Project. clean and inspection	50,000	\$433,000
City of Roseville, CA	CCTV, Sonar, and 3D laser of large diameter interceptors	21,885	1''
City of Roseville, CA	Large diameter cleaning and CCTV project in 33"-66" pipelines	8,000	\$208,401
Delridge Trunk Cleaning Project, King County, WA	Cleaning, debris disposal, and CCTV inspection of 48" and 54"	3,000	\$285,000
City of Santa Clara, CA	Clean and Inspection of single, double, and triple barrel siphons from 8"-24"	19	\$777,000
DSRSD, Dublin, CA	Clean and CCTV inspection of 6"-27" sewer lines	370,000	\$450,000
City of El Cajon, CA	Clean and CCTV	15,000	\$91,000
City of Los Angeles, CA	CCTV of sewer interceptors for City of LA through a contract with CDM	1,000,000	\$1,200,000
City of Wasco, CA	Clean and CCTV	61,000	\$77,000
Ace Pipe Cleaning, for St. Louis, MO	Clean, CCTV inspection, and lateral lining services	2,000	\$600,000
Cucamonga Valley Water District, CA	Cleaning and CCTV inspection. Lateral lining services	4	\$19,600
Carpinteria Sanitary District, CA	Cleaning and CCTV inspection, Lateral lining services	3	\$14,995
County of Los Angeles, CA	Clean and CCTV 6"-24"	1.2 Million	\$1,200,000
City of San Jose, CA	Sanitary Sewer Condition Assessment	200,000	\$750,000
Shasta County, CA	Clean and CCTV 6" - 12"	100,000	\$280,000
City of Alameda, CA	Clean and CCTV of sewer lines	370,000	\$146,000
East Bay Municipal Utility District, Oakland, CA	Cleaning of 18"-36" interceptors using the Recycler jet vac	2,500	\$75,000
SFPUC, San Francisco, CA	Cleaning, CCTV, and Chemical grout injection to stop I&I in 12" to 54" sewers	6	\$100,000
City of Sacramento, CA	Annual Inspection Contract, Multi Sensor Laser, Sonar, CCTV	145,047	\$830,000
City of San Bruno, CA	CCTV inspection and PACP coding of 285 house laterals	285	\$57,000
City of Roseville, CA	Multi sensor inspections (CCTV, Sonar, Laser) of 30"-66" interceptors	28,000	\$134,000
City of Eugene, OR	Large diameter CCTV and sonar inspections of interceptors	60,100	\$237,000
City of Tacoma, WA	Multi sensor inspections (CCTV, Sonar, Laser) of 24"-72" interceptors	86,000	\$575,000
DSRSD, Dublin, CA	Multi sensor inspections (CCTV, Sonar, Laser) of 18"-42" interceptors	36,000	\$220,000
Harry Joh Construction, County of LA Public Works	Clean and CCTV inspection of 8"-24" sewers	2,040,545	\$1,570,574
City of Fullerton, CA	Clean double barrel siphons (33" and 36"), each 300' length. National Plant Services has been cleaning these siphons at least twice a year for over 10 years.	various	various

SECTION 6 – MKN QUALITY CONTROL PROCESS

MKN’s Quality Management System (QMS) is based on our Principal’s experience at Fortune 500 Design Firms but streamlined and focused for Municipal Water projects. This means better quality, faster delivery and lower overhead for our Clients. **Our QMS** includes three key elements: (1) Quality Planning, (2) Quality Assurance, and (3) Quality Control.



Quality Planning – Plan for Success

Our QMS requires the Project Manager to plan for quality even before a contract is signed. This means that our proposal must include the following:

- **Line Item Scope** – this helps to ensure that the budget is preserved through project execution.
- **Line Item Schedule** – QC is included in our task linked Microsoft Project Schedules to ensure that adequate time is allotted, this typically requires 2-5 days.
- **Identify QC Person** – this person is identified and confirmed prior to submitting.

Once signed, a Project Management Plan is prepared which details key elements of the project, including risks and quality reviews.



Quality Assurance – Prevent Errors

A key element of Quality Assurance is our technical training which is conducted every two weeks. Our engineers are also supported by our design templates, calculation spreadsheets and access to our Technical Practice Groups which maintain and manage many of these documents.

The Technical Review completed at the 10% project phase is another key element of our Quality Assurance program.



Quality Control – Confirm MKN Quality is Met

For the District, Ryan Gallagher, will serve as the Principal-in-Charge which requires him to conduct a monthly status meeting with Project Manager Ryan Lippincott. During this call, project status will be discussed along with adherence to QMS procedures and resource needs.

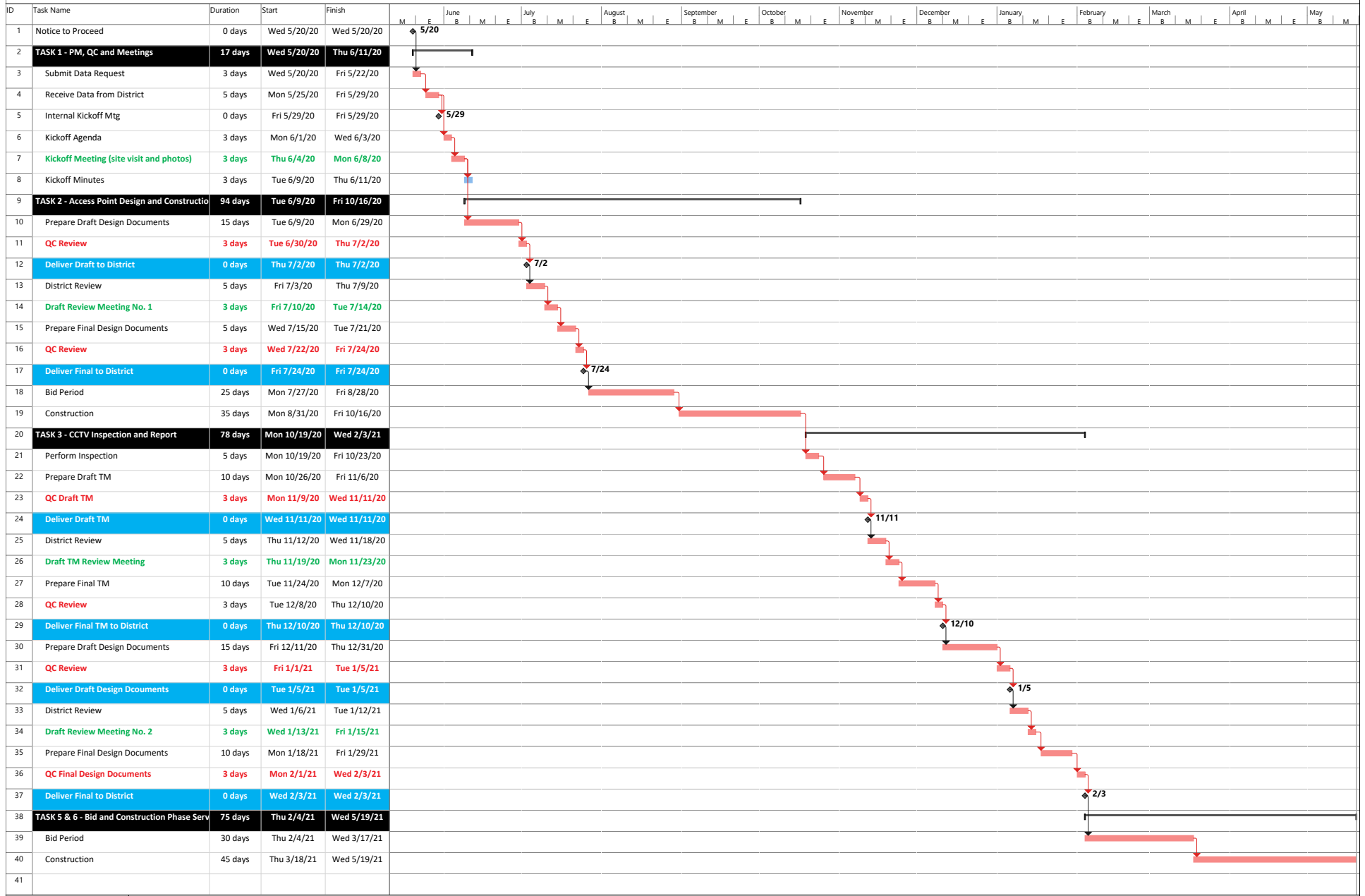


SECTION 8 – SCHEDULE

A detailed project schedule is provided on the following page. The following key elements are noted:

1. ***Realistic and Comprehensive Schedule.*** QC time and District review time included
2. ***Clear Expectations.*** Clearly defined dates for deliverables
3. ***Avoid Periods when Outfall may be Needed.*** Construction occurs outside of rainy season

LAS VIRGENES MUNICIPAL WATER DISTRICT OUTFALL REHABILITATION PROJECT



Project: Centrate Valve Schedu
Date: Fri 5/1/20

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

Page 1

SECTION 9 – LEVEL OF EFFORT ESTIMATE

The following table summarizes our anticipated level of effort for each task. Our fee schedule and associated fee estimate for the project is provided separately.

	Principal (Ryan Gallagher)	Project Manager (Lippincott)	Senior Project Engineer (Bull/JJ)	Assistant Engineer II (Wong)	Drafter	Total Hours (MKN)
Task 1 - PM, Meetings, & QC						
Project Management (3 months)		24				24
Coordination Meetings (4)	4	8	8			20
QA/QC (Draft and Final, 6 deliverables)	8					8
Subtotal	12	32	8	0	0	52
Task 2 - Access Point Design and Construction						
Contract Documents - Plans and Specs (Draft/Final)	4		20	26	30	80
Bid and Construction Phase Support (20 hrs)			20			20
Subtotal	4		40	26	30	100
Task 3 - CCTV Inspection and TM						
CCTV Inspection			4	4		8
Rehabilitation Report (Draft/Final)	4		24	40	12	80
Subtotal	4		28	44	12	88
Task 4 - Final Design						
Contract Documents - Plans and Specs (Draft/Final)	4		24	36	40	104
Subtotal	4		24	36	40	104
Task 5 - Bid Phase Services						
Bid Phase Services (3 RFIs)			4	8		12
Subtotal	0		4	8	0	12
Task 6 - Construction Phase Services						
Task 6.1 - PM and Construction Meetings (2)			6			6
Task 6.2 - RFIs (3)/Change Orders (1)	2		12			14
Task 6.3 - Shop Drawing Review (6)			12	12		24
Subtotal	2	0	30	12	0	44
TOTAL BUDGET	26	32	134	126	82	400

APPENDIX A – RESUMES



**Ryan
Lippincott, PE**
Project Manager

Education

California Polytechnic State
University, San Luis Obispo
BS Civil Engineering

Licenses & Registrations

California Professional
Engineer - Civil
No. C81989

Land Surveyor In Training
Qualified SWWP Developer

Professional Associations

American Public Works
Association

Society of Civil Engineers

California Water Environment
Association

Ryan Lippincott has over 10 years of experience working in the water sector for engineering consultants, special districts, and contractors. His experience includes water infrastructure and civil design projects, construction management, planning, estimating, startup management, preliminary design, and constructability analysis on municipal and industrial infrastructure projects. He has a proven track record of project oversight during design and construction and has the unique ability to remain focused on the project objective to efficiently and effectively complete the project.

Tapia WRF Rehabilitation, Las Virgenes Municipal Water District (LVMWD) / Westlake Village, CA

Project Manager for the repair, rehabilitation, and coating of Primary Sedimentation on Basins 4 and 5. Removal and replacement of existing skimmings and primary sludge piping from the primary sedimentation on basins skimming trough to the "Muffin Monster" comminutors. Installation on of new redundant grit solids feed piping from the grit pump dry-well to the northeast end of the existing cyclone feed header. Removal and replacement of 20 existing "Hydro-Gate" sluice gates and custom boxes in the effluent channel from secondary clarifiers.

Tesoro-Viejo Wastewater Treatment Plant / Tesoro Viejo, CA

Design Engineer for the design/build of a new wastewater treatment facility to service the Tesoro-Viejo community development. The wastewater treatment plant consisted of 3 mgd membrane bioreactor filtration/UV disinfection recycled water wastewater treatment plant, sewage lift stations and main line, recycled water pump station and pipelines, recharge wells, and seasonal storage ponds and recharge basins, as well as allocations for future IPR.

Hughson Wastewater Treatment Plant Expansion / Hughson, CA

Project Engineer for the construction of the wastewater treatment plant expansion to 1.9 MGD including the construction of a new headworks, oxidation ditch, secondary clarifiers, biofilter system, RAS/WAS pump stations, belt filter press, percolation ponds, operations building, electrical service, standby generator, yard piping, and site work.

Recycled Water Pump Station #2, Ventura County Waterworks District #1 / Moorpark, CA

Engineer of Record for the upgrade of an existing recycled water booster pump stations with an additional pump, VFD, and associated controls.

Phase IV Recycled Water BPS and Pipeline, Ventura County Waterworks District #1 / Moorpark, CA

Project Engineer for the design of approximately 16,500 linear feet of 12-inch diameter recycled water pipeline and a new recycled water booster station which included a new building, four vertical turbine pumps with a combined capacity of 2,700 gpm, MCC, surge tank, and other related appurtenances.

North Bank Lift Station Upgrades, City of Ventura / Ventura, CA

Project Manager for a rehabilitation project consisting of installing four new vertical shaft driven dry pit screw type pumps and motors equipped with flywheels, in addition to related piping, valve and appurtenance modifications. The project also included installing four new PowerFlex 755 VFDs, and a new PLC. A continuous bypass during work operations was maintained in close vicinity to a critical waterway.

OWTP Emergency Repair Project / Oxnard, CA

Project Manager for the improvements to four circular primary clarifiers, rehabilitation of two biotowers, belt filter press improvements, replacement of existing fire suppression system, replacement of VFDs for four sludge transfer pumps, administration building laboratory HVAC improvement, and a new Chemically Enhanced Primary Treatment (CEPT) facility.

HTCP Chlorine Contact Chamber Cover Replacement / Thousand Oaks, CA

Project Manager and Superintendent for the construction of walkable concrete covers, removable FRP access panels, and fencing while keeping the chlorine contact chambers in service.

EI Estero Aeration Gate Modification / Santa Barbara, CA

Project Manager for the relocation of six fabricated steel slide gates and the modification of twelve flumes to be level and at a target elevation.

Markham Lift Station Upgrades Western Municipal Water District (WMWD) / Perris, CA

Project Manager for the rehabilitation of the Markham Lift Station. Work included the replacement of two – 1,250 gpm pumps, coating of the wet well and emergency storage tank, demolition of the existing vapex system, upgrade of the MCC, and addition of VFDs, while maintaining a bypass to service multiple other lift stations and gravity fed pipelines.

RP-5 Dynasand Filter Rehabilitation, Inland Empire Utility Agency / Chino, CA

Performed all field office and project management duties for the rehabilitation of 6 individual Dynasand tertiary filters comprised of 72 Filter Modules.

Development Review, Ventura County Waterworks Districts / Ventura County, CA

Reviewed and evaluated development requests for new or upsized water and wastewater services. Also, ensured the adequacy of existing services for new improvements on properties. Managed projects to upgrade existing District facilities in response to new development.

On Call Infrastructure Review, City of Ventura / Ventura, CA

Project Manager for on call services related to infrastructure review for various developments throughout the City of Ventura. The review evaluated the proposed demands and the existing capacity of the system to ensure adequacy of the facilities.



**Joseph J.
Reichmuth, PE**
Senior Engineer

Education

California Polytechnic State University, San Luis Obispo
San Luis Obispo, CA

BS Civil Engineering

Licenses & Registrations

California Civil Engineer
No. C63124

Professional Associations

American Society of Civil Engineers

Certifications

NASSCO ITCP – Cured In Place Pipe
NASSCO ITCP – Manhole Rehabilitation

Joseph J. Reichmuth is a Senior Engineer with over 10 years of design experience with an emphasis in pipeline design, ranging from condition assessment and rehabilitation to planning and design. Pipelines include various trenchless construction methods, such as horizontal directional drilling and jack-and-bore, and pipeline sizes up to 42-inches. Mr. Reichmuth also has nearly a decade of experience working in the geotechnical engineering discipline specializing in field engineering and construction observation.

Arroyo Grande Sewer and Storm Drain Rehabilitation Project | Arroyo Grande, CA

Project Engineer. Developed construction documents for the rehabilitation of 1,000 feet of vitrified clay sewer main and 900 feet of corrugated metal storm drain pipe for the City of Arroyo Grande. **Due to accessibility constraints, the use of cured-in-place-pipe (CIPP) was proposed.**

Via California Pipeline Replacement, South Coast Water District | Dana Point, CA

Technical Advisor for replacement of 500 feet of pipe following failure of the pipeline. The 10-inch pipeline is located within a 16-inch casing located in a freeway overpass. The replacement design included evaluation of various materials, including fusible PVC and Certa-Lok PVC. **The final design included a cured-in-place liner for the casing and new Certa-Lok PVC to replace the failed carrier pipe.** The design was expedited to ensure the pipe could be returned to service.

Sewer Rehabilitation CIP Development, Channel Islands Beach Community Services District | Channel Islands Harbor, CA

Technical Advisor for development of rehabilitation plan based on review of CCTV and inspection results. Prepared 5-Year CIP based on identification and grouping of priority rehabilitation projects, and conceptual cost estimates. **Projects include both cured-in-place liners, spot repair projects, and manhole rehabilitation.** Estimated construction is \$750,000.

Arroyo Grande Creek Sewer Rehabilitation Project | Arroyo Grande, CA

Project Engineer. Developed construction documents for the rehabilitation of 2,400 feet of aging sewer main for the City of Arroyo Grande. Due to the close proximity of the sewer main to the Arroyo Grande Creek, **cured-in-place-pipe (CIPP) was proposed.** Construction phase services was also performed for the City.

Dejoy Trunk Main Alternatives | Santa Maria, CA

Project Engineer. Performed evaluation of alternatives for upsizing one of the City's main sewer trunk mains. The existing trunk main was identified to have capacity issues during the City's recent capacity study. A portion of the existing line is located within an active farm that prevents the City from accessing the line. The City is interested in re-routing the sewer main around private properties and in or along nearby roadways. **The study provided several alternatives and discussed potential issues with re-routing of the trunk main to roadway areas.** The report also included estimated construction costs.

Highland Waterline Replacement | San Luis Obispo, CA

Project Engineer. Performed preliminary design services for replacement of 165 feet the City's 24-inch water transmission line located within Highland Drive. This section of transmission main travels under a creek culvert system and railroad bridge. Due to the site constraints mentioned this section of pipe was not included in a 1995 project that replaced remaining portions of the transmission main. MKN analyzed four potential replacement alignments and has identified the alternative that minimizes construction complexities and provides the City with access for future maintenance activities. MKN is currently working on development of construction documents for the replacement project.

Eastside Force Main Project, Templeton Community Services District | Templeton, CA

Project Manager. Designed and prepared construction documents for two sewage lift stations. The new lift stations diverted flow currently being conveyed to the City of Paso Robles to the District's Meadowbrook WWTP. Design included two lift stations consisting of solids handling submersible pumps, rehabilitation of an existing lift station, and a total combined force main length of over 2.5 miles. The force main included three creek crossings and crossing under Highway 101. In addition to open cut trenching of the force main the design included HDD and jack and bore construction techniques.

Hollister Avenue Waterline Replacement | Pismo Beach, CA

Project Engineer. Responsibilities included the preparation of plans, details, specifications, and opinions of cost for the construction of 350-lf of 8-inch PVC distribution main. Project also involved reconnecting laterals, fire hydrants, and new meters.

Nipomo Waterline Intertie Project, Nipomo CSD | Nipomo, CA

Project Engineer. Responsible for coordination and management of subconsultants (HDD, Environmental/Permits, Geotechnical, and property acquisition). Responsibilities also included the preparation of plans, details, specifications, and opinions of cost for construction.

Tognazzini Well Intertie Pipeline | Guadalupe, CA

Project Engineer. Performed design and production of construction documents for 300 feet of 8 inch PVC transmission pipeline to convey well water to the City's distribution system. Also provided construction phase service for the City.

Branch Street Waterline Improvements, Nipomo CSD | Nipomo, CA

Project Engineer. Project consists of abandoning an aged 6-inch waterline and installation of approximately 400 linear feet of new 8 inch waterline, reconnecting water services and installation of a new fire hydrant. MKN developed project alternatives, provided recommendations to the District, produced plans and specifications for public bid and an opinion of construction cost.

Heights Waterline Upgrade | Pismo Beach, CA

Project Engineer. Responsible for design of main water lines to consolidate pressure zones in the area. Design included the preparation of plans, details, specifications, and opinions of cost for the construction of over 3000-lf of 12-inch PVC and 650-lf of 8-inch PVC distribution main. Project also involved connection to a new booster station, replacing a pressure reducing station, reconnecting laterals, fire hydrants, and new meters.

Emergency UPRR Sewer Repair/Replacement Project | Guadalupe, CA

Performed construction management services for project to repair and replace a failing sewerline crossing under the Union Pacific Railroad tracks. New sewer line was installed using by jack and bore construction techniques.

Tognazzini Well Intertie Pipeline | Guadalupe, CA

Performed construction management for new 8 inch PVC transmission pipeline to convey well water to City distribution system.

Sulfur Spring Pipeline Construction Phase Services | El Paso de Robles, CA

Project Engineer/Construction Observer. Project to capture spring water that erupted in the City Hall parking lot as a result of the San Simeon Earthquake. Provide construction management and construction observation for collection system, pipeline, and leach field to transport thermal spring water to the Salinas River.

Water Treatment Plant Pipe Gallery Improvements | San Luis Obispo, CA

Project Engineer. Performed design services for replacement of 30-inch steel pipe at the City's Water Treatment Plant. A recent pipe inspection identified a portion of a piping that connects the treatment plant to the City's storage and distribution system in need of immediate repair due to severe corrosion. MKN provided the City with technical memorandum outlining potential new piping configurations and methods of rehabilitating the existing pipe. Based on this memorandum the MKN developed construction documents for installation of a new pipe to both replace the severely corroded section for existing pipe and to provide the City more flexibility in operation for the treatment system.

2019 CDBG Waterline Replacement | Grover Beach, CA

Project Engineer. Project consists of abandoning 50 year old 2-inch water mains and installation of approximately 2500 linear feet of new 8 and 6 inch water mains, reconnecting water services and installation of new fire hydrants. MKN developed pipeline alignment alternatives, produced plans and specifications for public bid and an opinion of construction cost.

Calleguas-Crestview Interconnection Facility | Camarillo, CA

Project Engineer. Performed design services for an interconnection facility to connect the Crestview Mutual Water Company (Crestview) with Calleguas Mutual Water District (Calleguas). This connection will provide Calleguas with an emergency source of water during outages of imported water from other sources. The interconnection facility consist of a subsurface vault with a flow meter, pressure reducing/sustaining valve, and associated piping. The vault is connected to Crestview's water distribution system and Calleguas' Springville Reservoir via 650 feet of 12-inch CML&C welded steel pipe.

2020 CDBG Waterline Replacement | Grover Beach, CA

Project Engineer. Project consists of abandoning 50 year old 2-inch water mains and installation of approximately 4800 linear feet of new 8 and 6 inch water mains, reconnecting water services and installation of new fire hydrants. MKN developed pipeline alignment alternatives, produced plans and specifications for public bid and an opinion of construction cost.

2010 Sewer Rehab Project | El Paso de Robles, CA

Project Engineer/Construction Observer. Performed observation services for the City at several sewer segments identified to be rehabilitated. Performed field observations on improvements for conformance to the City's specifications. Provided the City with recommendations regarding compliance of completed work with approved City standards. Prepared daily field reports and other documentation

Oxnard Concentrate Collection Project | Oxnard, CA

(sub to Stantec) Project Engineer for development of design criteria, evaluation of potential customers, and design of customer connection facilities for a brine collection and conveyance system. Facilities will receive brine from industrial users and City brackish water treatment plant for transmission to the City's existing ocean outfall.

Industrial Wastewater Conveyance to Winery Study | Gonzales, CA

Performed evaluation of conveying industrial wastewater from the Gonzales Agricultural Business Industrial Park to a nearby treatment facility owned and operated by a private winery. This would allow the City to provide service to additional industrial customers while planning and designing collection system upgrades. The study included a feasibility study of the winery treatment facility to accommodate the additional flows, discussion of required permits and development of a conceptual lift station and force main alignment including estimated construction costs.

El Camino Real Storm Drain Rehabilitation | Arroyo Grande, CA

Project Engineer. Project consists of rehabilitating an existing 24-inch corrugated metal pipe located under an existing structure. Services included design and **construction observation of 300 linear feet of cured-in-place pipe (CIPP)**. The next phase of the project includes design of storm drain piping within El Camino Real so that the City can abandon the existing pipe under the structure.

WWTP Influent Piping Improvements | Santa Maria, CA

Project Engineer. Performed evaluation of existing influent piping at the City's WWTP to determine the condition of the existing pipes and to recommend improvements to the piping to reduce grit accumulation and to provide capacity to the WWTP for future flow conditions. The study included a review of plant hydraulics and projected future flows to determine the capacity of the existing system. Based on this study developed and provided construction documents to the City to install 350 feet of 48 inch piping, 225 feet of 42 inch piping, modifications to 3 concrete diversion structures, and an automatic septage receiving station.

Emergency UPRR Sewer Repair/Replacement Project | Guadalupe, CA

Performed construction management services for project to repair and replace a failing sewerline crossing under the Union Pacific Railroad tracks. New sewer line was installed using by jack and bore construction techniques.

Highland Way Sewer Line Project | Grover Beach, CA

Project Manager. Developed construction documents for installation of 1,300 linear feet of new sewer line for the City of Grover Beach. This new extent of the sewer collection system is intended to service costumers within the City limits and to eliminate on-site wastewater disposal systems. Project include coordination with proposed construction plans for future development along the alignment.



Keenan Bull, PE

Senior Engineer

Education

Missouri University of Science
and Technology
MS Civil Engineering

Missouri University of Science
and Technology
BS Civil Engineering

Licenses & Registrations

California, Civil Engineer,
2019, No. C-91138
Arizona, 2019, No. 68967
North Dakota, 2016, No.
PE-10549
Illinois, 2007, No.
062.059597
Missouri, 2006, No.
2006019594

Professional Associations

American Water Works
Association (AWWA)

Orange County Water
Association (OCWA)

Water Reuse Association,
Orange County

***Keenan Bull** has over 19 years of experience in civil engineering as a design engineer and project manager for private and municipal water and wastewater treatment operations, water distribution systems, wastewater collection systems, large-diameter pipelines, water conveyance systems, and water storage facilities. Proficiencies include the design, planning, and construction/retrofit of water pumping stations; water and wastewater treatment facility yard piping; aboveground water storage tanks; and buried or exposed transmission and distribution pipelines. He has expertly managed the coordination of design personnel and subconsultants in the development of design drawings and specifications for construction, as well as the development and completion of regulatory permit applications. Mr. Bull brings leadership, a strong work ethic, technical knowledge, and dedication to overall client satisfaction on every project.*

Sewer Rehabilitation CIP Development, Channel Islands Beach Community Services District | Channl Islands Harbor, CA

Project Technical Lead for development of rehabilitation plan based on review of CCTV and inspection results. Prepared 5-Year CIP based on identification and grouping of priority rehabilitation projects, and conceptual cost estimates. Projects include both **cured-in-place-pipe (CIPP)** liners, spot repair projects, and manhole rehabilitation. Estimated construction is \$750,000.

Via California Pipeline Replacement, South Coast Water District | Dana Point, CA

Project Manager for replacement of 500 feet of Asbestos concrete (transite) pipe following failure of the pipeline. The 10-inch AC pipeline is located within a 16-inch casing located in an I-5 freeway overpass (Caltrans). The replacement design included evaluation of various materials, including fusible PVC and Certa-Lok PVC. The final design included a **cured-in-place-pipe (CIPP) liner for the casing** and new Certa-Lok RJB AWWA C900 PVC (DR14) pipe to replace the failed carrier pipe. The design was expedited to ensure the pipe could be returned to service.

Palos Verdes Recycled-Water Pipeline & Lago Seco Pump Station, West Basin Municipal Water District | Carson, CA

Project Task Leader for preliminary design and environmental assessment for a recycled-water pipeline conveying water through Torrance and Palos Verdes Estates. The project includes **approximately 16,000 feet of 8-inch to 10-inch-diameter pipeline**, a recycled water pump station, and a connection to the Palos Verdes Golf Course and several parks, schools, and other irrigation customers along the route. Several options were established which reduced overall project cost by approximately \$750,000. Major project elements included easement assessment, hydraulics, pump station concept development, a California Department of Transportation (Caltrans) crossing, and an expedited schedule. Total project cost is estimated at \$6.2M.

Water Main Removal/Replacement Along Illinois Route 158, Illinois-American Water (ILAW) / Columbia to Millstadt, IL

As Project Manager and Design Engineer, planned and designed approximately **23,000 feet of 24-inch ductile iron water main** in the Interurban service district of ILAW to remove and replace existing 16-inch and 12-inch transmission water mains. Responsibilities included the development of design drawings and specifications for construction of the proposed water main, as well as development and completion of the permit applications to Illinois Environmental Protection Agency (IEPA), the Illinois Department of Transportation (IDOT), and U.S. Army Corps of Engineers (USACE) seeking approval for water main construction and permitting.

Ground Storage Tank and Booster Station, Missouri-American Water | Warrensburg, MO

Project Manager and Design Technical Lead during planning, design and construction supervision/contract administration for a 750,000-gallon prestressed wire-wound concrete ground-storage tank. The project scope also included the planning, design, procurement, and installation of a prefabricated 3.5 mgd booster station along with approximately **3,000 feet of 16-inch buried ductile iron water main** from the distribution system to the tank site.

Alvarado Trunk Sewer Phase IV Replacement Project | San Diego, CA

Quality Assurance/Quality Control (QA/QC) Lead on this project involving deep gravity sewer ranging in depth from 15 feet to 30 feet. The scope also includes microtunneling of approximately 3,000 feet of sewer across College Avenue and Waring Road, which required permitting coordination with the California Department of Transportation (Caltrans) and San Diego's Metropolitan Transit System. The estimated design fee is \$4 million, with an estimated construction cost of \$30 million.

Group Job 1 Water Pipeline Replacement Design and Construction, Vista Irrigation District | Vista, CA

Task Leader for the cured in-place pipe (CIPP) rehabilitation evaluation. The District has been experiencing catastrophic failures on its nipponite asbestos cement (AC) pipe installed in the 1960s. GF is providing preliminary design and design services for the District's Group Job Pipeline Replacement Project, which includes the replacement of **approximately 10,000 feet of 10-inch, 8-inch, 6-inch, and 4-inch AC pipe** with polyvinyl chloride (PVC) pipe. Services being provided include preliminary design evaluation such as high-lining versus replacing in-place; coordination of survey, geotechnical, and environmental services; and preparation of plan and profiles, connection detail, and project specification.

French Village Discharge Phase 2 Transmission Main, Illinois American Water (ILAW) | Belleville, IL

Project Manager for the design and construction of a new 24-inch and 16-inch water transmission main(s) to allow for increased flow from the French Village Pump Station. The project included the design, bidding, and construction of approximately 9,000 linear feet (LF) of 24-inch ductile iron water main **and 1,000 LF of 16-inch ductile iron water main** along Illinois Route 161 in Belleville. Responsibilities included project management of design; collection and review of record drawings for existing distribution system infrastructure; verification of existing conditions along the pipeline alignment; coordination and communication with American Water Operations & Maintenance; coordination with the Illinois Environmental Protection Agency and U.S. Army Corps of Engineers (USACE) for creek crossing(s); coordination and securing of permits and approvals from regulatory agencies; and preparation of final bid documents, including bid quantities, engineer's estimate, specifications, and construction drawings in compliance with American Water Standards. The project construction cost was \$2.1 million.

Feasibility Study of Water Transmission Project – Mississippi River Horizontal Directional Drill (HDD) Crossing, Illinois-American Water | St. Clair County, IL

Technical Lead/Planning Engineer for the planning and conceptual design of approximately 10,000 feet of twin 36-inch ductile iron water main with approximately **3,000 feet of installation via HDD** trenchless technology through the Mississippi River. Provided a feasibility study to understand the challenges associated with transmitting water from St. Louis (located west of the Mississippi River) to a distribution point on the east side of the Mississippi River. Responsibilities included data collection and review, contact/coordination with permitting agencies (e.g., the Missouri Department of Transportation, U.S. Army Corps of Engineers, and various railroad authorities), and conceptual design of three alternate routes for the proposed water main alignment. Developed an opinion of probable cost and time for construction estimate for pipeline(s), booster stations, storage tanks and associated infrastructure, and developed the final feasibility study report.

Cast-Iron Main Replacement – Cherry Avenue, Long Beach Water Department | Long Beach, CA

Project Manager and Technical Lead for a 12-inch cast-iron main replacement project. Responsibilities included the planning and design for the installation of approximately **2,600 linear feet of 12-inch ductile iron pipe** to replace cast-iron main pipes on Cherry Avenue. Also in charge of designing proposed valves, service laterals, fire hydrants, existing service line reconnections, existing water meters, and adjustments to existing subgrade detector check valves and back-flow preventer assemblies for fire service lines to above-grade locations. Responsibilities also included the coordination of surveying, pot-holing, and traffic-control subconsultants, as well as coordination with and among City departmental personnel and permitting agencies.

Horizontal Directional Drill (HDD) Installation of Water Main Under I-70, City of Columbia Water & Light Department | Columbia, MO

Project Manager and Technical Lead/Design Engineer for the HDD installation of approximately 600 feet of 16-inch fused polyvinyl chloride (FPVC) carrier pipeline with a 20-inch FPVC casing pipeline under I-70 in Columbia, Missouri. Responsibilities also included the design of approximately **1,000 feet of 16-inch ductile iron pipe (DIP)** to tie-in to the existing distribution system at Business Loop 70 to the south. Tasks involved the development of design drawings and specifications for construction of the proposed water main, as well as development and completion of the regulatory permit applications to be submitted to the Missouri Department of Natural Resources (MDNR) and the Missouri Department of Transportation (MoDOT).

Mississippi River Bridge Water Main Extensions, Illinois-American Water (ILAW) | St. Clair County, IL

Project Manager and Design Engineer for the planning and design of **approximately 2,600 feet of dual 36-inch ductile iron water mains** in the Interurban (Belleville/East St. Louis Area) service district of ILAW to maintain water transmission service across the existing I-55/70/64 interchange. Responsibilities included the development of design drawings and specifications to be used for construction of the proposed water mains, as well as development and completion of the permit applications to be submitted to the Illinois Environmental Protection Agency (IEPA) and the Illinois Department of Transportation (IDOT). Also provided utility coordination and construction-phase coordination between various utilities and IDOT.

Mississippi River Bridge, 24-Inch Water Main Relocation and 48-Inch Raw Water Protection, Illinois-American Water (ILAW) | St. Clair County, IL

Project Manager and Design Engineer for the planning and design of approximately **300 feet of 24-inch ductile iron water main** in the Interurban (Belleville/East St. Louis Area) service district of ILAW to maintain water transmission service across the proposed alignment of the I-70 Connector and bridge piers for the aerial Illinois approach to the new Mississippi River Bridge. The scope also included the design of a precast-concrete protection structure for the existing 48-inch raw water pipeline. Responsibilities included the development of design drawings and specifications for construction of the proposed water mains as well as development and completion of the permit applications to be submitted to the Illinois Environmental Protection Agency (IEPA) and the Illinois Department of Transportation (IDOT). Also provided utility coordination and construction-phase coordination between various utilities and IDOT.

Mississippi River Bridge, Dual 36-inch Water Main Extension, CSX to Winstanley, Illinois-American Water (ILAW) | St. Clair County, IL

Project Manager and Design Engineer for the planning and design of approximately **3,900 feet of twin 36-inch ductile iron water mains** in the Interurban (Belleville/East St. Louis Area) service district of ILAW to maintain water transmission service across the existing I-55/70/64 interchange. Responsibilities included the development of design drawings and specifications for construction of the proposed water mains as well as development and completion of the permit applications to be submitted to the Illinois Environmental Protection Agency (IEPA) and the Illinois Department of Transportation (IDOT). Also provided utility coordination and construction-phase coordination between various utilities and IDOT.

Mississippi River Bridge, 12-Inch Water Main Extension, Illinois-American Water (ILAW) | St. Clair County, IL

Project Manager and Design Engineer for the planning and design of approximately **3,000 feet of 12-inch ductile iron water main** in the Interurban (Belleville/East St. Louis Area) service district of ILAW to maintain service to existing customers in the National Stockyards area. Responsibilities included the development of design drawings and specifications to be used for construction of the proposed water main, as well as development and completion of the permit applications to be submitted to the Illinois Environmental Protection Agency (IEPA) and the Illinois Department of Transportation (IDOT). Also provided utility coordination and construction-phase coordination between various utilities and IDOT.

Abengoa Ethanol Plant 20-Inch Water Main Extension, Illinois-American Water (ILAW) | Venice, IL

Project Manager and Design Engineer for the planning and design of approximately **6,300 feet of 20-inch ductile iron water main** in the Interurban (Granite City Area) service district of ILAW to provide service to the Abengoa Bioenergy ethanol plant in Madison County. Responsibilities included the development of design drawings and specifications for construction of the proposed water main(s) as well as development and completion of the permit applications to the Illinois Environmental Protection Agency (IEPA), the Illinois Department of Transportation (IDOT), and various railroad authorities seeking approval for water main construction and permitting.

Water Main Relocations for Page Avenue Extension, Missouri-American Water | St. Charles, MO

Project Manager and Design Engineer for planning, design, permitting, and construction of **6,400 feet of 24-inch ductile iron buried water main** and 1,500 feet of 12-inch ductile iron buried water main for utility relocations associated with the Missouri Department of Transportation Page Avenue Extension project.

Water Main, Alton Service District of Illinois-American Water (ILAW) | Alton, IL

Project Manager and Design Engineer for planning, design, permitting, and construction/contract administration for **11,000 feet of 16-inch ductile iron buried water main**.

Water Main, Missouri-American Water | Mexico, MO

Project Manager and Design Engineer in charge of the planning, design, surveying, permitting, and construction/contract administration for approximately **4,500 feet of 12-inch buried ductile iron water main**.

Utility Relocations for Cross County MetroLink Extension, Missouri-American Water (MAW) / St. Louis County, MO

Project Manager and Design Engineer for planning, design, permitting, and construction/contract administration for the construction, installation, and **replacement of 6-inch, 8-inch, and 12-inch buried ductile iron water mains**, fire hydrants, and other MAW facilities throughout St. Louis County.

Water Mains for the New I-64 Replacement Project, Missouri-American Water / St. Louis County, MO

Project Manager and Design Engineer in charge of planning, design, permitting, and construction/contract administration for the construction, installation, and replacement of 20-inch and 24-inch buried ductile iron water mains along the I-64 project corridor. The project scope included the relocation of **approximately 1,000 feet of 20-inch and 24-inch buried ductile iron water main** to eliminate conflicts with the proposed highway reconstruction project by the Missouri Department of Transportation.



**Ryan
Gallagher, PE**
Principal

Education

California Polytechnic State
University San Luis Obispo,
California

BS Civil Engineering

Licenses & Registrations

California Professional
Engineer

- Civil, No. 74805

Professional Associations

Orange County Water
Association (*President 2020*)

American Society of Civil
Engineers (*Santa
Barbara/Ventura YMF
President 2012*)

American Public Works
Association (Ventura County
Chapter President 2014)

Association of Water Agencies
Ventura County (President
2013, Board of Directors 2010-
2016)

Ryan Gallagher; for the past 14 years, Ryan has completed over 75 projects with 20 public agencies in Southern California, serving as the Project Manager for the majority. The estimated construction value of the projects that have been planned, designed and/or constructed exceeds \$250 million. Projects include planning through design for water, wastewater and recycled-water conveyance, pumping, storage, and treatment. Ryan specializes in complex multi-agency water supply programs, alternative delivery program management, master planning, and contract negotiations.

Via California Pipeline Replacement, South Coast Water District / Dana Point, CA

Project Manager for replacement of 500 feet of pipe following failure of the pipeline. The 10-inch pipeline is located within a 16-inch casing located in a freeway overpass. The replacement design included evaluation of various materials, including fusible PVC and Certa-Lok PVC. **The final design included a cured-in-place liner for the casing and new Certa-Lok PVC to replace the failed carrier pipe.** The design was expedited to ensure the pipe could be returned to service.

Sewer Rehabilitation CIP Development, Channel Islands Beach Community Services District / Channel Islands Harbor, CA

Project Manager for development of rehabilitation plan based on review of CCTV and inspection results. Prepared 5-Year CIP based on identification and grouping of priority rehabilitation projects, and conceptual cost estimates. **Projects include both cured-in-place liners, spot repair projects, and manhole rehabilitation.** Estimated construction is \$750,000.

Force Main Rehabilitation Constructability Review, Channel Islands Beach Community Services District / Oxnard, CA

Project Manager for a constructability review of 90 percent design documents related to a sewer rehabilitation project. **Improvements included cured-in-place pipeline (CIPP) lining for approximately 2 miles of 8-inch to 12-inch force main.** The review included technical evaluation of design drawings and specifications and development of a summary table of comments.

HDPE Brine Pipeline, Water Replenishment District of Southern California / Pico Rivera, CA

Principal-in-Charge for this project that included an approximately 2,000-foot, 16-inch-diameter, high-density polyethylene (HDPE) pipeline in the city of Pico Rivera. The pressurized pipeline conveyed brine from the Groundwater Reliability Improvement Project (GRIP) Advanced Water Treatment Facility (AWTF) to a 63-inch trunk sewer owned and operated by the Sanitation Districts of Los Angeles County (LACSD). The work included both preliminary and final design. In addition, the preliminary design included evaluation of a turnout structure along a 66-inch reinforced-concrete pipe conveying tertiary effluent from the San Jose Creek Water Reclamation Plant. The objective of the turnout was to deliver influent water to the GRIP AWTF.

Palos Verdes Recycled-Water Pipeline, West Basin Municipal Water District / Carson, CA

Project Manager for preliminary design, environmental assessment, and final design for a recycled-water pipeline conveying water through Torrance and Palos Verdes Estates. The project includes approximately 16,000 feet of 8-inch to 10-inch-diameter pipeline, a pump station, and a connection to the Palos Verdes Golf Course, several parks, schools, and other irrigation customers along the route. Established several options, which reduced overall project cost by approximately \$750,000. Major project elements included easement assessment, hydraulics, pump station concept development, a California Department of Transportation (Caltrans) crossing, and an expedited schedule. Total project cost is estimated at \$6.2M.

36-Inch Steel Pipeline and 5 MG Reservoir, Las Virgenes Municipal Water District (LVMWD) / Westlake Village, CA

As Project Manager, prepared plan and profile drawings for 2,200 feet of 30-inch and 36-inch potable-water steel pipeline design for the LVMWD 5 MG potable water reservoir. Completed designs for open-cut installation using blasting and aboveground installation in 42-inch casing on pipe supports across the existing dam. Designs also included 8-inch, 16-inch, and 24-inch steel pipeline designs for overflow, drain line, and other potable-water improvements as part of the project. The project required coordination with the California Department of Water Resources, Division of Safety of Dams and the California Department of Public Health. Conducted extensive public outreach efforts, including a full-day open house with design experts, client staff, and workshop materials.

Potable Water Pipeline Project, Ventura County Waterworks District / Somis, CA

Principal-in-Charge overseeing the preparation of 4 miles of 12-inch pipeline design in the congested Los Angeles Avenue (State Route 118) and Somis Road (State Route 34) area. The project included extensive utility mapping in the state highway corridor and direct up-front coordination with the Calleguas Municipal Water District. Work involved investigating alternative pipe installation methods including open-cut, pipe-bursting, horizontal directional drill, replacement on existing alignment (using highline), jack-and-bore, and microtunneling methods.

Hope Reservoir Feasibility Study, Las Virgenes Municipal Water District / Calabasas, CA

Project Manager for development of a feasibility analysis evaluating a proposed 3,000 acre-foot recycled-water reservoir in the city of Calabasas. The investigation included evaluation of access road alignments, dam types, geotechnical issues, necessary recycled-water infrastructure, operation, mixing, and sizing. An economic analysis was provided for the preferred alternative.

Calabasas Tank Feasibility Study, Las Virgenes Municipal Water District / Calabasas, CA

Project Manager for the investigation of removing the 8 MG Calabasas Tank Potable Reservoir for service to allow for rehabilitation. The investigation included hydraulic modeling, review of temporary storage, development of preliminary shutdown procedures, and overview of challenges and mitigations.

Las Virgenes Reservoir Access Road and Pipeline Feasibility Study, Las Virgenes Municipal Water District / Las Virgenes, CA

Project Manager for a fatal-flaw analysis of an alternative access road and pipeline options from Triunfo Canyon Road to Las Virgenes Reservoir. The evaluation included development of a conceptual-level plan and profile drawings, hydraulic schematics, constructability, and opinion of probable construction cost.

Recycled Water Alternatives Study, United Water Conservation District / Ventura County, CA

As Project Manager, prepared an alternatives study of three options for delivering recycled water from the City of Oxnard to the District's spreading grounds and agricultural customers. The alternatives consisted of pipelines ranging in size from 16 inches to 24 inches for a range of 4 miles to 6 miles, and an annual delivery of approximately 4,000 AFY. Analysis included hydraulic modeling, cost estimates, implementation schedules, operational integration, permitting,

utility investigations, coordination with the City of Oxnard's Master Plan, and development of a business plan comparing alternatives against Master Plan alternatives.

GRIP Program Conveyance Alternatives Analysis, Water Replenishment District of Southern California / Lakewood, CA

Project Manager for an Alternatives Analysis and Preliminary Design of 5-mile, 42-inch recycled-water conveyance pipeline. The project includes an economic analysis comparing two alternative alignments, 30 percent design drawings, and Preliminary Design Report. The investigation addresses multiple trenchless crossing, utility coordination, hydraulics, traffic impacts, corrosion, residential/commercial impacts, geotechnical issues, and constructability. The estimated construction cost of the pipeline is \$30 million.



NATIONAL PLANT SERVICES

MICHELLE D. BEASON, PE

EDUCATION

Purdue University, West Lafayette, IN
BACHELOR OF SCIENCE IN CIVIL ENGINEERING, 1993
California State University, East Bay, Hayward, CA
COURSEWORK TOWARD MASTER OF BUSINESS ADMINISTRATION (NOT COMPLETED)

CERTIFICATIONS

Professional Civil Engineer License #C55331
CA General Engineering "A" and "B" Contractor License #1010254
PACP/LACP/MACP Certification U-413-17097
Water Distribution Operator Certification, D-2, #46247
Standardized Emergency Management System (SEMS)/ICS Training

EXECUTIVE CAREER HISTORY AND MILESTONES

NATIONAL PLANT SERVICES, INC., HAYWARD, CA **Regional Manager, March 2014 - Present**

- Regional Manager over western operations for numerous concurrent sewer, water, and storm water cleaning, inspection, and trenchless rehabilitation projects (CIPP lining, structural coatings, injection grouting, etc).
- Lead Design Engineer and Project Manager on the development of a new robotic 3D Laser advanced inspection technology.
- Develop and provide technical presentations to City Management and to Engineering firms regarding our many service offerings; design appropriate rehabilitation alternatives; develop Specifications and preliminary engineers' estimates.
- Develop and respond to Request for Proposals including project schedule and cost analysis; attend final project interviews; negotiate final contracts and subcontract agreements. Manage subconsultant contracts.
- Analyze pipeline multi-sensor inspection results and provide final recommendation reports including RUL (remaining useful life), rehabilitation recommendations, cleaning and inspection frequencies, and CIP planning.
- Direct Pacific Northwest operations; Develop training procedures and SOPs for the field personnel.
- Also serves as an elected Board Member of NASSCO, Chair of NASSCO Infrastructure Assessment Committee, Board Member of Western Chapter of North American Society for Trenchless Technology.

REDZONE ROBOTICS, INC. / ICOMMM, INC., SAN RAMON, CA **Director of Client Services/Key Account Manager, April 2010 - March 2014**

- Advised key personnel at hundreds of Cities on BMPs for sewer inspections and maintenance, and in the development of unique Asset Management Programs. Analyzed and provided remaining useful life, rehabilitation, and re-inspection recommendations based on inspection results.8/94
- Guided and managed the development and implementation of CMMS Asset Management software for numerous cities including PM and CM creation and scheduling, and CIP planning.
- Reviewed CCTV and multi-sensor inspection reports to determine RUL and rehabilitation recommendations for sewer and storm pipelines for cities across the US and Canada. Prepare final reports.
- Consulting, business development, and technical sales for laser and sonar robotic inspection services and cloud-based SAAS software sales to C-level staff, marketing, presentations, response to technical proposals and RFP's, new client interviews and negotiations, project management, and client satisfaction for clients across the 10 Western States and Canada.
- Develop and provide technical presentations to City Management and to Engineering firms regarding our many service offerings; develop Specifications for client budgeting process.
- Troubleshooting and recommending improvements for the ICOM3 software, robotic technology inspection technology, and work processes.

CAMELOT ENGINEERING & CONSTRUCTION, INC., WALNUT CREEK, CA **President / Owner • 2005-2010**

- Responsible for all company operation and managerial duties including: client negotiations, cost estimating, contract preparation, scheduling and material procurement, client satisfaction, bookkeeping, residential structures design, permitting, traffic control, safety, training, and labor management for all phases of residential construction projects.



NATIONAL PLANT SERVICES PROPOSAL FOR SELMA-KINGSBURG-FOWLER COUNTY SANITATION DISTRICT

MICHELLE D. BEASON, PE

- Installed new sewer laterals and PG&E Joint Trench for various projects; replaced broken sewer laterals.
- Coordinated with local and state governments.
- Recruited, hired, and trained 17 employees and directed and supervised all work.
- Ensured timely, accurate, and within budget completion of all projects, including work of sub-contractors.
- Successfully established and managed a proprietary-owned contracting business; directed the construction of 4 new single-family residences and dozens of remodels and additions on time and within budget.

EAST BAY MUNICIPAL UTILITY DISTRICT (EBMUD), OAKLAND, CA **Associate Civil Engineering / Acting Senior Civil Engineer • 1994–2005**

- Earned 2005 EBMUD Employee Leadership Award for effective management and coordination of 60 simultaneous Capital and Operating construction projects.
- Developed and implemented a project tracking procedure, including budget preparation, project scheduling, resource loading, and cost tracking for the O&M Department.
- Developed and controlled capital and operating budgets; set long-range CIP schedule.
- Designed a GIS-based application for the selection of critical and backbone facilities, as well as interfaces with MAXIMO database.
- Developed consultant contracts. Managed various consultant contracts, including the CH2M Hill contract for the Claremont Tunnel outage planning phase.
- Directed Reliability Centered Maintenance planning efforts; coordinated with O&M staff to determine maintenance schedules, and run to failure designations for District infrastructure.
- Situation Status lead for the EBMUD Emergency Operations Team for 7 years; rendered prompt response to all District emergency situations.
- Performed the role of Acting Senior Civil Engineer; directed and supervised 5 employees.
- Developed Microsoft Project Schedules and a Project Tracking system for the Pipeline Construction Division and the Construction Maintenance Division, trained Supervisors on the use of Microsoft Project and managed all scheduling.
- Developed the "Maintenance Hydraulic Training" for the field personnel. This is a comprehensive training program that is still provided on DVD to new hires. It provides an overview of the EBMUD system, and instructs the crews on basic system hydraulics.
- Completed numerous water service estimates, and several large pressure zone studies/master plans.
- Initiated and was the Chairperson of the District Outage Review Committee. Coordinated all work between Planning, Engineering, Operations, and Maintenance departments.
- Coordinated JPA and agency transfer of reclaimed water pump stations between EBMUD/LAVWMA/Caltrans.

BLACK & VEATCH, KANSAS CITY, MO **Project Engineer / Consultant • 1993–1994**

- Administered the development of contracts and scope of work; final system reports; and recommendation of system improvements for various municipalities. Performed hydraulic modeling using EPANET and KYPIPE.
- Presided over systems planning and hydraulic modeling of water distribution systems across the United States; business development for new clients; upselling and customer satisfaction for existing clients.

CAPITOL ENGINEERING, INDIANAPOLIS, IN **Project Engineer / Consultant • 1993**

Project Manager for a new wastewater treatment plant: Responsible for the planning, design, NPDES permitting, subcontractor selection, and construction management of a 60,000 gpd wastewater treatment plant and lift station in Hendricks County, IN. Project was completed on time and within budget.

Assistant Project Engineer for various small wastewater projects in the Midwest.

U.S. ENVIRONMENTAL PROTECTION AGENCY, GROSSE ILE, MI **Student Intern/Junior On-Scene Coordinator • 1986-1993**

Hired as a student intern working part time after High School classes, and was promoted to Junior On-Scene Coordinator (OSC) during my last two years at Purdue University. Responsible for writing technical final project reports after each Superfund Site cleanup, and technical assistance.

As a Junior OSC, I was responsible for cleanup operations at Superfund Cleanup sites in the Midwest: scheduled and coordinated all cleanup contractors, managed technical assistance team members, determined level of PPE required, handled disposal logs and waste manifests.



Office Locations

ARROYO GRANDE

530 Paulding Circle, Suite B
Arroyo Grande, California 93420
(805) 904-6530

BAKERSFIELD

1800 21st Street, Suite C
Bakersfield, California, 93301
(661) 873-4262

FRESNO

8405 N. Fresno St., Suite 120
Fresno, California 93720
(559) 500-4750

IRVINE

38 Executive Park, Suite 320
Irvine, California, 92614
(714) 213-9758

SANTA CLARITA

23942 Lyons Ave., Ste 215
Newhall, California, 91321
(661) 382-8515

VENTURA

121 N. Fir Street, Suite G
Ventura, California, 93001
(805) 947-4971

	Principal (Ryan Gallagher)	Project Manager (Lippincott)	Senior Project Engineer (Bull/JJ)	Assistant Engineer II (Wong)	Drafter	Total Hours (MKN)	Subtotal Labor (MKN)	ODCs (3% MKN)	CCTV Consultant	Total Cost
Task 1 - PM, Meetings, &QC										
Project Management (3 months)		24				24	\$ 4,704	\$ 141	\$ -	\$ 4,845
Coordination Meetings (4)	4	8	8			20	\$ 3,764	\$ 113	\$ -	\$ 3,877
QA/QC (Draft and Final, 6 deliverables)	8					8	\$ 1,672	\$ 50	\$ -	\$ 1,722
Subtotal	12	32	8	0	0	52	\$ 10,140	\$ 304	\$ -	\$ 10,444
Task 2 - Access Point Design and Construction										
Contract Documents - Plans and Specs (Draft/Final)	4		20	26	30	80	\$ 13,118	\$ 394	\$ -	\$ 13,512
Bid and Construction Phase Support (20 hrs)			20			20	\$ 3,920	\$ 118	\$ -	\$ 4,038
Subtotal	4		40	26	30	100	\$ 17,038	\$ 511	\$ -	\$ 17,549
Task 3 - CCTV Inspection and TM										
CCTV Inspection			4	4		8	\$ 1,392	\$ 42	\$ 9,900	\$ 11,334
Rehabilitation Report (Draft/Final)	4		24	40	12	80	\$ 13,384	\$ 402	\$ -	\$ 13,786
Subtotal	4		28	44	12	88	\$ 14,776	\$ 443	\$ 9,900	\$ 25,119
Task 4 - Final Design										
Contract Documents - Plans and Specs (Draft/Final)	4		24	36	40	104	\$ 16,892	\$ 507	\$ -	\$ 17,399
Subtotal	4		24	36	40	104	\$ 16,892	\$ 507	\$ -	\$ 17,399
Task 5 - Bid Phase Services										
Bid Phase Services (3 RFIs)			4	8		12	\$ 2,000	\$ 60	\$ -	\$ 2,060
Subtotal	0		4	8	0	12	\$ 2,000	\$ 60	\$ -	\$ 2,060
Task 6 - Construction Phase Services										
Task 6.1 - PM and Construction Meetings (2)			6			6	\$ 1,176	\$ 35	\$ -	\$ 1,211
Task 6.2 - RFIs (3)/Change Orders (1)	2		12			14	\$ 2,770	\$ 83	\$ -	\$ 2,853
Task 6.3 - Shop Drawing Review (6)			12	12		24	\$ 4,176	\$ 125	\$ -	\$ 4,301
Subtotal	2	0	30	12	0	44	\$ 8,122	\$ 244	\$ -	\$ 8,366
TOTAL BUDGET	26	32	134	126	82	400	\$ 68,968	\$ 2,069	\$ 9,900	\$ 80,937

Billing Rates	\$/hr
Principal	209
Senior Project Engineer	196
Assistant Engineer II	152
Drafter	147
Administrative Assistant	100

Mileage to be reimbursed at IRS rate



2020 SUMMARY RATE SCHEDULE

Billing Title	Hourly Billing Rates
Project Director/Operations Manager	\$225.00
Principal	\$209.00
Senior Project Engineer	\$196.00
Project Engineer/Senior Scientist	\$170.00
Water Resources Planner	\$160.00
GIS Specialist	\$150.00
Assistant Engineer II	\$152.00
Assistant Engineer I	\$136.00
Supervising Drafter	\$147.00
Drafting/Design Technician II	\$125.00
Drafting/Design Technician I	\$105.00
Administrative Assistant	\$100.00

Routine office expenses such as computer usage, software licenses and fees, telephone charges, office equipment and supplies, incidental postage, copying, and faxes are included as a 3% fee on labor cost.

Professional Reimbursement

Where charges are associated with MKN employees, the hourly billing rates include the cost of salaries, fringe benefits, indirect overhead costs and fee. Rates for categories of services not identified above shall be as negotiated with the Client and included in the professional services agreement. Not-to-Exceed amounts identified in the Agreement with Client do not include overtime hours as defined by State specific and Federal wage and hour laws. Labor will be billed at 1½ times billing rates for non-exempt employees for overtime hours requested by the Client.

Direct Expenses

Reimbursement for direct expenses incurred in connection with the work, will be at cost plus ten percent (10%) for items such as:

- a. Maps, photographs, reproductions, printing, equipment rental and special supplies related to the work.
- b. Consultants, contractors and other outside services.
- c. Rented vehicles, local public transportation, taxis, air/train fare, travel and subsistence (non-GSA rates).
- d. Special fees, insurance, permits, and licenses applicable to the work.

Reimbursement for employee-owned vehicles used in connection with the work will be at the rate per mile equal to the Privately Owned Vehicle (POV) Mileage Reimbursement Rate as established by the United States General Services Administration for the dates the POV is in use. Travel and subsistence (other than mileage) will be billed at cost.

Other in-house charges will be at standard company rates. The foregoing Billing Rate Schedule is effective through **December 31, 2020** and will be adjusted each year after at a rate of 2 to 5%.



Memorandum

To: Las Virgenes – Triunfo JPA
From: Syrus Devers, Best Best & Krieger
Date: May 22, 2020
Re: Monthly State Political Report

Legislative Report

The Assembly reconvened under special procedures on May 4th and the Senate followed suit on May 11th. The process so far is slow moving. The committees meet in the main chambers and Appropriations Committee rooms where the members can spread out, which means only two committees meet at a time. In-person testimony by witnesses is possible but highly discouraged. In order to enter the Capitol, a witness would need to first check in with the sergeants who will require a mask and a specific reason to enter the building. The sergeants will then escort the witness to the hearing location, opening all doors and only allowing one person in an elevator at a time. After giving testimony, the witness is then escorted out of the building. BB&K staff will be taking advantage of the phone system set up for support and opposition testimony, which moves slowly but seems to work well.

The first policy committee hearings relevant to water met on the 13th and 14th when the Assembly Natural Resources (NR) and Environmental Safety and Toxic Materials (ESTM) Committees held hearings. SB 1099 (Dodd), the LVMWD sponsored bill, is set to be heard on the 29th in the Senate Environmental Quality Committee.

Administrative Report

Governor Newsom released the May Revise for the State Budget on May 14th. At the beginning of the year fiscal analysts predicted that the state would likely hit the statutory savings limit for the state's rainy-day fund. During the press conference for the release of the May Revise, Newsom asserted that the state's budget deficit will likely be \$54.3 billion, which approaches the nearly \$60 billion deficit in 2009 during the height of the Great Recession. Since this reversal happened in such a short time span, for all practical purposes this is a newly proposed budget as opposed to a revision of the budget submitted in January.

BBK
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ATTORNEYS AT LAW

The Legislative Analyst's Office (LAO), however, reached a different set of conclusions about the budget deficit. The Governor compared a point-in-time snapshot to the fiscal outlook in January to reached the deficit figure of \$54 billion. The LAO looked at the budget deficit as a dynamic figure that changes based on assumptions about how the economy will perform over the next three years. It also compared the current fiscal situation against a baseline state budget, or those parts of the budget that are mandatory plus those areas necessary for public health and safety. This approach gave an optimistic and a pessimistic estimate for the deficit of \$18 billion and \$31 billion. The difference between the estimates turns on whether the economy rebounds quickly, a "U" shaped recovery, or bottoms out and take an extended time to begin recovering, or an "L" shaped recovery. Look for the Legislature to talk about a \$54 billion deficit problem, but act as if it is a \$18 to \$31 billion problem.

In water-related news Department of Fish and Wildlife (CDFW) and the Department of Water Resources (DWR) are being sued by both federal and state water contractors, as well as environmental groups and in-Delta interests, over the CDFW Incidental Take Permit for the long term operations of the State Water Project (SWP). The federal contractors are suing on largely the same CEQA grounds as the State Contractors and MWD with an emphasis on impacts to CVP operations. Meanwhile, the state and enviros are suing the feds over the federal Biological Opinions for the operation of the Central Valley Project. The SWP contractors took the important step of seeking to intervene in the lawsuit as defendants and are now in the case as interested parties. In short, everyone is suing everyone else. Long-time water policy observers (a.k.a. water buffaloes) are tossing around terms such as "unprecedented" and "unheard of" to describe the current state of affairs.

Las Virgenes-Triunfo JPA

Bill Matrix –May 22, 2020

A. Priority Support/Oppose

Measure	Author	Topic	Status	Brief Summary	Position	Priority
AB 1672	Bloom D	Solid waste: nonwoven disposable products.	1/30/2020-Read third time. Passed. Ordered to the Senate. In Senate. Read first time. To Com. on RLS. for assignment.	The California Integrated Waste Management Act of 1989, administered by the Department of Resources Recycling and Recovery, generally regulates the disposal, management, and recycling of solid waste. This bill would require, commencing January 1, 2021, except as provided, certain nonwoven disposal products to be labeled clearly and conspicuously to communicate that they should not be flushed, as specified. The bill would prohibit a covered entity, as defined, from making a representation about the flushable attributes, benefits, performance, or efficacy of those nonwoven disposal products, as provided.	Support	A. Priority Support/Oppose
AB 2093	Gloria D	Public records: writing transmitted by electronic mail: retention.	3/10/2020-From committee: Do pass and re-refer to Com. on APPR. (Ayes 10. Noes 1.) (March 10). Re-referred to Com. on APPR.	Would, unless a longer retention period is required by statute or regulation, or established by the Secretary of State pursuant to the State Records Management Act, require a public agency, for purposes of the California Public Records Act, to retain and preserve for at least 2 years every public record, as defined, that is transmitted by electronic mail.	Out for Analysis	A. Priority Support/Oppose
AB 2178	Levine D	Emergency services.	5/13/2020-From committee: Do pass and re-refer to Com. on APPR. (Ayes 20. Noes 0.) (May 12). Re-referred to Com. on APPR.	Current law defines the terms “state of emergency” and “local emergency” to mean a duly proclaimed existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by, among other things, fire, storm, or riot. This bill would additionally include a deenergization, defined as a planned public safety power shutoff, as specified, within those conditions constituting a state of emergency and a local emergency.	Out for Analysis	A. Priority Support/Oppose
AB 2182	Rubio, Blanca D	Emergency backup generators: water and wastewater facilities: exemption.	3/16/2020-In committee: Hearing postponed by committee.	Would exempt the operation of an alternative power source, as defined, to provide power to a critical facility, as defined, from any local, regional, or state regulation regarding the operation of that source. The bill would authorize providers of essential public services, in lieu of compliance with applicable legal requirements, to comply with the maintenance and testing procedure set forth in the National Fire Protection Association Standard for Emergency and Standby Power System, NFPA 110, for alternative power sources designated by the providers for the support of critical facilities.	Out for Analysis	A. Priority Support/Oppose
AB 2296	Quirk D	State Water Resources	5/14/2020-From committee: Do	Would authorize the State Water Resources Control Board to delegate partial	Out for Analysis	A. Priority Support/Oppose

		Control Board: local primacy delegation: funding stabilization program.	pass and re-refer to Com. on APPR. (Ayes 6. Noes 1.) (May 14). Re-referred to Com. on APPR.	responsibility for the California Safe Drinking Water Act's administration and enforcement by means of a local primacy delegation agreement. The bill would authorize the state board, for counties that have not been delegated primary responsibility as of January 1, 2021, to offer an opportunity for the county to apply for partial or primary responsibility if the state board determines that it needs assistance in performing administrative and enforcement activities, as specified. The bill would authorize the state board to approve the application for delegation if the state board determines that the local health officer is able to sufficiently perform the administrative and enforcement activities and would specify that a local primacy agency has all of the authority over designated public water systems as is granted to the state board by the act.		e
AB 2560	Quirk D	Water quality: notification and response levels: procedures.	5/14/2020-From committee: Do pass and re-refer to Com. on APPR. with recommendation : To Consent Calendar. (Ayes 9. Noes 0.) (May 14). Re-referred to Com. on APPR.	The California Safe Drinking Water Act requires the State Water Resources Control Board to adopt drinking water standards for contaminants in drinking water based upon specified criteria and requires any person who owns a public water system to ensure that the system, among other things, complies with those drinking water standards. The act requires a public water system to provide prescribed notices within 30 days after it is first informed of a confirmed detection of a contaminant found in drinking water delivered by the public water system for human consumption that is in excess of a maximum contaminant level, a notification level, or a response level established by the state board. This bill would require the state board to comply with specified public notice and comment procedures when establishing or revising notification or response levels.	Support	A. Priority Support/Oppose
SB 45	Allen D	Wildfire Prevention, Safe Drinking Water, Drought Preparation, and Flood Protection Bond Act of 2020.	1/30/2020-In Assembly. Read first time. Held at Desk.	Would enact the Wildfire Prevention, Safe Drinking Water, Drought Preparation, and Flood Protection Bond Act of 2020, which, if approved by the voters, would authorize the issuance of bonds in the amount of \$5,510,000,000 pursuant to the State General Obligation Bond Law to finance projects for a wildfire prevention, safe drinking water, drought preparation, and flood protection program.	Out for Analysis	A. Priority Support/Oppose
SB 857	Bates R	Solid waste: integrated waste management plans: composting component.	1/22/2020-Referred to Com. on RLS.	Current law, the California Integrated Waste Management Act of 1989, administered by the Department of Resources Recycling and Recovery, establishes an integrated waste management program. The act requires each city to submit to the county in which the city is located a source reduction and recycling element containing specified components, including a composting component. This bill would make a nonsubstantive change to language concerning implementation of the	Out for Analysis	A. Priority Support/Oppose

				composting component.		
SB 996	Portantino D	State Water Resources Control Board: Constituents of Emerging Concern Program.	4/1/2020-From committee with author's amendments. Read second time and amended. Re-referred to Com. on EQ.	Would require the State Water Resources Control Board to establish, maintain, and direct an ongoing, dedicated program called the Constituents of Emerging Concern Program to assess the state of information and recommend areas for further study on constituents of emerging concern in drinking water that may pose risks to public health. The bill would require the state board to establish the Stakeholder Advisory Group and, by an unspecified date, the Science Advisory Panel, both as prescribed, to assist in the gathering and development of information for the program, among other functions. The bill would require the program to provide opportunities for public participation, including conducting stakeholder meetings and workshops to solicit relevant information and feedback for development and implementation of the program.	Support	A. Priority Support/Oppose
SB 1052	Hertzberg D	Water quality: municipal wastewater agencies.	5/12/2020-Referral to Com. on GOV. & F. rescinded due to the shortened 2020 Legislative Calendar.	Would establish municipal wastewater agencies and would authorize a municipal wastewater agency, among other things, to enter into agreements with entities responsible for stormwater management for the purpose of managing stormwater and dry weather runoff, to acquire, construct, expand, operate, maintain, and provide facilities for specified purposes relating to managing stormwater and dry weather runoff, and to levy taxes, fees, and charges consistent with the municipal wastewater agency's existing authority in order to fund projects undertaken pursuant to the bill. The bill would require the exercise of any new authority granted under the bill to comply with the Cortese-Knox-Hertzberg Local Government Reorganization Act of 2000.	Out for Analysis	A. Priority Support/Oppose
SB 1099	Dodd D	Emergency backup generators: critical facilities: exemption.	3/18/2020-April 1 hearing postponed by committee.	Would, consistent with federal law, require air districts to adopt a rule, or revise its existing rules, to allow critical facilities with a permitted emergency backup generator to use that emergency backup generator during a deenergization event or other loss of power, and to test and maintain that emergency backup generator, as specified, without having that usage, testing, or maintenance count toward that emergency backup generator's time limitation on actual usage and routine testing and maintenance. The bill would prohibit air districts from imposing a fee on the issuance or renewal of a permit issued for those critical facility emergency backup generators.	Support	A. Priority Support/Oppose
SB 1386	Moorlach R	Local government: assessments, fees, and charges: water.	5/22/2020-Action From GOV. & F.: Read second time. To THIRD READING.	The Proposition 218 Omnibus Implementation Act prescribes specific procedures and parameters for local jurisdictions to comply with these requirements and, among other things, authorizes an agency providing water, wastewater, sewer, or refuse collection	Support	A. Priority Support/Oppose

				<p>services to adopt a schedule of fees or charges authorizing automatic adjustments that pass through increases in wholesale charges for water, sewage treatment, or wastewater treatment or adjustments for inflation under certain circumstances.</p> <p>Current law defines, among other terms, the term “water” for these purposes to mean any system of public improvements intended to provide for the production, storage, supply, treatment, or distribution of water from any source. This bill would specify that “water” for purposes of the Proposition 218 Omnibus Implementation Act also includes the public fixtures, appliances, and appurtenances connected to an above-described system of public improvements intended to provide for the production, storage, supply, treatment, or distribution of water from any source.</p>		
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B. Watch

Measure	Author	Topic	Status	Brief Summary	Position	Priority
AB 291	Chu D	Local Emergency Preparedness and Hazard Mitigation Fund.	1/30/2020-Read third time. Passed. Ordered to the Senate. In Senate. Read first time. To Com. on RLS. for assignment.	Would establish a Local Emergency Preparedness and Hazard Mitigation Fund to, upon appropriation by the Legislature, support staffing, planning, and other emergency mitigation priorities to help local governments meet emergency management, preparedness, readiness, and resilience goals. The bill would require the Office of Emergency Services to establish the Local Emergency Preparedness and Hazard Mitigation Fund Committee under the Standardized Emergency Management System Advisory Board.	Out for Analysis	B. Watch
AB 1839	Bonta D	Economic, environmental, and social recovery: California COVID-19 Recovery Deal.	5/11/2020-Re-referred to Com. on NAT. RES.	Would enact the California COVID-19 Recovery Deal. The bill would make a series of legislative findings and declarations pertaining to the coronavirus (COVID-19) pandemic and various economic, environmental, and social conditions in the state. The bill would state the intent of the Legislature that the state adopt a policy framework with principles and goals committed to accomplish specified economic, environmental, and social objectives and priorities as part of the state’s COVID-19 recovery spending. The bill would state that the Legislature establishes various spending rules for the COVID-19 recovery, including adopting spending measures that prohibit businesses, organizations, or agencies from accepting public funds for any long-term projects that prolong the emission of greenhouses gases or lead to the expansion of fossil fuel projects and ensuring that recovery spending includes specific measures for California populations and communities most negatively impacted by COVID-19.	Watch	B. Watch
AB 1957	Gallagher R	Paradise	2/18/2020-Re-re	Current law authorizes, until January 1,	Watch	B. Watch

		Irrigation District: water pipeline: design-build process.	ferred to Com. on L. GOV.	2025, local agencies, as defined, to use the design-build project delivery process, as specified, for specified public works. This bill would authorize the Paradise Irrigation District to utilize the design-build project delivery process to assign contracts for the construction of a water conveyance pipeline from the Town of Paradise to the City of Chico.		
AB 2095	Cooper D	Public water systems: reduction of water charges: customers impacted by COVID-19.	5/5/2020-Re-referred to Com. on L. GOV.	Would authorize a public water system to reduce the water charges imposed on a customer impacted by COVID-19 during the duration of the impact provided that the reduction does not increase the water charges imposed on another ratepayer.	Out for Analysis	B. Watch
AB 2322	Friedman D	Small water suppliers and rural communities: drought and water shortage planning: repeal.	2/15/2020-From printer. May be heard in committee March 16.	Current law makes legislative findings and declarations regarding drought planning for small water suppliers and rural communities, and requires the Department of Water Resources, in consultation with the State Water Resources Control Board and other relevant state and local agencies and stakeholders, to use available data to identify, no later than January 1, 2020, small water suppliers and rural communities that may be at risk of drought and water shortage vulnerability and notify counties and groundwater sustainability agencies of those suppliers or communities. Current law requires the department, in consultation with the state board, to propose to the Governor and the Legislature, by January 1, 2020, recommendations and guidance relating to the development and implementation of countywide drought and water shortage contingency plans to address the planning needs of small water suppliers and rural communities, as provided. This bill would repeal these provisions.	Watch	B. Watch
AB 2324	Friedman D	Accessory dwelling units: prohibition of rent or lease.	5/5/2020-Re-referred to Com. on H. & C.D.	The Planning and Zoning Law authorizes a local agency to provide, by ordinance, for the creation of accessory dwelling units in single-family and multifamily dwelling residential zones and requires a local agency that has not adopted an ordinance to ministerially approve an application for an accessory dwelling unit. Current law also authorizes a local agency to allow, by ordinance, for the sale or conveyance of an accessory dwelling unit separate from the primary residence to a qualified buyer, as defined, upon meeting specified conditions. This bill would prohibit a person, as defined, from renting or leasing more than 15 of the person's accessory dwelling units, as defined, in the state.	Watch	B. Watch
AB 3256	Garcia, Eduardo D	Economic Recovery, Wildfire Prevention, Safe Drinking Water, Drought	5/19/2020-Re-referred to Com. on APPR.	Would enact the Economic Recovery, Wildfire Prevention, Safe Drinking Water, Drought Preparation, and Flood Protection Bond Act of 2020, which, if approved by the voters, would authorize the issuance of bonds in the amount of \$6,980,000,000	Out for Analysis	B. Watch

		Preparation, and Flood Protection Bond Act of 2020.		pursuant to the State General Obligation Bond Law to finance projects for an economic recovery, wildfire prevention, safe drinking water, drought preparation, and flood protection program.		
SB 378	Wiener D	Electrical corporations: deenergization events: procedures: allocation of costs: reports.	1/27/2020-Read third time. Passed. (Ayes 25. Noes 2.) Ordered to the Assembly. In Assembly. Read first time. Held at Desk.	Would require each electrical corporation to annually submit a report to the Wildfire Safety Division and, after June 30, 2021, to the Office of Energy Infrastructure Safety, that includes the age, useful life, and condition of the electrical corporation's equipment, inspection dates, and maintenance records for its equipment, investments to maintain and improve the operation of its transmission and distribution facilities, and an assessment of the current and future fire and safety risk posed by the equipment.	Watch	B. Watch
SB 862	Dodd D	Planned power outage: public safety.	5/20/2020-Read second time and amended. Re-referred to Com. on APPR.	Current law defines the terms "state of emergency" and "local emergency" to mean a duly proclaimed existence of conditions of disaster or of extreme peril to the safety of persons and property within the state caused by, among other things, fire, storm, or riot. This bill would additionally include a deenergization event, as defined, within a sudden and severe energy shortage constituting a state of emergency and a local emergency.	Out for Analysis	B. Watch
SB 931	Wieckowski D	Local government meetings: agenda and documents.	4/2/2020-From committee with author's amendments. Read second time and amended. Re-referred to Com. on GOV. & F.	The Ralph M. Brown Act requires meetings of the legislative body of a local agency to be open and public and also requires regular and special meetings of the legislative body to be held within the boundaries of the territory over which the local agency exercises jurisdiction, with specified exceptions. Current law authorizes a person to request that a copy of an agenda, or a copy of all the documents constituting the agenda packet, of any meeting of a legislative body be mailed to that person. This bill would require, if the local agency has an internet website, a legislative body or its designee to email a copy of, or website link to, the agenda or a copy of all the documents constituting the agenda packet if the person requests that the items be delivered by email. The bill would require, where the local agency determines it is technologically infeasible to send a copy of all documents constituting the agenda packet or a website link containing the documents by electronic mail or by other electronic means, the legislative body or its designee to send by electronic mail a copy of the agenda or a website link to the agenda and mail a copy of all other documents constituting the agenda packet in accordance with the mailing requirements.	Out for Analysis	B. Watch
SB 952	Nielsen R	Sales and use taxes: exemption: backup	5/21/2020-Set for hearing May 28.	Current state sales and use tax laws impose a tax on retailers measured by the gross receipts from the sale of tangible personal property sold at retail in this state or on the	Watch	B. Watch

		electrical resources: deenergization events.		storage, use, or other consumption in this state of tangible personal property purchased from a retailer for storage, use, or other consumption in this state. The Sales and Use Tax Law provides various exemptions from those taxes. This bill, on and after January 1, 2021, would provide an exemption from those taxes with respect to the sale of, or the storage, use, or consumption of, a backup electrical resource, as defined, that is purchased for exclusive use by a city, county, special district, or other entity of local government during deenergization events, as defined.		
SB 971	Hertzberg D	Small water supplier and countywide water shortage contingency planning.	5/12/2020-Referal to Com. on GOV. & F. rescinded due to the shortened 2020 Legislative Calendar.	Would require a small water supplier, as defined, with 1,000 to 2,999 service connections, inclusive, to prepare and adopt a small water supplier water shortage contingency plan that consists of specified elements. The bill would require a small water supplier with 15 to 999 service connections, inclusive, to take specified actions related to water shortage planning and response. The bill would require small water suppliers to provide to the public, and to report, the plan and specified water shortage planning information, as prescribed.	Out for Analysis	B. Watch
SB 1011	Dahle R	Water quality: waste discharge requirements: management agency agreements.	3/25/2020-From committee with author's amendments. Read second time and amended. Re-referred to Com. on RLS.	Would provide that implementation of a management agency agreement entered into between the State Water Resources Control Board and the United States Forest Service or the state board and the United States Bureau of Land Management constitutes compliance by the United States Forest Service or the United States Bureau of Land Management, as applicable, with specified waste discharge requirements for nonpoint source discharges. The bill would prohibit a provision of such a management agency agreement from being construed in any way as limiting the authority of the state board or a regional board in carrying out its legal responsibilities for the management or regulation of water quality.	Out for Analysis	B. Watch
SB 1044	Allen D	Firefighting equipment and foam: PFAS chemicals.	5/18/2020-From committee with author's amendments. Read second time and amended. Re-referred to Com. on EQ.	Would, commencing January 1, 2022, require any person, including a manufacturer, as defined, that sells firefighter personal protective equipment to any person or public entity to provide a written notice to the purchaser at the time of sale if the firefighter personal protective equipment contains perfluoroalkyl and polyfluoroalkyl substances (PFAS), and would provide that a violation of this requirement is punishable by a specified civil penalty. The bill would require the seller and the purchaser to retain the notice on file for at least 3 years and to furnish the notice and associated sales documentation to the State Fire Marshal within 60 days upon request, as provided.	Out for Analysis	B. Watch
SB 1056	Portantino	Drinking water:	3/18/2020-April	Would require the State Water Resources	Out for	B. Watch

	D	testing: perfluoroalkyl and polyfluoroalkyl substances.	1 hearing postponed by committee.	Control Board, on or before January 1, 2022, to certify a methodology or methodologies for testing drinking water, groundwater, and surface water for perfluoroalkyl and polyfluoroalkyl substances, as provided, and to accredit qualified laboratories in California to analyze perfluoroalkyl and polyfluoroalkyl substances pursuant to the adopted methodology or methodologies.	Analysis	
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Total Measures: 27

Total Tracking Forms: 27



BEST BEST & KRIEGER
ATTORNEYS AT LAW

To: Las Virgenes-Triunfo JPA Board of Directors
From: John Freshman and Ana Schwab
Date: May 22, 2020
RE: Federal Report

Federal Update

On May 15, the House of Representatives passed a \$3 trillion economic stimulus package, the Health and Economic Recovery Omnibus Emergency Solutions Act, or the HEROES Act, by a vote of 208-199. The HEROES Act would provide broad financial relief, including nearly \$1 trillion to states and local governments and another round of \$1,200 checks to Americans. House Speaker Nancy Pelosi said that she wants to use the bill as a starting point for negotiations with the Republican-controlled Senate and the White House.

There are debates between lawmakers and the White House on whether to ease statutory budget caps to fund the federal response efforts. Senate Majority Leader Mitch McConnell (R-KY) stated that the Senate would not move forward with the bill, or other economic stimulus packages, until June. The bill is not expected to pass in the Senate. President Donald Trump said he would not sign the HEROES Act into law if it were to pass the Senate.

The bill addresses the utility industry by providing aid to assistance programs and requiring a continuation of services. \$1.5 billion would be allocated for the Low-Income Home Energy Assistance Program (LIHEAP). States, territories, and tribes would be provided \$1.5 billion in grants to pay for water and wastewater bills for low income families. The bill includes a provision that would require state and utilities that are receiving federal emergency funds to adopt of maintain policies to prevent energy and water service shutoffs to residential customers during the COVID-19 public health emergency.

The next package may be the last major economic stimulus relief of the year. As such, many industries see this period as the last opportunity to push for major financial assistance. States and local governments are continuing to put pressure on Congress and the White House to provide more direct federal financial relief due to immense revenue losses.

In the meantime, the House will vote next week on a bipartisan proposal to improve the Paycheck Protection Program (PPP). The bill is separate from the HEROES Act package. The “Paycheck Protection Flexibility Act”, H.R.6886, introduced by Representatives Dean Phillips (D-MN) and Chip Roy (R-TX), would allow businesses receiving forgivable loans to be able to use the funds on payrolls for more than the eight weeks under the original program. It would relax the requirement that 75% of loans be used for payroll expenses. It would allow businesses to have more than two years to pay back the loans.



A bipartisan group of senators introduced legislation that would create a \$500 billion fund to help state and local governments. The bill, supported by Senators Bob Menendez (D-NJ), Bill Cassidy (R-LA), Susan Collins (R-ME), Cindy Hyde-Smith (R-MS), Joe Manchin (D-WV), and Cory Booker (D-NJ), aims to assist governments experiencing financial strain due to COVID-19. The money would be distributed according to population size, infection rate, and revenue losses. The funding does not have a population requirement, which would permit municipalities to apply and use the funding. All states, as well as Puerto Rico and the District of Columbia, would receive a minimum of \$2 billion in relief aid. A companion bill in the House was introduced by Representatives Mike Sherrill (D-NJ) and Peter King (R-NY).

PFAS

This week, EPA announced it would set limits for PFOA and PFOS sometime next year, in 2021. Administrator Andrew Wheeler told the Senate Environment and Public Works Committee that the maximum contaminant levels (MCL) for the two chemicals will not be able to be determined within a year.

As NDAA drafting begins in the Senate Armed Services Committee, PFAS will likely be a contested issue. The draft of the NDAA is expected to be released in July. Last year, NDAA negotiations were stalled due to House and Senate members from both sides of the aisle fighting for stricter PFAS regulations.

Currently, EPA is finalizing a rule to add 172 per- and polyfluoroalkyl substances (PFAS) to the list of chemicals to be reported to the Toxics Release Inventory (TRI), pursuant to the National Defense Authorization Act (NDAA).

The rule will become effective immediately once its published in the Federal Register. Per the NDAA, the PFAS additions became effective as of January 1, 2020. Additionally, the NDAA established a manufacture, processing, and otherwise use reporting threshold of 100 pounds for each of the listed PFAS. The 172 PFAS are reportable for the 2020 reporting year.

DuPont Inc. and Chemours Co., two of the largest manufacturers of PFAS, are being charged in for PFAS contamination across the country. This past week, more than 200 property owners in North Carolina filed a lawsuit in the United States Eastern District Court of North Carolina seeking punitive damages to cover the cost of installing water filters and cleaning up PFAS contamination on their properties. On the west coast, Orange County Water District, along with 12 other cities and water districts, is considering litigation against DuPont Inc. and 3M over PFAS contamination in their water system.



Pertinent Lawsuits

The Center for Biological Diversity and two other environmental groups sued the Bureau of Reclamation and Secretary of Interior Director David Bernhardt asking for declaratory and injunctive relief for contracts with water users due to improper environmental reviews. The lawsuit was filed in the U.S. District Court for the Eastern District of California.

The petitioners claim the Bureau of Reclamation and the Interior Department violated several environmental laws when it agreed to convert 14 short-term Central Valley Project water contracts into permanent agreements. They claim the conversions were permitted without review of the adverse environmental consequences. The petitioners also seek an order and judgement to prevent Reclamation from converting 26 contracts that Reclamation is in the process of converting to permanent repayment contracts. The petitions hold that these conversions are in violation of NEPA, as Environmental Impact Statements and Environmental Assessments have not been properly prepared.

The State of California, the California Natural Resources Agency, and the California Environmental Protection Agency filed a lawsuit against the Trump Administration over the Bureau of Reclamation's adoption of new biological opinions. The Trump Administration is prioritizing increasing the Central Valley Project water supplies for its users. The Administration is following a 2019 biological opinion created under the Endangered Species Act (ESA; 87 Stat. 884. 16 U.S.C. §§1531-1544). The lawsuit, filed in the U.S. District Court for the Northern District of California, asserts that the biological opinions issued by the National Marine Fisheries Services (NMFS) and the U.S. Fish and Wildlife Service (USFWS) under ESA lack safeguards for protected species and their habitat in the Sacramento and San Joaquin River watersheds, including the Bay-Delta, and are therefore unlawful.

85 FR 23940 Announcement of Preliminary Regulatory Determinations for Contaminants on the Fourth Drinking Water Contaminant Candidate List; Extension of Comment Period

On March 10, 2020, the EPA published in the Federal Register (85 FR 14098) a request for public comment for the "Announcement of Preliminary Regulatory Determinations for Contaminants on the Fourth Drinking Water Contaminant Candidate List." The proposed preliminary determinations and request for comment, as initially published in the Federal Register, provided for written comments to be submitted to the EPA on or before May 11, 2020 (a 60-day public comment period). Since publication, the EPA has received requests for additional time to submit comments. The EPA is extending the comment period for 30 days until June 10, 2020. The EPA will consider public comments in the development of final regulatory determinations for contaminants on the Fourth Drinking Water Contaminant Candidate List. The Preliminary Regulatory Determinations and supporting documents are available at <https://www.regulations.gov> (Docket ID No. EPA-HQ-OW-2019-0583). Comments may be submitted on or before June 10, 2020.



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85 FR 30953 Request for Comment on Whether EPA's Approval of a Clean Water Act Section 404 Program Is Non-Discretionary for Purposes of Endangered Species Act Section 7 Consultation

The Environmental Protection Agency (EPA) requests comment on whether the EPA should reconsider its current position that consultation under Endangered Species Act (ESA) section 7 is not required when the EPA approves a state or tribe's request to assume the Clean Water Act (CWA) section 404 dredged and fill permit program under the CWA. Comments in response to this document will be considered as the EPA reviews this position. If the EPA changes its current position, then the EPA would take the position that the Agency's decision as to whether to approve or disapprove a state's or tribe's request to assume the CWA section 404 permit program involves an exercise of discretion warranting consultation under ESA section 7. Section 7

consultation under the ESA would consequently apply to state and tribal requests to assume the CWA section 404 program and potentially subsequent program revisions, and the EPA would consult on its actions with the U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) (hereafter referred to as "the Services") under the ESA as appropriate. Comments may be submitted on or before July 6, 2020.

**LAS VIRGENES TRIUNFO - HIGH PRIORITY LEGISLATION IN THE 116TH CONGRESS
THROUGH MAY 22, 2020**

LEGISLATION	SUMMARY	STATUS	POSITION
<u>H.R. 34</u> <u>Energy and Water Research Integration Act of 2019</u>	<p>To ensure consideration of water intensity in the Department of Energy’s energy research, development, and demonstration programs to help guarantee efficient, reliable, and sustainable delivery of energy and clean water resources.</p>	<p>Introduced by Rep. Eddie Bernice Johnson (D-TX) – January 3, 2019</p> <p>Passed/agreed to in the House – July 23, 2019. Introduced in the Senate</p>	
<u>S. 47</u> <u>Natural Resources Management Act</u>	<p>This bill sets forth provisions regarding various programs, projects, activities, and studies for the management and conservation of natural resources on federal lands.</p> <ul style="list-style-type: none"> • Specifically, the bill addresses, among other matters • land conveyances, exchanges, acquisitions, withdrawals, and transfers; • national parks, monuments, memorials, wilderness areas, wild and scenic rivers, historic and heritage sites, and other conservation and recreation areas; • wildlife conservation; • helium extraction; • small miner waivers of claim maintenance fees; • wildland fire operations; • the release of certain federal reversionary land interests; • boundary adjustments; • the Denali National Park and Preserve natural gas pipeline; • fees for medical services in units of the National Park System; • funding for the Land and Water Conservation Fund; • recreational activities on federal or nonfederal lands; • a national volcano early warning and monitoring system; • federal reclamation projects; and • search-and recovery-missions. <p>In addition, the bill reauthorizes the National Cooperative Geologic Mapping Program.</p>	<p>Introduced by Sen. Lisa Murkowski (R-AK) – January 8, 2019</p> <p>Became Public Law No: 116-9 – March 12, 2019</p>	

LEGISLATION	SUMMARY	STATUS	POSITION
S. 40 Bureau of Reclamation Transparency Act	To require the Secretary of the Interior to submit to Congress a report on the efforts of the Bureau of Reclamation to manage its infrastructure assets.	Introduced by Sen. John Barrasso (R-WY) – January 8, 2019	
H.R. 357 Sacramento-San Joaquin Delta National Heritage Area Act	To establish the Sacramento-San Joaquin Delta National Heritage Area. The boundaries of the Heritage Area shall be in the counties of Contra Costa, Sacramento, San Joaquin, Solano, and Yolo in the State of California, as generally depicted on the map entitled “Sacramento-San Joaquin Delta National Heritage Area Proposed Boundary”, numbered T27/105,030, and dated October 2012.	Introduced by Rep. John Garamendi (D-CA) – January 9, 2019 Signed into law on March 12, 2019 as part of S. 47 – Natural Resources Management Act	
H.R. 535 PFAS Action Act of 2019	To require the Administrator of the Environmental Protection Agency to designate per- and polyfluoroalkyl substances as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980.	Introduced by Rep. Debbie Dingell (D-MI) – January 14, 2019 Received in the Senate – January 13, 2020	
H.R. 579 Water Rights Protection Act of 2019	To prohibit the conditioning of any permit, lease, or other use agreement on the transfer of any water right to the United States by the Secretaries of the Interior and Agriculture, and for other purposes.	Introduced by Rep. Scott Tipton (R-CO) – January 15, 2019	
H.R. 664 Recreational Lands Self-Defense Act of 2019	To protect the right of individuals to bear arms at water resources development projects administered by the Secretary of the Army, and for other purposes	Introduced by Rep. Bob Gibbs (D-OH) – January 17, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
<u>H.R. 667</u> <u>Regulatory Certainty for Navigable Waters Act</u>	To repeal the Waters of the United States rule and amend the Federal Water Pollution Control Act	Introduced by Rep. Jamie Herrera Beutler (R-WA) – January 17, 2019	
<u>H.R. 658</u> <u>National Infrastructure Development Bank Act of 2019</u>	To facilitate efficient investments and financing of infrastructure projects and new job creation through the establishment of a National Infrastructure Development Bank, and for other purposes. Highlighting environmental infrastructure projects which include drinking water, waste water treatment facility, and stormwater management system.	Introduced by Rep. Rosa DeLauro (D-CT) – January 17, 2019	
<u>H.R. 807</u> <u>Water and Agriculture Tax Reform Act of 2019</u>	To amend the Internal Revenue Code of 1986 to facilitate water leasing and water transfers to promote conservation and efficiency.	Introduced by Rep. Ken Buck (R-CO) – January 28, 2019	
<u>H.R. 843</u> <u>Reform EPA Act</u>	To amend the Federal Water Pollution Control Act to clarify when the Administrator of the Environmental Protection Agency has the authority to prohibit the specification of a defined area, or deny or restrict the use of a defined area for specification, as a disposal site under section 404 of such Act, and for other purposes.	Introduced by Rep. Bob Gibbs (R-OH) – January 29, 2019	
<u>H.R. 855</u> <u>STRONG Act</u>	To minimize the economic and social costs resulting from losses of life, property, well-being, business activity, and economic growth associated with extreme weather events by ensuring that the United States is more resilient to the impacts of extreme weather events in the short- and long-term, and for other purposes. Key sectors shall include water management, including supply and treatment; infrastructure, including natural and built forms of water and wastewater services;	Introduced by Rep. Scott Peters (D-CA) – January 29, 2019	
<u>S. 308</u> <u>Santa Ana River Wash Plan Land Exchange Act</u>	A bill to direct the Secretary of the Interior to convey certain Federal lands in San Bernardino County, California, to the San Bernardino Valley Water Conservation District, and to accept in return certain non-Federal lands, and for other purposes	Introduced by Sen. Dianne Feinstein (D-CA) – January 31, 2019	
<u>S. 361</u> <u>Water and Agriculture Tax Reform Act of 2019</u>	A bill to amend the Internal Revenue Code of 1986 to facilitate water leasing and water transfers to promote conservation and efficiency.	Introduced by Sen. Cory Gardner (R-CO) – February 6, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
<u>H.R. 1067</u> <u>Santa Ana River Wash Plan Land Exchange Act</u>	To direct the Secretary of the Interior to convey certain Federal lands in San Bernardino County, California, to the San Bernardino Valley Water Conservation District, and to accept in return certain non-Federal lands, and for other purposes.	Introduced by Rep. Pete Aguilar (D-CA) – February 7, 2019	
<u>S. 376</u> <u>Defense of Environment and Property Act of 2019</u>	A bill to amend the Federal Water Pollution Control Act to clarify the definition of navigable waters, and for other purposes.	Introduced by Sen. Rand Paul (R-KY) – February 7, 2019	
<u>H.R. 1137</u> <u>To amend the Water Resources Development Act of 1986 to repeal the authority relating to reprogramming during national emergencies.</u>	To amend the Water Resources Development Act of 1986 to repeal the authority relating to reprogramming during national emergencies.	Introduced by Rep. John Garamendi (D-CA) – February 11, 2019	
<u>H.R. 1162</u> <u>Water Recycling Investment and Improvement Act</u>	To extend the authorization of the Bureau of reclamation’s Title XVI competitive grants program, and increases the authorized funding levels from \$50 million to \$500 million. Further the legislation expands the geographic scope of the program by removing a requirement that projects be located in sustained drought or disaster areas, makes the program truly competitive by removing a requirement that Congress sign off on each selected project, and modernizes the individual program funding cap from \$20 million to \$30 million.	Introduced by Rep. Grace Napolitano (D-CA) – Introduced February 13, 2019 Ordered to be Reported (Amended) – March 11, 2020	<i>Support</i>
<u>H.R. 1334</u> <u>Outdoor Recreation Legacy Partnership Grant Program Acts</u>	To provide grants for projects to acquire land and water for parks and other outdoor recreation purposes and to develop new or renovate existing outdoor recreation facilities.	Introduced by Rep. Nanette Barragan (D-CA) – February 25, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
<u>H.R. 1331</u> <u>Local Water Protection Act</u>	<p>To amend Section 319(j) of the Federal Water Pollution Control Act (33 U.S.C. 1329 (j)) is amended by striking “subsections (h) and (i) not to exceed” and all that follows through “fiscal year 1991” and inserting “subsections (h) and (i) \$200,000,000 for each of fiscal years 2020 through 2024”.</p>	<p>Introduced by Rep. Annie Craig (D-MN) – February 26, 2019</p> <p>Passed/agreed to in House - April 8, 2019. Introduced in the Senate.</p>	
<u>H.R. 1429</u> <u>Drinking Water Infrastructure for Job Creation Act</u>	<p>Making supplemental appropriations, of \$7,500,000,000, for fiscal year 2019 for the Drinking Water State Revolving Funds, and for other purposes.</p>	<p>Introduced by Rep. Maxine Waters (D-CA) – February 28,2019</p>	
<u>S. 611</u> <u>Water Affordability, Transparency, Equity, and Reliability Act of 2019</u>	<p>To establish a trust fund, of \$34,850,000,000, to provide for adequate funding for water and sewer infrastructure, and for other purposes.</p>	<p>Introduced by Sen. Bernie Sanders (I-VT) – February 28, 2019</p>	
<u>H.R. 1417</u> <u>Water Affordability, Transparency, Equity, and Reliability Act of 2019</u>	<p>To establish a trust fund, of \$34,850,000,000, to provide for adequate funding for water and sewer infrastructure, and for other purposes.</p>	<p>Introduced by Rep. Brenda Lawrence (D-MI) – March 1, 2019</p>	
<u>H.R. 1497</u> <u>Water Quality Protection and Job Creation Act of 2019</u>	<p>To amend the Federal Water Pollution Control Act to reauthorize certain water pollution control programs, and for other purposes. The legislation would authorize \$120,000,000 for each of fiscal years 2020 through 2024.”</p>	<p>Introduced by Rep. Pete DeFazio (D-OR) – March 6, 2019</p> <p>Ordered to be Reported (Amended) by Voice Vote – October 29, 2019</p>	

LEGISLATION	SUMMARY	STATUS	POSITION
<u>H.R. 1621</u> <u>Water Supply Permitting Coordination Act</u>	To authorize the Secretary of the Interior to coordinate Federal and State permitting processes related to the construction of new surface water storage projects on lands under the jurisdiction of the Secretary of the Interior and the Secretary of Agriculture and to designate the Bureau of Reclamation as the lead agency for permit processing, and for other purposes.	Introduced by Rep. Tom McClintock (R-CA) – March 7, 2019	
<u>H.R. 1764</u> <u>To amend the Federal Water Pollution Control Act with respect to permitting terms, and for other purposes.</u>	To extend the NPDES permit period from 5 years to 10 years.	Introduced by Rep. John Garamendi (D-CA) – March 14, 2019	<i>Support (with condition of needing Napolitano's support on the bill as well)</i>
<u>H.R. 2030</u> <u>Colorado River Drought Contingency Plan Authorization Act</u>	This bill requires the Department of the Interior to carry out the Colorado River Drought Contingency Plan which was submitted to Congress on March 19, 2019, by Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming. Interior must execute the plan without delay and operate applicable Colorado River System reservoirs accordingly.	Introduced by Rep. Raul Grijalva (D-AZ) – April 2, 2019 Became Public Law No: 116-14 - April 16, 2019	
<u>S. 1057</u> <u>Colorado River Drought Contingency Plan Authorization Act</u>	This bill requires the Department of the Interior to carry out the Colorado River Drought Contingency Plan which was submitted to Congress on March 19, 2019, by Arizona, California, Colorado, Nevada, New Mexico, Utah, and Wyoming. Interior must execute the plan without delay and operate applicable Colorado River System reservoirs accordingly	Introduced by Sen. Martha McSally (R-AZ) – April 8, 2019 Passed the Senate on April 9, 2019. Introduced in the House	
<u>S. 1087</u> <u>Water Quality Certification Improvement Act of 2019</u>	To amend the Federal Water Pollution Control Act to make changes with respect to water quality certification, and for other purposes.	Introduced by Sen. John Barrasso (R-WY) – April 9, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R. 2215 San Gabriel Mountains Foothills and Rivers Protections Act	<p>The legislation would designate over 30,000 acres of protected wilderness and 45.5 miles of protected rivers and expand the San Gabriel Mountains National Monument, establish a National Recreation Area along the foothills and the San Gabriel Corridor. The bill would expand the borders of the monument to include the western Angeles National Forest</p>	<p>Introduced by Rep. Judy Chu (D-CA) – April 10, 2019</p> <p>Placed on the Union Calendar – February 4, 2020</p>	
S. 1109 San Gabriel Mountains Foothills and Rivers Protection Act	<p>To establish as a unit of the National Park System the San Gabriel National Recreation Area in the State of California, and for other purposes.</p>	<p>Introduced by Sen. Kamala Harris (D-CA) – April 10, 2019</p>	
H.R. 2205 Water Quality Certification Improvement Act of 2019	<p>To amend the Federal Water Pollution Control Act to make changes with respect to water quality certification, and for other purposes.</p>	<p>Introduced by Rep. David McKinley (R-WV) – April 11, 2019</p>	
H.R. 2287 Federal Regulatory Certainty for Water Act	<p>This bill nullifies the Clean Water Rule that was issued on May 27, 2015, by the Environmental Protection Agency and the U.S. Army Corps of Engineers. The rule describes the scope of the Clean Water Act.</p> <p>Under this bill, the Clean Water Act applies to waters of the United States that are (1) navigable-in-fact; or (2) permanent or continuously flowing bodies of water that form geographical features commonly known as streams, oceans, rivers, and lakes that are connected to waters that are navigable-in-fact.</p> <p>Under this bill, the Act does not apply to (1) waters that do not physically abut those waters of the United States through an actual and continuous surface water connection; (2) man-made or natural structures or channels through which water flows intermittently or ephemerally; or (3) wetlands (including playa lakes, prairie potholes, wet meadows, wet prairies, and vernal pools) that lack that continuous surface water connection.</p> <p>The aggregation of wetlands or waters may not be used to determine whether the wetlands or waters are navigable waters.</p>	<p>Introduced by Rep. Mac Thornberry (R-TX) – April 11, 2019</p>	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R. 2313 Water Conservation Rebate Tax Parity Act	<p>To amend the Internal Revenue Code of 1986 to expand the exclusion for certain conservation subsidies to include subsidies for water conservation or efficiency measures and storm water management measures.</p>	<p>Introduced by Rep. Jared Huffman (D-CA) – April 12, 2019</p>	
H. Res. 324 Recognizing the importance of the United States-Israel economic relationship and encouraging new areas of cooperation	<p>(1) affirms that the United States-Israel economic partnership has achieved great tangible and intangible benefits to both countries and is a foundational component of the strong alliance;</p> <p>(2) recognizes that science and technology innovation present promising new frontiers for United States-Israel economic cooperation, particularly in light of widespread drought, cybersecurity attacks, and other major challenges impacting the United States;</p> <p>(3) encourages the President to regularize and expand existing forums of economic dialogue with Israel and foster both public and private sector participation; and</p> <p>(4) expresses support for the President to explore new agreements with Israel, including in the fields of energy, water, agriculture, medicine, neurotechnology, and cybersecurity.</p>	<p>Introduced by Rep. Ted Lieu (D-CA) – April 18, 2019</p>	
H.R. 2377 Protect Drinking Water from PFAS Act of 2019	<p>To amend the Safe Drinking Water Act to require the Administrator of the Environmental Protection Agency to publish a maximum contaminant level goal and promulgate a national primary drinking water regulation for total per- and polyfluoroalkyl substances, and for other purposes.</p>	<p>Introduced by Rep. Brendan Boyle (D-PA) – April 29, 2019</p> <p>Forwarded by Subcommittee to Full Committee on Energy and Commerce by Voice Vote – September 26, 2019</p>	
S. 1251 Safe Drinking Water Assistance Act of 2019	<p>A bill to improve and coordinate interagency Federal actions and provide assistance to States for responding to public health challenges posed by emerging contaminants, and for other purposes.</p>	<p>Introduced by Sen. Jeanne Shaheen (D-NH) – April 30, 2019</p>	

LEGISLATION	SUMMARY	STATUS	POSITION
S. 1245 All-of-the-Above Federal Building Energy Conservation Act of 2019	A bill to improve energy performance in Federal buildings, including water usage.	Introduced by Sen. John Hoeven (R-ND) – April 30, 2019 Placed on Senate Legislative Calendar - September 25, 2019	
H.R. 2462 Flood Mapping Modernization and Homeowner Empowerment Pilot Program Act of 2019	To establish a pilot program to enhance the mapping of urban flooding and associated property damage and the availability of such mapped data to homeowners, businesses, and localities to help understand and mitigate the risk of such flooding, and for other purposes.	Introduced by Rep. Mike Quigley (D-IL) – May 2, 2019	
S. 1276 Flood Mapping Modernization and Homeowner Empowerment Pilot Program Act of 2019	To establish a pilot program to enhance the mapping of urban flooding and associated property damage and the availability of such mapped data to homeowners, businesses, and localities to help understand and mitigate the risk of such flooding, and for other purposes.	Introduced by Sen. Dick Durbin (D-IL) – May 2, 2019	
H.R. 2458 Water Infrastructure Sustainability and Efficiency Act	To amend the Federal Water Pollution Control Act to require a certain percentage of funds appropriated for revolving fund capitalization grants be used for green projects, and for other purposes.	Introduced by Rep. Debbie Mucarsel-Powell (D-FL) – May 2, 2019	
H.R. 2473 Securing Access for the central Valley and Enhancing (SAVE) Water Resources Act	To promote water supply reliability and improved water management for rural communities, the State of California, and the Nation, and for other purposes.	Introduced by Rep. Josh Harder (D-CA) – May 2, 2019 Order to be Reported (Amended) – March 11, 2020	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R. 2470 Clean Water Infrastructure Resilience and Sustainability Act	To direct the Administrator of the Environmental Protection Agency to establish a program to make grants to eligible entities to increase the resilience of publicly owned treatment works to natural disasters.	Introduced by Rep. Salud Carbajal (D-CA) – May 3, 2019	
S. 1372 PFAS Accountability Act of 2019	To encourage Federal agencies to expeditiously enter into or amend cooperative agreements with States for removal and remedial actions to address PFAS contamination in drinking, surface, and ground water and land surface and subsurface strata, and for other purposes.	Introduced by Sen. Debbie Stabenow (D-MI) – May 8, 2019	
H.R. 2570 PFAS User Fee Act of 2019	To ensure that polluters pay ongoing water treatment costs associated with contamination from perfluoroalkyl and polyfluoroalkyl substances, and for other purposes.	Introduced Rep. Harley Rouda (D-CA) – May 9, 2019 Forwarded by Subcommittee to Full Committee on Energy and Commerce by voice vote – September 26, 2019.	<i>Watching</i>
H.R. 2665 Smart Energy and Water Efficiency Act of 2019	To direct the Secretary of Energy to establish a smart energy and water efficiency program, and for other purposes.	Introduced Rep. Jerry McNerney (D-CA) – May 13, 2019 Ordered to be Reported (Amended) by Voice Vote – July 17, 2019	
H.R. 2705 Water Infrastructure Trust Fund Act of 2019	To establish a Water Infrastructure Trust Fund through the Treasury Department - 50% of the fund shall be available to the EPA for capitalization grants under §601 of the Federal Water Pollution Control Act and 50% of the fund shall be available to the EPA for capitalization grants under §1452 under the Safe Drinking Water Act.	Introduced by Rep. Earl Blumenauer (D-OR) – May 14, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
S. 1473 Protect Drinking Water from PFAS Act of 2019	To amend the Safe Drinking Water Act to require the Administrator of the Environmental Protection Agency to set maximum contaminant levels for certain chemicals, and for other purposes.	Introduced by Sen. Kirsten Gillibrand (D-NY) – May 15, 2019	
H.R. 2800 PFAS Monitoring Act of 2019	To amend the Safe Drinking Water Act to require continued and expanded monitoring of perfluoroalkyl and polyfluoroalkyl substances in drinking water, and for other purposes.	Introduced by Rep. Elissa Slotkin (D-MI) – May 16, 2019	
S. 1507 PFAS Release Disclosure Act	To include certain perfluoroalkyl and polyfluoroalkyl substances in the toxics release inventory, and for other purposes.	Introduced by Sen. Shelley Moore Capito (R-WV) – May 16, 2019 Passed the Senate Committee on Environment and Public Works and placed on the Senate Calendar for a full vote – June 19, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R. 2776 Stop Sewage Overflow Act	<p>To make certain municipalities eligible for grants under the Federal Water Pollution Control Act. Grant cost shares would be applicable as follows:</p> <ul style="list-style-type: none"> • Not less than 55 percent for municipalities the affected residents of which pay, on average, 2.0 percent or less of their household income for sewer service. • Not less than 60 percent for municipalities the affected residents of which pay, on average, more than 2.0 percent, but not more than 2.5 percent, of their household income for sewer service. • Not less than 65 percent for municipalities the affected residents of which pay, on average, more than 2.5 percent, but not more than 3.0 percent, of their household income for sewer service. • Not less than 70 percent for municipalities the affected residents of which pay, on average, more than 3.0 percent, but not more than 3.5 percent, of their household income for sewer service. • Not less than 75 percent for municipalities the affected residents of which pay, on average, more than 3.5 percent of their household income for sewer service. • 	<p>Introduced by Rep. Lori Traham (D-MA) – May 16, 2019</p>	
H.R. 2871 Aquifer Recharge Flexibility Act	<p>To provide flexibility to allow greater aquifer recharge. Eligible land, with respect to a Reclamation project, means land that is authorized to receive water under State law and shares a groundwater source with land located in the service area of the Reclamation project.</p>	<p>Introduced by Rep. Russ Fulcher (R-ID) – May 21, 2019</p>	
S. 1604 Local Water Protection Act	<p>To amend the Federal Water Pollution Control Act to reauthorize certain programs relating to nonpoint source management – specifically authorization appropriations of \$7,500,000 per year for FY2020 through FY2024.</p>	<p>Introduced by Sen. Amy Klobuchar (D-MN) - May 22, 2019</p>	

LEGISLATION	SUMMARY	STATUS	POSITION
<p>S. 1689 A bill to permit States to transfer certain funds from the clean water revolving fund of a State to the drinking water revolving fund of the State in certain circumstances, and for other purposes.</p>	<p>To permit States to transfer certain funds from the clean water revolving fund of a State to the drinking water revolving fund of the State in certain circumstances, and for other purposes.</p>	<p>Introduced by Sen. Cory Booker (D-NJ) – May 23, 2019</p> <p>Became Public Law No: 116-63 – October 4, 2019</p>	<p><i>Watching</i></p>
<p>S. Res. 213 A resolution designating the week of May 19 through May 25, 2019 as “National Public Works Week.”</p>	<p>This resolution designates the week of May 19-May 25, 2019, as National Public Works Week.</p>	<p>Introduced by Sen. Jim Inhofe (R-OK) – May 23, 2019</p> <p>Passed the Senate – May 23, 2019</p>	
<p>S. 1811 A bill to make technical corrections to the America’s Water Infrastructure Act of 2018</p>	<p>To make technical corrections to the America’s Water Infrastructure Act of 2018. Corrections include:</p> <ul style="list-style-type: none"> • Extending the Non-Federal Implementation Pilot Program from five to ten years; and • Amending the local government reservoir permit review to remove the limitation of those only owned and operated by the Secretary. 	<p>Introduced by Sen. John Barrasso (R-WY)</p> <p>Passed the Senate – July 10, 2019</p>	
<p>S. 1857 Federal Energy and Water Management Performance Act of 2019</p>	<p>To amend the National Energy Conservation Policy Act to improve Federal energy and water performance requirements for Federal buildings and establish a Federal Energy Management Program. The program is to exist from 2020-2030. One area addressed is to improve water use efficiency and management, including stormwater management, at facilities of the agency by reducing agency potable water consumption intensity (as measure in galls per gross square food) by 54% by FY2030, relative to the water consumption of the agency in FY2007 and through reductions of 2% each fiscal year.</p>	<p>Introduced by Sen. Lisa Murkowski (R-AK) – June 13, 2019</p> <p>Placed on Senate Legislative Calendar – September 25, 2019</p>	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R. 3254 PIPE Act	<p>To require the Administrator of the Environmental Protection Agency to establish a discretionary grant program for drinking water and wastewater infrastructure projects, and for other purposes. Priority of the grant program would be to help bring public water systems into compliance with the Safe Drinking Water Act or for publicly owned treatment works into compliance with the Federal Water Pollution Control Act. The federal cost share of projects under this program will not exceed 100%. The grants program is to be authorized for \$500,000,000 a year for fiscal years 2020 through 2029.</p>	<p>Introduced by Rep. Antonio Delgado (D-NY)</p>	
S. 1932 Drought Resiliency and Water Supply Infrastructure Act	<p>To support water infrastructure in Reclamation states and for other purposes. The bill includes a 5-year, \$100 million reauthorization of the Bureau of Reclamation’s Title XVI Water Reclamation and Reuse competitive grant program, originally authorized in the 2016 Water Infrastructure Improvements for the Nation (WIIN) Act (Title XVI-WIIN). In addition to the key Title XVI-WIIN Competitive Grant Program, the legislation includes \$60 million for desalination, additional funding for surface and groundwater storage, and a new low-interest loan program for the financing of a range of water infrastructure projects.</p>	<p>Introduced by Sen. Cory Gardner (RCO) – June 20, 2019</p> <p>Subcommittee on Water and Power hearing – July 18, 2019</p>	
H.R. 3423 National Green Bank Act of 2019	<p>To amend title 31, United States Code, to provide for the issuance of Green Bonds and to establish the United States Green Bank, and for other purposes.</p>	<p>Introduced by Rep. Jim Himes (D-CT) – June 21, 2019</p>	
H.R. 3521 Wastewater Infrastructure Workforce Investment Act	<p>To amend the Federal Water Pollution Control Act with respect to wastewater infrastructure workforce development, and for other purposes. Amends the language from manpower to workforce. Gives the states the ability to reserve up to 1% of the sums allotted to the state under this section for the fiscal year to carry out workforce development, training, and retraining.</p>	<p>Introduced Rep. Greg Stanton (D-AZ) – June 26, 2019</p>	
H.R. 3510 Water Resources Research Amendments Act	<p>To amend the Water Resources Research Act of 1984 to reauthorize grants for and require applied water supply research regarding the water resources research and technology institutes established under that Act.</p>	<p>Introduced by Rep. Josh Harder (D-CA) – June 26, 2019</p> <p>Subcommittee on Water, Oceans, and Wildlife hearing – July 25, 2019</p>	

LEGISLATION	SUMMARY	STATUS	POSITION
S. 2044 Water Supply Infrastructure Rehabilitation and Utilization Act	To amend the Omnibus Public Land Management Act of 2009 to establish an Aging Infrastructure Account, to amend the Reclamation Safety of Dams Act of 1978 to provide additional funds under that Act, to establish a review of flood control rule curves pilot project within the Bureau of Reclamation, and for other purposes.	Introduced by Sen. Martha McSally (R-AZ) – June 27, 2019 Placed on Senate Legislative Calendar – October 29, 2019	
S. 2013 A bill to protect the right of individuals to bear arms at water resources development projects	To protect the right of individuals to bear arms at water resources development projects.	Introduced by Sen. Mike Crapo (R-ID) – June 27, 2019	<i>Watching</i>
H.R. 3616 Clean Water Standards for PFAS Act of 2019	To require the Administrator of the Environmental Protection Agency to designate per- and polyfluoroalkyl substances as toxic pollutants under the Federal Water Pollution Control Act, and for other purposes.	Introduced by Rep. Chris Pappas (D-NH) – July 2, 2019	
S. 2056 Build America, Buy America Act	To ensure that certain Federal infrastructure programs require the use of materials produced in the United States, and for other purposes.	Introduced by Sen. Sherrod Brown (D-OH) – July 8, 2019	
H.R. 3723 Desalination Development Act	To promote desalination project development and drought resilience, and for other purposes.	Introduced by Rep. Mike Levin (D-CA) – July 11, 2019 Ordered to be Reported (Amended) – March 11, 2020	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R. 3779 Resilience Revolving Loan Fund Act of 2019	<p>To amend the Robert T. Stafford Disaster Relief and Emergency Assistance Act to allow the Administrator of the Federal Emergency Management Agency to provide capitalization grants to eligible entities to establish revolving funds to provide assistance to reduce disaster risks, and for other purposes.</p>	<p>Introduced by Rep. Angie Craig (D-MN) – July 16, 2019</p> <p>Ordered to be Reported (Amended) by Voice Vote – September 19, 2019</p>	
H.R. 3844 Farmer Fairness Act	<p>To amend the Federal Water Pollution Control Act to require all persons exercising substantial operational control over a concentrated animal feeding operation to jointly obtain a permit for certain discharges, and for other purposes.</p>	<p>Introduced by Rep. Ro Khanna (D-CA) – July 18, 2019</p>	
S. 2187 National Flood Insurance Program Reauthorization and Reform Act of 2019	<p>To reauthorize the National Flood Insurance Program, and for other purposes.</p>	<p>Introduced by Sen. Robert Menendez (D-NJ) – July 18, 2019</p>	
S. 2164 Water Resources Research Amendments Act	<p>To amend the Water Resources Research Act of 1984 to reauthorize grants for and require applied water supply research regarding the water resources research and technology institutes established under that Act.</p>	<p>Introduced by Sen. Ben Cardin (D-MD) – July 18, 2019</p>	
S. 2239 A bill to codify an Executive order preparing the United States for the impacts of climate change, and for other purposes	<p>To codify an Executive order preparing the United States for the impacts of climate change, and for other purposes.</p>	<p>Introduced by Sen. Amy Klobuchar (D-MN) – July 23, 2019</p>	

LEGISLATION	SUMMARY	STATUS	POSITION
<u>H.R. 3944</u> <u>To amend the Water Resources Reform and Development Act of 2014 to modify the procedure for communicating certain emergency risks, and for other purposes.</u>	To amend the Water Resources Reform and Development Act of 2014 to modify the procedure for communicating certain emergency risks, and for other purposes.	Introduced by Rep. Kevin Hern (R-OK) – July 24, 2019	
<u>H.R. 3949</u> <u>Safe Drinking Water in Playgrounds and Parks Act</u>	To amend the Safe Drinking Water Act to provide for drinking water fountain replacement in playgrounds and parks, and for other purposes.	Introduced by Rep. Grace Meng (D-NY) – July 24, 2019	
<u>H.R. 4050</u> <u>ZERO WASTE Act</u>	To direct the Administrator of the Environmental Protection Agency to award grants for projects that are consistent with zero-waste practices, and for other purposes.	Introduced by Rep. Ilhan Omar (D-MN) – July 25, 2019	
<u>H.R. 4033</u> <u>Water Justice Act</u>	To provide supplemental appropriations for safe and secure water, and for other purposes.	Introduced by Rep. Daniel Kildee (D-MI) – July 25, 2019	
<u>H.R. 4006</u> <u>CLEANER Act of 2019</u>	To require regulation of wastes associated with the exploration, development, or production of crude oil, natural gas, or geothermal energy under the Solid Waste Disposal Act, and for other purposes.	Introduced by Rep. Matt Cartwright (D-PA) – July 26, 2019	
<u>H.R. 4007</u> <u>Focused Reduction of Effluence and Stormwater runoff through Hydrofracking Environmental Regulation Act of 2019</u>	To amend the Federal Water Pollution Control Act and direct the Secretary of the Interior to conduct a study with respect to stormwater runoff from oil and gas operations, and for other purposes.	Introduced by Rep. Matt Cartwright (D-PA) – July 26, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
S. 2325 Super Pollutants Act	To establish a task force to review policies and measures to promote, and to develop best practices for, reduction of short-lived climate pollutants, and for other purposes.	Introduced by Sen. Murphy (D-CT) – July 30, 2019 Placed on Senate Legislative Calendar – November 7, 2019	
S. 2356 Define WOTUS Act of 2019	To provide a definition of navigable waters, and for other purposes.	Introduced by Mike Braun (R-IN) – July 31, 2019	
S. 2353 Protecting Firefighters from Adverse Substances Act of 2019	To direct the Administrator of the Federal Emergency Management Agency to develop guidance for firefighters and other emergency response personnel on best practices to protect them from exposure to PFAS and to limit and prevent the release of PFAS into the environment, and for other purposes.	Introduced by Sen. Gary Peters (D-MI) – July 31, 2019 Placed on Senate Legislative Calendar – February 3, 2020	
S. 2410 Flood Reduction, Wildlife Habitat, and Water Quality Improvement Act of 2019	To amend the Federal Water Pollution Control Act to modify the requirements for permits for dredged or fill material, and for other purposes.	Introduced by Sen. Cindy Hyde-Smith (R-MS) – July 31, 2019	
S. 2404 Build Local, Hire Local Act	To establish an expansive infrastructure program to create local jobs and raise the quality of life in every community, to launch middle class career pathways in infrastructure, and to invest in high-quality American jobs, and for other purposes.	Introduced by Sen. Kirsten Gillibrand (D-NY) – July 31, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R. 4143 Super Pollutants Act of 2019	To establish a task force to review policies and measures to promote, and to develop best practices for, reduction of short-lived climate pollutants, and for other purposes.	Introduced by Rep. Scott Peters (D-CA) – August 2, 2019	
H.R. 4149 REGION Act	To prohibit the closure, consolidation, or elimination of offices of the Environmental Protection Agency.	Introduced by Rep. Debbie Dingell (D-MI) – August 2, 2019	
H.R. 4205 FLARE Act	To require the Secretary of Agriculture to reimburse sponsors for certain costs of emergency water protection measures, and for other purposes.	Introduced by Rep. John Curtis (R-UT) – August 23, 2019	
H.R. 4266 Clean Water Through Green Infrastructure Act	To establish centers of excellence for innovative stormwater control infrastructure, and for other purposes.	Introduced by Rep. Denny Heck (D-WA) – September 10, 2019	
S. 2456 Clean Water Through Green Infrastructure Act	To establish centers of excellence for innovative stormwater control infrastructure, and for other purposes.	Introduced by Sen. Tom Udall (R-NM) – September 10, 2019	
S. 2466 Water Justice Act	To provide supplemental appropriations for safe and secure water, and for other purposes.	Introduced by Sen. Kamala Harris (D-CA) – September 11, 2019	
S. 2470 Energy and Water Development and Related Agencies Appropriations Act, 2020	Making appropriations for energy and water development and related agencies for the fiscal year ending September 30, 2020, and for other purposes.	Introduced by Sen. Lamar Alexander (R-TN) – September 12, 2019 Placed on Senate Legislative Calendar – September 12, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
<u>H.R. 4321</u> <u>GET THE LEAD OUT Act of 2019</u>	<p>To eliminate lead-based pipe and tap hazards in housing, and for other purposes.</p>	<p>Introduced by Rep. Tim Ryan (D-OH) – September 12, 2019</p>	
<u>H.R. 4341</u> <u>Critically Endangered Animals Conservation Act of 2019</u>	<p>To assist in the conservation of critically endangered species in foreign countries, and for other purposes.</p>	<p>Introduced by Rep. Jarred Huffman (D-CA) – September 12, 2019</p> <p>Subcommittee on Water, Oceans, and Wildlife hearing - September 24, 2019</p>	
<u>H.R. 4347</u> <u>PREPARE Act of 2019</u>	<p>To enhance the Federal Government’s planning and preparation for extreme weather and the Federal Government’s dissemination of best practices to respond to extreme weather, thereby increasing resilience, improving regional coordination, and mitigating the financial risk to the Federal Government from such extreme weather, and for other purposes.</p>	<p>Introduced by Rep. Matt Cartwright (D-PA) – September 17, 2019</p> <p>Ordered to be Reported by voice vote – September 19, 2019</p>	
<u>S. 2491</u> <u>Protect America's Wildlife and Fish in Need of Conservation Act of 2019</u>	<p>To terminate certain rules issued by the Secretary of the Interior and the Secretary of Commerce relating to endangered and threatened species, and for other purposes.</p>	<p>Introduced by Sen. Tom Udall (D-NM) – September 17, 2019</p>	

LEGISLATION	SUMMARY	STATUS	POSITION
S. 2522 Agriculture, Rural Development, Food and Drug Administration, and Related Agencies Appropriations Act, 2020	Making appropriations for Agriculture, Rural Development, Food and Drug Administration, and Related Agencies for the fiscal year ending September 30, 2020, and for other purposes.	Introduced by Rep. John Hoeven (R-ND) – September 19, 2019 Placed on Senate Legislative Calendar – September 19, 2019	
H.R. 4348 PAW and FIN Conservation Act of 2019	To terminate certain rules issued by the Secretary of the Interior and the Secretary of Commerce relating to endangered and threatened species, and for other purposes.	Introduced by Rep. Raul Grijalva (D-AZ) – September 24, 2019 Natural Resources Subcommittee on Water, Oceans, and Wildlife – September 24, 2019	
S.Res. 324 A resolution designating September 29, 2019, as "National Urban Wildlife Refuge Day"	Designating September 29, 2019, as “National Urban Wildlife Refuge Day”.	Introduced by Sen. Cory Gardner (R-CO) – September 24, 2019 Resolution agreed to in Senate without amendment and with a preamble by Unanimous Consent – October 16, 2019	
H.R. 4483 Localizing Authority of Management Plans Act of 2019	To amend the Endangered Species Act of 1973 to increase State and local involvement in management plans.	Introduced by Rep. Don Young (R-AK) – September 24, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
S. 2580 Department of the Interior, Environment, and Related Agencies Appropriations Act, 2020	Making appropriations for the Department of the Interior, environment, and related agencies for the fiscal year ending September 30, 2020, and for other purposes.	Introduced by Sen. Lisa Murkowski (R-AK) – September 26, 2019 Placed on Senate Legislative Calendar – September 26, 2019	
H.R. 4512 Outdoors for All Act	To provide grants for projects to acquire land and water for parks and other outdoor recreation purposes and to develop new or renovate existing outdoor recreation facilities.	Introduced by Rep. Nanette Diaz Barragan (D-CA) – September 26, 2019 Subcommittee on Natural Parks, Forests, and Public Lands hearing – February 27, 2020	
H.R. 4416 Lead-Free Future Act of 2019	To authorize the Secretary of Housing and Urban Development to award grants to eligible entities to evaluate and reduce lead-based paint hazards, lead in drinking water hazards, and lead in soil hazards in pre-1978 residential real properties.	Introduced by Rep. Jared Golden (D-ME) – October 2, 2019	
H.R. 4659 Water Supply Infrastructure Rehabilitation and Utilization Act	To amend the Omnibus Public Land Management Act of 2009 to establish an Aging Infrastructure Account, to amend the Reclamation Safety of Dams Act of 1978 to provide additional funds under that Act, to establish a review of flood control rule curves pilot project within the Bureau of Reclamation, and for other purposes.	Introduced by Rep. Newhouse (R-WA) – October 11, 2019	
S. 2596 Voluntary Water Partnership for Distressed Communities Act of 2019	To amend the Safe Drinking Water Act to authorize certain community water systems to enter into partnerships to improve the water systems, and for other purposes.	Introduced by Sen. Tammy Duckworth (D-IL) – October 15, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
<u>H.Res. 628</u> <u>Expressing support for the designation of the week beginning on October 13, 2019, as National Wildlife Refuge Week</u>	Expressing support for the designation of the week beginning on October 13, 2019, as National Wildlife Refuge Week.	Introduced by Rep. Mike Thompson (D-CA) – October 15, 2019	
<u>S.Res. 362</u> <u>A resolution designating the week beginning on October 13, 2019, as "National Wildlife Refuge Week"</u>	Designating the week beginning on October 13, 2019, as “National Wildlife Refuge Week”.	Introduced by Sen. Chris Coons (D-DE) – October 17, 2019 Resolution agreed to in Senate without amendment and with a preamble by Unanimous Consent – October 24, 2019	
<u>S. 2636</u> <u>Clean Water Infrastructure Resilience and Sustainability Act</u>	To amend the Federal Water Pollution Control Act to establish a program to make grants to eligible entities to increase the resilience of publicly owned treatment works to natural hazards, and for other purposes.	Introduced by Sen. Benjamin Cardin (D-MD) – October 17, 2019	
<u>H.R. 4723</u> <u>Fish Act of 2019</u>	To require the identification of salmon conservation areas, and for other purposes.	Introduced by Rep. Jared Huffman (D-CA) – October 17, 2019 Subcommittee on Water, Oceans, and Wildlife hearing – January 14, 2020	

LEGISLATION	SUMMARY	STATUS	POSITION
<p>H.R. 4732 To establish a Global Climate Change Resilience Strategy, to authorize the admission of climate-displaced persons, and for other purposes</p>	<p>To establish a Global Climate Change Resilience Strategy, to authorize the admission of climate-displaced persons, and for other purposes.</p>	<p>Introduced by Rep. Nydia Velasquez (D-NY) – October 17, 2019</p>	
<p>S.Res. 372 A resolution expressing the sense of the Senate that the Federal Government should establish a national goal of conserving at least 30 percent of the land and ocean of the United States by 2030</p>	<p>Expressing the sense of the Senate that the Federal Government should establish a national goal of conserving at least 30 percent of the land and ocean of the United States by 2030.</p>	<p>Introduced by Sen. Tom Udall (D-NM) – October 22, 2019</p>	
<p>H.R. 4780 National Infrastructure Investment Corporation Act of 2019</p>	<p>To establish a Government corporation to provide loans and loan guarantees for infrastructure projects, and for other purposes.</p>	<p>Introduced by Rep. Salud Carbajal (D-CA) – October 22, 2019</p>	
<p>S. 2674 Assuring Quality Water Infrastructure Act</p>	<p>To amend the Safe Drinking Water Act to establish a grant program for improving infrastructure asset management by small public water systems, and for other purposes.</p>	<p>Introduced by Sen. Shelley Capito (R-WV) – October 23, 2019</p>	

LEGISLATION	SUMMARY	STATUS	POSITION
S. 2687 Low-Income Water Customer Assistance Programs Act of 2019	To amend the Safe Drinking Water Act and the Federal Water Pollution Control Act to establish pilot programs to assist low-income households in maintaining access to sanitation services and drinking water, and for other purposes.	Introduced by Sen. Benjamin Cardin (D-MD) – October 23, 2019	
H.R. 4832 Low-Income Water Customer Assistance Programs Act of 2019	To amend the Safe Drinking Water Act and the Federal Water Pollution Control Act to establish pilot programs to assist low-income households in maintaining access to sanitation services and drinking water, and for other purposes.	Introduced by Rep. Marcia Judge (D-OH) – October 23, 2019	
H.R. 4891 Western Water Security Act of 2019	To provide for the conduct of certain water security measures in the Western United States, and for other purposes.	Introduced by Rep. Xochitl Torres Small (D-NM) – October 28, 2019 Ordered to be Reported (Amended) – March 11, 2020	
S. 2767 A bill to amend the Federal Water Pollution Control Act to establish a pilot competitive grant program for improving the sharing of water quality data, and for other purposes	To amend the Federal Water Pollution Control Act to establish a pilot competitive grant program for improving the sharing of water quality data, and for other purposes.	Introduced by Sen. Doug Jones (D-AL) – October 31, 2019	
S. 2783 Responsibly Enhancing America's Landscapes Act	To amend title 54, United States Code, to establish, fund, and provide for the use of amounts in a National Park Service Legacy Restoration Fund to address the maintenance backlog of the National Park Service, and for other purposes.	Introduced by Sen. Michael Enzi (R-WY) – November 5, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
S. 2799 Nexus of Energy and Water for Sustainability Act of 2019	To require the Secretary of Energy and the Secretary of the Interior to establish a joint Nexus of Energy and Water Sustainability Office, and for other purposes.	Introduced by Sen. Lisa Murkowski (R-AK) –November 6, 2019 Sen. Murkowski from Committee on Energy and Natural Resources filed written report – January 7, 2020	
S. 2792 Penny Plan to Enhance Infrastructure Act of 2019	To amend the Balanced Budget and Emergency Deficit Control Act of 1985 to establish a discretionary spending limit for infrastructure spending.	Introduced by Sen. Rand Paul (R-KY) – November 6, 2019	
S. 2862 Drought Relief through Innovative Projects Act of 2019	To direct the Secretary of Agriculture to establish a grant program to remove nonnative plant species that contribute to drought conditions, and for other purposes.	Introduced by Sen. Krysten Sinema (D-AZ)-November 14, 2019	
H.R. 5095 Endangered Species Accountability Reform Act	To require the Secretary of the Interior to delist certain endangered species and threatened species.	Introduced by Rep.Rep. Blaine Luetkemeyer (R-MO) – November 14, 2019	
H.R. 5120 SAFER Pipelines Act of 2019	To amend title 49, United States Code, to provide enhanced safety and environmental protection in pipeline transportation, and for other purposes.	Introduced by Rep. Peter DeFazio (D-OR) – November 20, 2019 Ordered to be Reported (Amended) – November 20, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
<u>H.R. 5176</u> <u>Climate Resiliency Service Corps Act of 2019</u>	To amend the National and Community Service Act of 1990 to establish a climate resiliency service corps to help communities withstand and respond to changes in the Earth’s climate with respect to natural disasters, and for other purposes.	Introduced by Rep. Judy Chu (D-CA) – November 19, 2019	
<u>H.R. 5193</u> <u>Buy America for Drinking Water Extension Act of 2019</u>	To amend the Safe Drinking Water Act to extend and expand the provision requiring the use of iron and steel products that are produced in the United States in projects funded through a State drinking water treatment revolving loan fund.	Introduced by Rep. Cheri Bustos (D-IL) – November 20, 2019	
<u>H.R. 5217</u> <u>WOW Act</u>	To provide for western water security, reliability, modernization, and abundance, and for other purposes.	Introduced by Rep. Tom McClintock (R-CA) – November 21, 2019	
<u>H.R. 5288</u> <u>Upper Mississippi River Flood Control Act</u>	To amend the Water Resources Development Act of 1999 to direct the Secretary of the Army to develop a plan to address water resource problems in the Upper Mississippi River Basin, and for other purposes.	Introduced by Rep. Blaine Luetkemeyer (R-MO) – December 3, 2019	
<u>S. 2978</u> <u>Energy and Water Research Integration Act of 2019</u>	To ensure consideration of water intensity in the Department of Energy’s energy research, development, and demonstration programs to help guarantee efficient, reliable, and sustainable delivery of energy and clean water resources.	Introduced by Sen. Catherine Cortez Masto (D-NV) – December 4, 2019	
<u>S. 2980</u> <u>Clean Water Standards for PFAS Act of 2019</u>	To require the promulgation of certain standards for perfluoroalkyl and polyfluoroalkyl substances under the Federal Water Pollution Control Act, and for other purposes.	Introduced by Sen. Kirsten Gillibrand (D-NY) – December 4, 2019	
<u>H.R. 5302</u> <u>Western Water Recycling and Drought Relief Act</u>	To amend the Reclamation Wastewater and Groundwater Study and Facilities Act to authorize certain recycled water projects, and for other purposes.	Introduced by Rep. Jerry McNerney (D-CA) – December 4, 2019	
<u>H.R. 5303</u> <u>California Central Coast Conservation Act</u>	To establish a moratorium on oil and gas leasing on public land on the Central Coast of California.	Introduced by Rep. Jimmy Panetta (D-CA) – December 4, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R. 5316 Move Water Now Act	To provide for the restoration of the original carrying capacity of canals impacted by land subsidence, and for other purposes.	Introduced by Rep. TJ Cox (D-CA) – December 5, 2019 Ordered to be Reported – February 12, 2020	
H.R. 5347 Disadvantaged Community Drinking Water Assistance Act	To require the Secretary of the Interior to establish a grant program to close gaps in access to safe drinking water in disadvantaged communities, and for other purposes.	Introduced by Rep. TJ Cox (D-CA) – December 6, 2019 Ordered to be Reported (Amended) – February 12, 2020	
H.R. 5361 Safe Drinking Water Assistance Act of 2019	To improve and coordinate interagency Federal actions and provide assistance to States for responding to public health challenges posed by emerging contaminants, and for other purposes.	Introduced by Rep. Lisa Blunt Rochester (D-DE) – December 9, 2019	
S. 3044 Western Tribal Water Infrastructure Act of 2019	To amend the America's Water Infrastructure Act of 2018 to expand the Indian reservation drinking water program, and for other purposes.	Introduced by Sen. Ron Wyden (D-OR) – December 12, 2019	
S. 3046 Wastewater Efficiency and Treatment Act of 2019	To amend the Energy Policy Act of 2005 to establish a program to provide grants and loan guarantees to improve the energy efficiency of publicly owned wastewater treatment facilities, and for other purposes.	Introduced by Sen. Jeff Merkley (D-OR) – December 12, 2019	
S. 3051 America's Conservation Enhancement Act	To improve protections for wildlife, and for other purposes.	Introduced by John Barrasso (R-WY) – December 12, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
<u>H.R. 5430</u> <u>United States-Mexico-Canada Agreement Implementation Act</u>	To implement the Agreement between the United States of America, the United Mexican States, and Canada attached as an Annex to the Protocol Replacing the North American Free Trade Agreement.	Introduced by Rep. Steny Hoyer (D-MD) December 13, 2019 Became Public Law No: 116-113 – January 29, 2020	
<u>S. 3052</u> <u>United States-Mexico-Canada Agreement Implementation Act</u>	To implement the Agreement between the United States of America, the United Mexican States, and Canada attached as an Annex to the Protocol Replacing the North American Free Trade Agreement.	Introduced by Sen. Chuck Grassley (R-IA) – December 16, 2019	
<u>H.R. 5435</u> <u>American Public Lands and Waters Climate Solution Act of 2019</u>	To require the Secretary of the Interior and the Chief of the United States Forest Service to meet certain targets for the reduction of the emission of greenhouse gases, and for other purposes.	Introduced by Rep. Raul Grijalva (D-AZ) – December 16, 2019 Committee on Natural Resources hearing – February 26, 2020	
<u>H.R. 5445</u> <u>Critical Infrastructure Act of 2019</u>	To amend the Endangered Species Act of 1973 to encourage the construction of critical infrastructure, and for other purposes.	Introduced by Rep. Chris Stewart (R-UT) – December 17, 2019	
<u>S. 3082</u> <u>LEVEE Act</u>	To establish a program to establish permanent features for flood control in areas in which temporary features have been constructed, and for other purposes.	Introduced by Sen. Kirsten Gillibrand (D-NY) – December 18, 2019	
<u>H.R.5513</u> <u>Affordable Safe Drinking Water Act of 2019</u>	To amend the Federal Water Pollution Control Act and the Safe Drinking Water Act to modify the payment periods of loans from State revolving funds under those Acts, and for other purposes.	Introduced by Rep. Joseph Kennedy (D-MA) – December 20, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
<u>H.R. 5504</u> <u>To amend the National Dam Safety Program Act with respect to the definition of eligible high hazard potential dam, and for other purposes</u>	To amend the National Dam Safety Program Act with respect to the definition of eligible high hazard potential dam, and for other purposes.	Introduced by Rep. Julia Brownley (D-CA) – December 19, 2019	
<u>H.R.5539</u> <u>Clean Water Standards for PFAS Act of 2020</u>	To require the Administrator of the Environmental Protection Agency to review and develop effluent standards, pretreatment standards, and water quality criteria for PFAS under the Federal Water Pollution Control Act, to provide Federal grants to publicly owned treatment works to implement standards, and for other purposes.	Introduced by Rep. Chris Pappas (D-NH) – January 3, 2020	
<u>H.R. 5540</u> <u>PFAS Transparency Act</u>	To require, pursuant to the Federal Water Pollution Control Act, disclosure of the introduction of perfluoroalkyl or polyfluoroalkyl substances into treatment works, and for other purposes.	Introduced by Rep. Antonio Delgado (D-NY) – January 3, 2020	
<u>S. 3160</u> <u>Affordable Safe Drinking Water Act of 2020</u>	To amend the Federal Water Pollution Control Act and the Safe Drinking Water Act to modify the payment periods of loans from State revolving funds under those Acts, and for other purposes.	Introduced by Sen. Elizabeth Warren (D-MA) – January 8, 2020	
<u>S. 3171</u> <u>Protect and Restore America's Estuaries Act</u>	To amend the Federal Water Pollution Control Act to reauthorize the National Estuary Program, and for other purposes.	Introduced by Se. Whitehouse (D-RI) – January 9, 2020	
<u>S. 3176</u> <u>United States-Israel Security Assistance Authorization Act of 2020</u>	To amend the Foreign Assistance Act of 1961 and the United States-Israel Strategic Partnership Act of 2014 to make improvements to certain defense and security assistance provisions and to authorize the appropriations of funds to Israel, and for other purposes.	Introduced by Sen. Marco Rubio (R-FL) – January 9, 2020	
<u>H.R. 5579</u> <u>LIST Act of 2020</u>	To amend the Endangered Species Act of 1973 to provide for improved precision in the listing, delisting, and downlisting of endangered species and potentially endangered species.	Introduced by Rep. Greg Gianforte (R-MT) – January 10, 2020	

LEGISLATION	SUMMARY	STATUS	POSITION
<u>H.R. 5580</u> <u>Bring ESA Into the 21st Century Act</u>	To codify certain rules issued by the Secretary of the Interior and the Secretary of Commerce relating to endangered species and threatened species, and for other purposes.	Introduced by Rep. Paul Gosar (R-AZ) – January 10, 2020	
<u>H.R. 5588</u> <u>WHOLE Act of 2020</u>	To amend the Endangered Species Act of 1973 to provide for consideration of the totality of conservation measures in determining the impact of proposed Federal agency action.	Introduced by Rep. Dan Newhouse (R-WA) – January 13, 2020	
<u>H.R. 5585</u> <u>Listing Reform Act</u>	To amend the Endangered Species Act of 1973 to require review of the economic cost of adding a species to the list of endangered species or threatened species, and for other purposes.	Introduced by Rep. Pete Olson (R-TX) – January 13, 2020	
<u>H.R. 5591</u> <u>Critical Habitat Improvement Act</u>	To amend the Endangered Species Act of 1973 to add requirements to the designation of areas as critical habitats, and for other purposes.	Introduced by Rep. Mike Johnson (R-LA) – January 13, 2020	
<u>H.R. 5594</u> <u>EMPOWERS Act of 2020</u>	To provide for greater county and State consultation with regard to petitions under the Endangered Species Act of 1973, and for other purposes.	Introduced by Rep. Jason Smith (R-MO) – January 13, 2020	
<u>H.R. 5595</u> <u>Israel Anti-Boycott Act</u>	To impose additional prohibitions relating to foreign boycotts under Export Control Reform Act of 2018, and for other purposes.	Introduced by Rep. Lee Zeldin (R-NY) – January 13, 2020	
<u>H.R. 5601</u> <u>Property Rights Protection Act of 2020</u>	To protect private property rights, and for other purposes.	Introduced by Rep. Ralph Norman (R-SC) – January 14, 2020	
<u>H.R. 5598</u> <u>Boundary Waters Wilderness Protection and Pollution Prevention Act</u>	To provide for the protection of the Boundary Waters Canoe Area Wilderness and interconnected Federal lands and waters, including Voyageurs National Park, within the Rainy River Watershed in the State of Minnesota, and for other purposes.	Introduced by Rep. Betty McCollum (D-MN) – January 14, 2020 Subcommittee on Energy and Mineral Resources hearing – February 5, 2020	

LEGISLATION	SUMMARY	STATUS	POSITION
<u>H.Res. 797</u> <u>Encouraging the Environmental Protection Agency to maintain and strengthen requirements under the Clean Water Act and reverse ongoing administrative actions to weaken this landmark law and protections for United States waters</u>	<p>Encouraging the Environmental Protection Agency to maintain and strengthen requirements under the Clean Water Act and reverse ongoing administrative actions to weaken this landmark law and protections for United States waters.</p>	<p>Introduced by Rep. Debbie Dingell (D-MI) – January 14, 2020</p>	
<u>H.R. 5606</u> <u>Desert National Wildlife Refuge and Nevada Test and Training Range Withdrawal and Management Act</u>	<p>To extend the withdrawal and reservation of certain public land in the State of Nevada for the continued use of the Nevada test and training range, to designate certain land in the Desert National Wildlife Refuge as wilderness, and for other purposes.</p>	<p>Introduced by Rep. Steven Horsford (D-NV) – January 15, 2020</p>	
<u>H.R. 5615</u> <u>TREES Act</u>	<p>To establish a grant program to assist retail power providers with the establishment and operation of energy conservation programs using targeted residential tree-planting programs, and for other purposes.</p>	<p>Introduced by Rep. Doris Matsui (D-CA)–January 15, 2020</p>	
<u>S. 3208</u> <u>Regulatory Accountability Act</u>	<p>To improve agency rulemaking, and for other purposes.</p>	<p>Introduced by Sen. Rob Portman (R-OH) – January 16, 2020</p>	
<u>H.R. 5638</u> <u>American Sovereignty and Species Protection Act</u>	<p>To amend the Endangered Species Act to prevent a species that is not native to the United States from being listed as an endangered species or a threatened species, to prohibit certain types of financial assistance, and for other purposes.</p>	<p>Introduced by Rep. Andy Biggs (R-AZ) - January 16, 2020</p>	

LEGISLATION	SUMMARY	STATUS	POSITION
S. 3211 Clean Water Allotment Modernization Act	To amend the Federal Water Pollution Control Act to modify certain allotments under that Act, and for other purposes.	Introduced by Sen. Marco Rubio (R-FL) – January 16, 2020	
H.R. 5628 Clean Water Allotment Modernization Act	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) – January 17, 2020	
H.R. 5636 Transparency in Energy Production Act of 2020	To provide for the accurate reporting of fossil fuel extraction and emissions by entities with leases on public land, and for other purposes.	Introduced by Rep. Alan Lowenthal (D-CA) – January 16, 2020 Subcommittee on Energy and Mineral Resources hearing – January 28, 2020	
H.R.5650 Federal Energy and Water Management Performance Act of 2020	To amend the National Energy Conservation Policy Act to improve Federal energy and water performance requirements for Federal buildings and establish a Federal Energy Management Program.	Introduced by Rep. Peter Welch (D-VT) – January 16, 2020	
H.R.5653 Green Federal Fleet Act	To prohibit Federal agencies from purchasing or leasing new vehicles that are not zero-emission vehicles, and for other purposes.	Introduced by Rep. Julia Brownley (D-CA) – January 17, 2020	
S. 3221 Farm System Reform Act of 2019	To place a moratorium on large concentrated animal feeding operations, to strengthen the Packers and Stockyards Act, 1921, to require country of origin labeling on beef, pork, and dairy products, and for other purposes.	Introduced by Sen. Cory Booker (D-NJ) – January 21, 2020	

LEGISLATION	SUMMARY	STATUS	POSITION
<u>H. Res. 835</u> <u>Expressing the sense of the House of Representatives that the Federal Government should establish a national goal of conserving at least 30 percent of the land and ocean of the United States by 2030</u>	<p>Expressing the sense of the House of Representatives that the Federal Government should establish a national goal of conserving at least 30 percent of the land and ocean of the United States by 2030.</p>	<p>Introduced by Rep. Debra Haaland (D-NM) – February 6, 2020</p>	
<u>H.R. 5832</u> <u>SHORE Act</u>	<p>To direct the Secretary of the Army and the Director of the Office of Management and Budget to issue regulations and submit a report to Congress on cost-benefit ratios, and for other purposes.</p>	<p>Introduced by Rep. John Katko (R-NY) – February 10, 2020</p>	
<u>S. 3274</u> <u>Decentralized Wastewater Grant Act of 2020</u>	<p>To amend the Federal Water Pollution Control Act to establish a decentralized wastewater grant program, and for other purposes.</p>	<p>Introduced by Sen. Cory Booker (D-NJ) – February 11, 2020</p>	
<u>H.Con.Res. 89</u> <u>Encouraging the Trump Administration to maintain protections under the National Environmental Policy Act and reverse ongoing administrative actions to weaken this landmark law and its protections for American communities</u>	<p>Encouraging the Trump Administration to maintain protections under the National Environmental Policy Act and reverse ongoing administrative actions to weaken this landmark law and its protections for American communities.</p>	<p>Introduced by Rep. Debbie Dingell (D-MI) – February 11, 2020</p>	

LEGISLATION	SUMMARY	STATUS	POSITION
<u>S.3288</u> <u>PUBLIC Lands Act</u>	To provide for the protection of and investment in certain Federal land in the State of California, and for other purposes.	Introduced by Sen. Kamala Harris (D-CA) – February 12, 2020	
<u>H.R. 5856</u> <u>Decentralized Wastewater Grant Act of 2020</u>	To amend the Federal Water Pollution Control Act to establish a decentralized wastewater grant program, and for other purposes.	Introduced by Rep. Terri Sewell (D-AL) – February 11, 2020	
<u>H.R. 5868</u> <u>RELIEF ACT</u>	To amend the Act of August 18, 1941 (commonly known as the Flood Control Act of 1941), to allow a non-Federal sponsor to carry out certain work, to provide for reimbursement of costs to complete such work, and for other purposes.	Introduced by Rep. Jeff Fortenberry (R-NE) – February 13, 2020	
<u>H.R. 5902</u> <u>Plastics Act of 2020</u>	To establish a microplastics pilot program, and for other purposes.	Introduced by Rep. Brian Mast (R-FL) – February 14, 2020	
<u>H.R.5986</u> <u>Environmental Justice For All Act</u>	To restore, reaffirm, and reconcile environmental justice and civil rights, provide for the establishment of the Interagency Working Group on Environmental Justice Compliance and Enforcement, and for other purposes.	Introduced by Rep. Raul Grijalva (D-AZ) – February 27, 2020	
<u>H.R.6000</u> <u>To reauthorize a pilot program to evaluate the effectiveness of certain water-related feasibility studies carried out by non-Federal interests.</u>	To reauthorize a pilot program to evaluate the effectiveness of certain water-related feasibility studies carried out by non-Federal interests.	Introduced by Rep. Mike Johnson (R-LA) – February 27, 2020	
<u>H.R.6112</u> <u>Oil and Water Don't Mix Act of 2020</u>	To require operators of oil and gas production facilities to take certain measures to protect drinking water, and for other purposes.	Introduced by Rep. Jared Huffman (D-CA) – March 5, 2020	
<u>H.R.6113</u> <u>ARPA-H2O Act of 2020</u>	To establish an Advanced Research Projects Agency–Water, and for other purposes.	Introduced by Rep. John Katko (R-NY) – March 5, 2020	

LEGISLATION	SUMMARY	STATUS	POSITION
<u>S.3418</u> <u>STORM Act</u>	<p>To amend the Robert T. Stafford Disaster Relief and Emergency Assistance Act to allow the Administrator of the Federal Emergency Management Agency to provide capitalization grants to States to establish revolving funds to provide hazard mitigation assistance to reduce risks from disasters and natural hazards, and other related environmental harm.</p>	<p>Introduced by Sen. Gary Peters (D-MI) – March 9, 2020</p>	
<u>S.Res.537</u> <u>A resolution encouraging the Trump Administration to maintain protections under the National Environmental Policy Act and reverse ongoing administrative actions to weaken this landmark law and its protections for American communities</u>	<p>Encouraging the Trump Administration to maintain protections under the National Environmental Policy Act and reverse ongoing administrative actions to weaken this landmark law and its protections for American communities.</p>	<p>Introduced by Sen. Thomas Carter (D-DE) – March 10, 2020</p>	
<u>H.R.6185</u> <u>Save Our Springs Act of 2020</u>	<p>To amend the Internal Revenue Code of 1986 to impose an excise tax on the extraction of certain water for bottling, and for other purposes.</p>	<p>Introduced by Rep. Debbie Wasserman Schultz (D-FL) – March 10, 2020</p>	

LEGISLATION	SUMMARY	STATUS	POSITION
<u>H.R.6169</u> <u>To require the Secretary of the Interior, the Secretary of Agriculture, and the Assistant Secretary of the Army for Civil Works to digitize and make publicly available geographic information system mapping data relating to public access to Federal land and waters for outdoor recreation, and for other purposes</u>	<p>To require the Secretary of the Interior, the Secretary of Agriculture, and the Assistant Secretary of the Army for Civil Works to digitize and make publicly available geographic information system mapping data relating to public access to Federal land and waters for outdoor recreation, and for other purposes.</p>	<p>Introduced by Rep. Russ Fulcher (D-ID) – March 10, 2020</p>	
<u>S.3480</u> <u>PFAS Testing and Treatment Act of 2020</u>	<p>To amend the Safe Drinking Water Act and the Federal Water Pollution Control Act to authorize additional assistance to address pollution from perfluoroalkyl and polyfluoroalkyl substances and other emerging contaminants, and for other purposes.</p>	<p>Introduced by Sen. Jeanne Shaheen (D-NH) – March 12, 2020</p>	
<u>H.R.6422</u> <u>National Infrastructure Bank Act of 2020</u>	<p>To facilitate efficient investments and financing of infrastructure projects and new job creation through the establishment of a National Infrastructure Bank, and for other purposes.</p>	<p>Introduced by Danny Davis (D-IL) – March 31, 2020</p>	
<u>H.R.6552</u> <u>Emergency Water is a Human Right Act</u>	<p>To prohibit water shutoffs during the COVID–19 emergency period, provide drinking and waste water assistance to households, and for other purposes.</p>	<p>Introduced by Rep. Rashida Tlaib (D-MI) – April 17, 2020</p>	
<u>H.R.6617</u> <u>Western Water Storage Infrastructure Act</u>	<p>To support surface and groundwater storage and supporting projects in Reclamation States, and for other purposes.</p>	<p>Introduced by Rep. TJ Cox (D-CA) – April 29, 2020</p>	

LEGISLATION	SUMMARY	STATUS	POSITION
<u>H.R.6631</u> <u>Essential Worker Protection Act of 2020</u>	To direct the Secretary of Labor to establish an interagency task force on worker protection from COVID–19, and for other purposes.	Introduced by Rep. Haley Stevens (D-MI) – April 28, 2020	
<u>S.3591</u> <u>America's Water Infrastructure Act of 2020</u>	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, to provide for water pollution control activities, and for other purposes.	Introduced by Sen. John Barrasso (R-WY) – May 4, 2020	
<u>S.3621</u> <u>Made in America Water Infrastructure Act of 2020</u>	A bill to amend the Safe Drinking Water Act to remove limitations on the required use of American iron and steel products in projects carried out using State revolving loan funds, and for other purposes.	Introduced by Sen. Tammy Baldwin (D-WI) – May 6, 2020	
<u>H.R.6745</u> <u>Clean Water for All Act</u>	To prohibit implementation of a rule defining “waters of the United States” under the Federal Water Pollution Control Act, and for other purposes.	Introduced by Rep. Peter DeFazio (D-OR) – May 11, 2020	
H.R.6898 To encourage the research and use of innovative materials and associated techniques in the construction and preservation of the domestic transportation and water infrastructure system, and for other purposes.	<i>Text is not yet available.</i>	Introduced by Rep. David Cicilline (D-RI) – May 18, 2020	

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LEGISLATION	SUMMARY	STATUS	POSITION
<p>H.R.6922 To require the Corps of Engineers to expedite review of applications for certain flood control projects near military installations, and for other purposes.</p>	<p><i>Text is not yet available.</i></p>	<p>Introduced by Rep. Don Bacon (R-NE) – May 20, 2020</p>	

COVID-19 RELIEF LEGISLATION

LEGISLATION	SUMMARY	STATUS	POSITION
<u>H.R.6074</u> <u>Coronavirus Preparedness and Response Supplemental Appropriations Act, 2020</u>	Making emergency supplemental appropriations for the fiscal year ending September 30, 2020, and for other purposes.	Introduced by Rep. Nita Lowey (D-NY) – March 4, 2020 Became Public Law No: 116-123 – March 6, 2020	
<u>S.3415</u> <u>Paid Sick Days for Public Health Emergencies and Personal and Family Care Act</u>	To allow Americans to earn paid sick time so that they can address their own health needs and the health needs of their families.	Introduced by Sen. Patty Murray (D-WA) – March 5, 2020	
<u>H.R.6201</u> <u>Families First Coronavirus Response Act</u>	Making emergency supplemental appropriations for the fiscal year ending September 30, 2020, and for other purposes.	Introduced by Rep. Nita Lowey (D-NY) – March 11, 2020 Became Public Law No: 116-127 – March 18, 2020	
<u>H.R.6198</u> <u>Emergency Paid Leave Act of 2020</u>	To provide emergency paid leave benefits to certain individuals affected by COVID-19, and for other purposes.	Introduced by Rep. Stephanie Murphy (D-FL) – Introduced March 11, 2020	
<u>H.R.6150</u> <u>Paid Sick Days for Public Health Emergencies and Personal and Family Care Act</u>	To allow Americans to earn paid sick time so that they can address their own health needs and the health needs of their families.	Introduced by Rep. Rosa DeLauro (D-CT) – March 9, 2020	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.6220 Emergency Family and Medical Leave Expansion Act	To amend the Family and Medical Leave Act of 1993 to provide for leave with respect to a public health emergency, and for other purposes.	Introduced by Rep. Robert Scott (D-VA) - March 12, 2020	
S.3476 Coronavirus Worker Relief Act	To provide for unemployment benefits to workers affected by the 2019 Novel Coronavirus.	Introduced by Sen. Gary Peters (D-MI) - March 12, 2020	
S.3548 CARES Act	To provide emergency assistance and health care response for individuals, families, and businesses affected by the 2020 coronavirus pandemic.	Introduced by Sen. Mitch McConnell (R-KY) – March 19, 2020	
H.R.6321 Financial Protections and Assistance for America's Consumers, States, Businesses, and Vulnerable Populations Act	To provide financial protections and assistance for America’s consumers, States, businesses, and vulnerable populations during the COVID-19 emergency and to recover from the emergency.	Introduced by Rep. Maxine Waters (D-CA) – March 23, 2020	
H.R.6328 Emergency Relief for State, Territorial and Local Governments Act of 2020	To authorize Federal reserve banks to purchase COVID–19 related municipal issuances, and for other purposes.	Introduced by Rep. Rashida Tlaib (D-MI) – March 23, 2020	
H.R.6379 Take Responsibility for Workers and Families Act	Making emergency supplemental appropriations for the fiscal year ending September 30, 2020, and for other purposes.	Introduced by Rep. Nita Lowery (D-NY) – March 23, 2020	
H.R. 6361 Relief for Small Businesses and Nonprofits Act	To provide loan and obligation payment relief for small businesses and nonprofits affected by the COVID–19 emergency, and for other purposes.	Introduced by Rep. Ed Perlmutter (D-CO) – March 23, 2020	

LEGISLATION	SUMMARY	STATUS	POSITION
<u>S.3584</u> <u>COVID-19 Workers</u> <u>First Protection Act</u> <u>of 2020</u>	<p>To direct the Secretary of Labor to issue an emergency temporary standard that requires certain employers to develop and implement a comprehensive infectious disease exposure control plan to protect employees in the health care sectors and other employees at elevated risk from exposure to SARS-CoV-2, and for other purposes.</p>	<p>Introduced by Sen. Tammy Baldwin (D-WI) – March 25, 2020</p>	
<u>H.R. 6402</u> <u>COVID-19</u> <u>Workforce</u> <u>Emergency</u> <u>Response Act</u>	<p>To provide State and local workforce systems flexibility and financial support to respond to the COVID-19 national emergency.</p>	<p>Introduced by Rep. Andy Levin (D-MI) – March 26, 2020</p>	
<u>H.R.748</u> <u>CARES Act</u>	<p>To amend the Internal Revenue Code of 1986 to repeal the excise tax on high cost employer-sponsored health coverage.</p>	<p>Introduced by Rep. Joe Courtney (D-CT) – March 27, 2020</p> <p>Became Public Law No: 116-136 – March 27, 2020</p>	
<u>H.R.6410</u> <u>To direct the</u> <u>President to use</u> <u>authority under the</u> <u>Defense Production</u> <u>Act of 1950 to</u> <u>ensure an adequate</u> <u>supply of equipment</u> <u>necessary for</u> <u>limiting the spread</u> <u>of COVID-19.</u>	<p>To direct the President to use authority under the Defense Production Act of 1950 to ensure an adequate supply of equipment necessary for limiting the spread of COVID-19.</p>	<p>Introduced by Rep. John Larson (D-CT) – March 27, 2020</p>	

LEGISLATION	SUMMARY	STATUS	POSITION
<p>H.R.6423 To provide for a temporary debt collection moratorium during the COVID-19 emergency period, and for other purposes.</p>	<p>To provide for a temporary debt collection moratorium during the COVID-19 emergency period, and for other purposes.</p>	<p>Introduced by Rep. Al Lawson (D-FL) – March 31, 2020</p>	
<p>H.R.6431 Made in America Emergency Preparedness Act</p>	<p>To require the creation of a national commission to prepare for future national emergencies, and for other purposes.</p>	<p>Introduced by Rep. Brian Fitzpatrick (R-PA) – April 3, 2020</p>	
<p>H.R.6472 COVID-19 Price Gouging Prevention Act</p>	<p>To prohibit price gouging in connection with the public health emergency resulting from COVID–19, and for other purposes.</p>	<p>Introduced by Rep. Janice Schakowsky (D-IL) – April 7, 2020</p>	
<p>H.R.6460 To provide funding for needed child and adult care so that essential workers can report to work during the COVID-19 pandemic.</p>	<p>To provide funding for needed child and adult care so that essential workers can report to work during the COVID-19 pandemic.</p>	<p>Introduced by Rep. Danny Davis(D-IL) – April 7, 2020</p>	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.6525 Reopen America Act of 2020	To provide the necessary Federal financial and logistical support so States can reopen their economies once periods of isolation have sufficiently reduced coronavirus infection and transmission rates, and with adequate testing and other safeguards to ensure infection rates do not exceed medical resources, and virus transmission rates are maintained below 1 and thereby steadily reduce the number of infected, and for other purposes.	Introduced by Rep. Jamie Raskin (D-MD) – April 17, 2020	
H.R. 6552 Emergency Water is Human Right Act	To prohibit water shutoffs during the COVID–19 emergency period, provide drinking and waste water assistance to households, and for other purposes.	Introduced by Rep. Rashida Tlaib (D-MI) – April 17, 2020	
H.R.6559 COVID-19 Every Worker Protection Act of 2020	To require the Occupational Safety and Health Administration to promulgate an emergency temporary standard to protect employees from occupational exposure to SARS–CoV–2, and for other purposes.	Introduced by Rep. Robert Scott (D-VA) – April 21, 2020	
H.R. 266 Paycheck Protection Program and Health Care Enhancement Act	Making appropriations for the Department of the Interior, environment, and related agencies for the fiscal year ending September 30, 2019, and for other purposes.	Introduced by Rep. Betty McCollum (D-MN) – April 24, 2020 Became Public Law No: 116-139 – April 24, 2020	
H.R. 6631 Essential Worker Protection Act of 2020	To direct the Secretary of Labor to establish an interagency task force on worker protection from COVID–19, and for other purposes.	Introduced by Rep. Haley Stevens (D-MI) – April 28, 2020	
H.R.6652 Flexibility for Localities and Eligibility Expansion Act of 2020	To amend title VI of the Social Security Act to expand the permissible use of funds under the Coronavirus Relief Fund.	Introduced by Rep. Don Bacon (R-NE) – May 1, 2020	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R. 6653 MASKS ON Act	To require the Director of the Centers for Disease Control and Prevention to carry out a national public outreach campaign regarding the proper use of personal protective equipment to minimize personal risk of exposure to, and risk of spreading, the virus that causes COVID-19, and for other purposes.	Introduced by Rep. Daniel Lipinski (D-IL) – May 1, 2020	
H.R.6699 Opportunities for Heroes Act of 2020	To establish a commission to determine essential employment during the COVID-19 crisis period and provide loan repayment and education credit to workers employed in such essential employment during such crisis, and for other purposes.	Introduced by Rep. Ann Kuster (D-NH) – May 5, 2020	
H.R.6705 Coronavirus State and Local Financial Assistance Act	To require the Secretary of the Treasury to establish a State and Local Government Coronavirus Relief Program to make grants to States to make up for lost revenue due to COVID-19 and social distancing steps taken by the State and political subdivisions of the State, and for other purposes.	Introduced by Rep. Cynthia Axne (D-IA) – May 5, 2020	
S.3627 Medical Supply Transparency and Delivery Act	A bill to provide for the expedited and transparent procurement and distribution of equipment and supplies needed to combat COVID-19.	Introduced by Sen. Tammy Badlwin (D-WI) – May 6, 2020	
S.3671 A bill to amend title VI of the Social Security Act to provide additional funding for States, Tribal Governments, and local communities due to the Coronavirus Disease 2019 (COVID-19) public health emergency, and for other purposes.	<i>Text is not yet available.</i>	Introduced by Rep. Jack Reed (D-RI) – May 7, 2020	
H.R. 6748 Direct Support for Communities Act	To provide funding for cities, counties, and other units of general local government to prevent, prepare for, and respond to coronavirus.	Introduced by Rep. Antonio Delgado (D-NY) – May 8, 2020	

LEGISLATION	SUMMARY	STATUS	POSITION
<p><u>H.R.6760</u> <u>Fair Housing Further Enforcement Emergency Act of 2020</u></p>	<p>To authorize assistance for fair housing enforcement activities to respond to the COVID-19 pandemic, and for other purposes.</p>	<p>Introduced by Rep. Al Green (D-TX) – May 8, 2020</p>	
<p>S.3672 A bill to provide States and Indian Tribes with flexibility in administering the temporary assistance for needy families program due to the public health emergency with respect to the Coronavirus Disease (COVID-19), to make emergency grants to States and Indian Tribes to provide financial support for low-income individuals affected by that public health emergency, and for other purposes.</p>	<p><i>Text is not yet available.</i></p>	<p>Introduced by Sen. Ron Wyden (D-OR) – May 11, 2020</p>	

LEGISLATION	SUMMARY	STATUS	POSITION
<p>S.3682 A bill to provide States, Tribal governments, and local governments with spending discretion for part of their Coronavirus Relief Fund payment.</p>	<p><i>Text is not yet available.</i></p>	<p>Introduced by Sen. Mike Rounds (R-SD) – May 11, 2020</p>	
<p>S.3685 A bill to provide emergency rental assistance under the Emergency Solutions Grants program of the Secretary of Housing and Urban Development in response to the public health emergency resulting from the coronavirus, and for other purposes.</p>	<p><i>Text is not yet available.</i></p>	<p>Introduced by Sen. Sherrod Brown (D-OH) – May 12, 2020</p>	
<p><u>H.R.6800</u> <u>The Heroes Act</u></p>	<p>Making emergency supplemental appropriations for the fiscal year ending September 30, 2020, and for other purposes.</p>	<p>Introduced by Rep. Nita Lowey (D-NY) – May 12, 2020</p> <p>Placed on Senate Legislative Calendar – May 21, 2020</p>	

LEGISLATION	SUMMARY	STATUS	POSITION
<p>H.R.6820 To provide emergency rental assistance under the Emergency Solutions Grants program of the Secretary of Housing and Urban Development in response to the public health emergency resulting from the coronavirus, and for other purposes.</p>	<p><i>Text is not yet available.</i></p>	<p>Introduced by Rep. Denny Heck (D-WA) – May 12, 2020</p>	
<p>S.3728 A bill to require the Secretary of Transportation to support the efforts of State and local governments to provide for priority testing of essential critical infrastructure workers with respect to the Coronavirus Disease 2019 (COVID-19), and for other purposes.</p>	<p><i>Text is not yet available.</i></p>	<p>Introduced by Sen. Roger Wicker (R-MS) – May 13, 2020</p>	

LEGISLATION	SUMMARY	STATUS	POSITION
<p>S.3767 A bill to require States to pass-through 45 percent of the amounts paid from the Coronavirus Relief Fund to local governments that did not receive a direct payment from the Fund.</p>	<p><i>Text is not yet available.</i></p>	<p>Introduced by Sen. Steve Daines (R-MT) – May 19, 2020</p>	
<p>H.R.6954 To amend title VI of the Social Security Act to establish a Coronavirus Local Community Stabilization Fund.</p>	<p><i>Text is not yet available.</i></p>	<p>Introduced by Rep. Mikie Sherrill (D-NJ) – May 19, 2020</p>	

INFORMATION ONLY

June 1, 2020 JPA Board Meeting

TO: JPA Board of Directors

FROM: Engineering and External Affairs

Subject : Rancho Las Virgenes Composting Facility Repairs: Approval of Change Order

On May 5, 2020, the LVMWD Board, acting as the Administering Agent of the JPA, approved Change Order No. 2, in the amount of \$1,542,900, for Pacific Hydrotech Corporation to include repair of the Amendment Building at the Rancho Las Virgenes Compositing Facility as part of Amendment Bin and Conveyance System Modifications Project.

SUMMARY:

On November 12, 2018, the LVMWD Board declared a state of emergency due to the Woolsey Fire that broke out on the afternoon of Thursday, November 8, 2018, in Ventura County near the Santa Susana Field Laboratory. Mandatory evacuations were required for nearly 300,000 people in Ventura and Los Angeles counties and thousands of homes and structures were threatened and/or destroyed. The Las Virgenes Municipal Water District's (District) facilities experienced significant damage that required immediate action to restore normal water and wastewater service to the region's customers. The fire impacted roughly 66% of the District's service area and damaged many key facilities including the Rancho Las Virgenes Composting Facility (Rancho).

By the end of Fiscal Year 2018-19, the District was able to resume all regular operations with the exception of those at Rancho, and dewatered biosolids continue to be hauled off-site for disposal. The District continues the recovery effort and is seeking reimbursement for fire-related damages through its insurance carrier, the Governor's Office of Emergency Services (CalOES), and the Federal Emergency Management Agency (FEMA). As part of the process, staff solicited repair proposals for Rancho from companies with existing construction contracts for work at the facility: GSE Construction, Inc. (Digester No. 2 Rehabilitation Project) and Pacific Hydrotech Corporation (Amendment Bin and Conveyance System Modification Project). On May 5, 2020, the LVMWD Board, acting as the Administering Agent of the JPA, approved Change Order No. 2 for Pacific Hydrotech Corporation for repair damages sustained to the Amendment Building at the Rancho Las Virgenes Compositing Facility as part of Amendment Bin and Conveyance System Modifications Project.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

The total cost of the work is \$1,542,900. Sufficient funding for the work is available in the adopted Fiscal Year 2019-20 JPA Budget. A claim has been submitted to the District's insurance carrier, and finalization of extent of coverage is pending.

DISCUSSION:

As of November 9th, 2018, the Rancho Las Virgenes Composting Facility has been out of service due to the impact and damages that occurred from the Woolsey Fire. Staff have been working with CalOES, FEMA, and the District's insurance carrier to secure reimbursement for the cost of repairs to the facility. To expedite the completion of repairs and restore the operation of Rancho, staff determined that the best strategy is to issue change orders to the companies that currently hold construction contracts with the District for work at Rancho: Pacific Hydrotech Corporation and GSE Construction, Inc. The two contractors were provided the same scope of work, which included repair of the biofilter as well as structural and mechanical repairs to the Amendment Building.

Legal counsel advised staff to ensure that the work for any proposed change orders was related to the original scope of work described in the construction contract. Both contractors have been working on repairs and modifications to the composting processes; the work being performed by GSE Construction for the Digester No. 2 Rehabilitation Project is most closely related to the proposed biofilter repairs, while Pacific Hydrotech worked on the Amendment Bin and Conveyance System Modifications Project, which is most closely related to the required structural and mechanical repairs within the Amendment Building.

Staff proposed to complete the repairs at Rancho in two phases as additional funding is approved by the District's insurance carrier. Phase I consisted of repairs to the biofilter, which provides odor control for the composting process. Phase I work was approved by the LVMWD Board, acting as the Administering Agent of the JPA, on February 10th, 2020. Phase I work commenced in late March 2020, and is anticipated to be completed by late May to early June 2020. Once the biofilter is repaired, staff can manually load amendment to restart and test the composting process. This manual process is a temporary solution and will produce a lower yield of compost. Manual loading will allow for compost to be provided again to the public by late summer 2020.

Phase II of the repairs includes structural and mechanical repairs within the Amendment Building. The work consists of structural and cosmetic repairs to the Amendment Building, replacement of the dust collector and repair or replacement of damaged mechanical equipment. The work will eliminate the need for staff to manually load amendment, resulting in a greater compost yield and restoring Rancho to its full operational capacity and previous operational strategy. On May 5th, 2020, the LVMWD Board, acting as Administering Agent of the JPA, as authorized in the JPA Agreement, awarded Change Order No.2 to Pacific Hydrotech Corporation, in the amount of \$1,542,900, to complete the Phase II repairs. Change Order No. 1, in the amount of \$11,497.63, was administratively approved as it was less than 1% of the original contract amount. The change order was for increased electrical

wire size and vent piping. The Las Virgenes Municipal Water District Code establishes that a single change order equal to or greater than 5 percent of the original contract amount must be approved by the Board. While this change order will be processed as a change to the Amendment Bin and Conveyance System Modification Project (CIP No. 10608), funding for the work will be from the Rancho Compost Facility Woolsey Fire Repair Project (CIP No. 10689). A claim has been submitted to the District's insurance carrier, and finalization of extent of coverage is pending.

Prepared by: Mercedes Acevedo, Assistant Engineer, E.I.T

INFORMATION ONLY

June 1, 2020 JPA Board Meeting

TO: JPA Board of Directors

FROM: Facilities & Operations

Subject : Energy Storage and Resiliency Capability Feasibility Assessment: Award

The Las Virgenes-Triunfo Joint Powers Authority (JPA) approved funding for this matter in the JPA Budget. On May 19, 2020, the LVMWD Board, acting as the Administering Agent of the JPA, authorized the General Manager to execute a professional services agreement with TerraVerde Energy, in the amount of \$24,980, to perform an investment-grade feasibility assessment for potential implementation of a battery energy storage system project for JPA-owned facilities.

SUMMARY:

With the construction of the 4 MW solar generation project well underway, staff seeks additional opportunities to save energy costs and provide resiliency for the District's wastewater operations. One potentially attractive opportunity is through the state's Self Generation Incentive Program (SGIP), which could provide up to 50% of the construction cost of a new battery energy storage system (BESS). The BESS project would reduce the demand charges for District and JPA electrical usage. Demand charges comprise up to 40% of the typical electric bill for District and JPA facilities. TerraVerde Energy previously performed a BESS feasibility study for the District in 2017 and determined that the investment was not as beneficial as the 4 MW solar generation project at that time.

Since 2017, changes in policy, regulations, technology and market dynamics have evolved significantly, improving the economics of BESS projects. As a result, staff requested a proposal from TerraVerde Energy to provide an investment-grade feasibility assessment of the technical and financial feasibility of implementing a BESS project in support of the District's resiliency goals to achieve additional energy cost-savings. The assessment would include critical load resiliency (backup power) using a microgrid design with an evaluation of additional solar generation systems, as applicable. The total cost to perform the assessment would be \$24,980 for JPA-owned facilities.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

The total cost of the work for JPA-owned facilities is \$24,980. The cost of the assessment may be reimbursable by a contractor who will develop the BESS project, similar to the 4 MW solar generation project, which was 100% reimbursed by Borrego Solar.

DISCUSSION:

In 2017, TerraVerde Energy performed a District-wide solar and energy storage feasibility assessment based on market condition at the time. The assessment identified potential energy cost-savings of approximately \$10 million over 25 years for the proposed solar project and \$761,000 in potential savings for installation of battery energy storage systems (BESS) at seven facilities when operated for 10 years. Based on the findings, the District selected to implement the 4 MW solar generation project as it offered the most favorable economics. However, the assessment identified that the economics for BESS projects were improving and recommended that an updated analysis be performed when market conditions changed.

BESS technology and market conditions have significantly improved since 2017. The California Public Utilities Commission (CPUC) has provided substantial funding through its Self Generation Incentive Program (SGIP) to promote the implementation of BESS projects, particularly those to address peak-period energy usage. It is important to note that peak-period pricing has shifted to be 4:00 to 9:00 p.m. The CPUC has also authorized various rate structure changes, such as increases to demand charges and the use of tariffs to support rate arbitrage using battery storage. BESS projects can also assist to provide resiliency and grid stability during Public Safety Power Shutoff (PSPS) events. SGIP can provide up to 50% of the funding for BESS projects to support communities threatened by wildfire.

Much like the California Solar Incentives Program in the early days of solar project implementation that was aimed to drive down the cost of projects, SGIP for BESS projects will also significantly reduce the capital cost of batteries. To take advantage of SGIP, the proposed investment-grade feasibility assessment is necessary to identify feasible projects for the JPA under the current BESS environment. Once these projects and potential cost-savings are identified, an RFP process will take place to contract with a BESS contractor/developer that would construct and operate the a proposed project.

Prepared by: John Zhao, P.E., Director of Facilities and Operations

ATTACHMENTS:

TerraVerde Energy Proposal for JPA Facilities



May 12, 2020

John Zhao, P.E.
Principal Engineer
Las Virgenes Municipal Water District – Triunfo JPA
4232 Las Virgenes Road
Calabasas, CA 91302

Re: Energy Storage and Resiliency Capability Feasibility Assessment – Proposal for Professional Consulting Services

Dear John,

Per your request, TerraVerde is pleased to provide the following proposal for Professional Consulting Services to perform an investment grade feasibility assessment of the technical and financial feasibility of implementing battery energy storage systems (BESS) with critical load resiliency (power backup) using a microgrid design (and including evaluation of additional solar PV systems, as applicable) in support of the JPA's resiliency goals, and energy cost savings objectives.

Background:

In August of 2016 the Las Virgenes Municipal Water District - Triunfo JPA retained TerraVerde to perform a District-wide solar PV and energy storage feasibility assessment as a starting point for the JPA's Phase II Solar implementation plan. The feasibility study evaluated LVMWD & JPA Southern California Edison (SCE) accounts/meters and operations/sites to identify potential solar PV and energy storage projects that would reduce energy consumption and provide long term energy cost savings to LVMWD and the JPA. The purpose of the battery energy storage systems (BESS) analysis portion of the solar PV feasibility assessment was to identify certain District operations that may benefit from demand (kW) reduction and associated demand charge cost reduction (i.e.: SCE bill savings). In June of 2017 TerraVerde delivered to LVMWD–Triunfo JPA staff a summary of feasibility assessment findings for potential (BESS) implementation at seven (7) District/JPA facilities, which as a group, were projected to provide \$761,000 in net savings over a 10yr battery life cycle using a 3rd party ownership financing structure. The analysis included:

- An initial evaluation of the District/JPA portfolio of SCE account/meter data (80+ meters) using a 5-element criteria screening process designed by TerraVerde to identify meters with the proper characteristics for a next step demand profile analysis.
- Demand profile analysis using 15minute interval data sets for all meters selected using the initial evaluation methodology (approximately 13 meters). This analysis was performed for meters/sites that did not/do not have solar PV systems, and for the recycled water pump station located at

LVMWD Headquarters which has a 1MW solar PV NEM system interconnected to its switchgear (installed in 2014 under a PPA with Tesla).

- Rank ordering of the meters having the highest potential for meaningful demand reduction based on a “cluster study” approach that determines the duration of the demand reduction that provides the greatest monetary benefit, including the value of applicable SGIP incentives and the value of calculated demand charge savings. This process also provided optimum battery capacity sizing.
- Cost-benefit analysis for standalone BESS installations (i.e.: no existing or proposed solar PV systems) at seven (7) sites (the savings proforma grouped all seven together).
- A comparative analysis of 10year net savings for cash purchase (District-owned) and 3rd party ownership financing scenarios for the group of seven selected sites.

Meter Name	Service Account ID	Cumulative Demand * (kW)	Year 1 Demand Reduction (kW)	Battery Sizing	Battery Size (kWh)	Battery Savings (\$/kW)	Year 1 Battery Savings (\$/kW)	Discharge (hr)
#1 - 731 Malibu Canyon Rd, Calabasas, Ca 91302	3000436856	24,601	4,942	20%	2,000	\$ 67,905	\$ 13.74	4
#2 - 3700 Las Virgenes Rd, Calabasas, Ca 91302	3004516546	6,792	2,420	36%	1,000	\$ 48,133	\$ 19.89	4
#3 - 4232 Las Virgenes Rd Unit 2A, Calabasas, Ca 91302	3010653473	763	442	58%	250	\$ 9,408	\$ 21.27	2
#4 - 23589 Calabasas Rd Pmp, Calabasas, Ca 91302	3001339585	2,796	604	22%	250	\$ 6,694	\$ 11.09	2
#5 - 4815 El Canon Ave Pmp, Calabasas, Ca 91302	3001397791	1,018	248	24%	60	\$ 2,924	\$ 11.78	2
#6 - 3240 Las Virgenes Road, Calabasas, Ca 91302	3000436860	1,437	256	18%	60	\$ 3,279	\$ 12.80	2
#7 - 32601 Torchwood Plwestlake Village Ca 91361	3000436852	848	173	20%	60	\$ 2,011	\$ 11.61	2
Totals		38,255	9,086	24%	3,680	\$ 140,355	\$ 15.45	

Cash Flow Proforma for the 3rd Party Ownership Financing Scenario (portfolio of 7 sites)

Term	Electricity		Utility Savings		Expenses			Net Savings	
	Annual Demand Reduction (kW)	Storage Savings per kW Reduced	Savings from Storage	Subtotal: Annual Gross Benefits	Payments to Storage Provider *	Asset Management Service	Subtotal: Annual Operating Expenses	Net Benefits (Storage)	Cumulative Net Benefits
2017	-	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
2018	9,086	\$ 15.45	\$ 140,355	\$ 140,355	\$ (71,377)	\$ (2,800)	\$ (74,177)	\$ 66,177	\$ 66,177
2019	9,086	\$ 15.91	\$ 144,585	\$ 144,585	\$ (73,492)	\$ (2,884)	\$ (76,376)	\$ 68,208	\$ 134,386
2020	9,086	\$ 16.39	\$ 148,948	\$ 148,948	\$ (75,674)	\$ (2,971)	\$ (78,645)	\$ 70,304	\$ 204,689
2021	9,086	\$ 16.89	\$ 153,450	\$ 153,450	\$ (77,925)	\$ (3,060)	\$ (80,985)	\$ 72,466	\$ 277,155
2022	9,086	\$ 17.40	\$ 158,095	\$ 158,095	\$ (80,247)	\$ (3,151)	\$ (83,399)	\$ 74,696	\$ 351,851
2023	9,086	\$ 17.93	\$ 162,886	\$ 162,886	\$ (82,643)	\$ (3,246)	\$ (85,889)	\$ 76,997	\$ 428,848
2024	9,086	\$ 18.47	\$ 167,829	\$ 167,829	\$ (85,115)	\$ (3,343)	\$ (88,458)	\$ 79,371	\$ 508,219
2025	9,086	\$ 19.03	\$ 172,929	\$ 172,929	\$ (87,665)	\$ (3,444)	\$ (91,108)	\$ 81,821	\$ 590,040
2026	9,086	\$ 19.61	\$ 178,191	\$ 178,191	\$ (90,296)	\$ (3,547)	\$ (93,843)	\$ 84,349	\$ 674,389
2027	9,086	\$ 20.21	\$ 183,620	\$ 183,620	\$ (93,010)	\$ (3,653)	\$ (96,663)	\$ 86,957	\$ 761,346
	90,858		\$ 1,610,889	\$ 1,610,889	\$ (817,444)	\$ (32,099)	\$ (849,543)	\$ 761,346	\$ 761,346

In December 2017, the JPA decided to pursue an RFP process for a 4MW solar energy PPA project using the RES-BCT tariff (which was the primary focus from the solar PV and energy storage feasibility assessment findings). LVMWD/JPA staff concluded the standalone BESS projects (using a 3rd party financing option) did not possess sufficient projected cash flow and net savings to mitigate certain risks, and therefore did not warrant further consideration at that time (noting, that the analysis should be updated in the future to determine if projected demand savings and/or other market-based revenue streams can provide improved economics).

In November of 2018, the Woolsey fire significantly impacted LVMWD’s service territory and the District’s/JPA’s operations, including damage to water distribution infrastructure. The District and the JPA seek to find cost effective strategies for the mitigation of potential future power outages and SCE PSPS events.

Changes in Energy Storage Since the 2017 Feasibility Assessment:

Since the issuance of TerraVerde’s battery storage feasibility assessment findings (for the Phase II solar PV project feasibility study) in June of 2017, there have been many changes in policy and regulations impacting energy storage in California, most notably, the CPUC’s restructuring of California’s Self Generation Incentive Program (SGIP). In addition, battery systems technology and marketplace dynamics have evolved to provide greater capabilities at lower installed costs. Here’s a brief list of market updates since June 2017:

- SCE’s implementation of TOU peak period shift to evening hours (4 to 9pm), March 2019.
- SCE’s implementation of new TOU rate schedules (March 2019) that can support rate arbitrage savings for customers with energy storage systems.
- Increase in Demand Charge rates across many of SCE’s TOU rate schedules.
- New tariffs for NEM solar PV paired with battery storage that facilitate easier and lower cost interconnections.
- Significant losses due to wildfires Statewide, leading to CPUC action to promote “Resiliency”.
- Implementation of the Public Safety Power Shutoff (PSPS) system by the IOUs.
- Greenhouse gas (GHG) emissions reduction requirements added to the SGIP performance-based incentive (PBI) eligibility.
- Changes to the SGIP program to encourage residential and commercial participation in battery storage projects, including restructuring of the SGIP Equity incentive budget, creation of an ¹Equity-Resiliency Budget incentive category (valued at \$1.00/Whr, which can cover the entire cost of the equipment, installation and O&M), and a Resiliency Adder incentive for critical facilities not located in low income and/or disadvantaged communities (DAC).
- Proliferation of Community Choice Aggregator (CCA) startups (such as the Clean Power Alliance serving many LA County & Ventura County cities and unincorporated areas of the Counties).
- New and evolving Distributed Energy Resources (DER) programs developed for/by Load Serving Entities (LSEs) and CCAs that provide “Grid Services” revenue opportunities to customers with battery storage systems, and the SCE/CAISO demand response auction mechanism (DRAM) program for commercial battery installations in certain locations.
- New financing options for 3rd party ownership structures.
- Increased quantity & quality of historical performance data for existing battery storage systems in California.
- The use of microgrids to support critical operations by islanding specific critical loads during grid outages, and the use of community microgrids to mitigate grid reliability issues and to drive a reduction in transmission system upgrades by the IOUs.
- Advancements in Battery systems control software to facilitate rate arbitrage benefits.
- Advancements in microgrid control systems, and awareness of potential behind the meter interconnection issues which are being addressed in CPUC proceedings.
- The CAISO and SCE are predicting a grid reliability shortfall in Southern California, which may trigger 2.5-gigawatts of reliability resources procurement between 2021 and 2023 (focused primarily on batteries).

¹ Reference CPUC Decisions D.19-09-027:

<http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M313/K975/313975481.PDF> , and D.20-01-021: <http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M325/K979/325979689.PDF>

Proposal Overview:

The JPA desires to understand how the use of BESS installations, supported by the CPUC's enhanced SGIP Equity & Resiliency incentives, can be used to:

- Provide resiliency for critical loads during PSPS events or other SCE grid outages using renewable energy resources, where feasible.
- Evaluate the JPA's operations (load profiles) to understand how battery storage systems may provide energy cost savings (demand charge reduction and rate arbitrage) when integrated with the existing 1MW solar PV system at the Recycled Water Pump Station. And, the potential of new NEM solar projects where feasible to provide added savings and to support a backup power capability.
- Leverage SGIP incentives and projected demand reduction savings to offset the cost of battery storage and microgrid implementation to achieve operational resiliency where financially viable.

The proposed scope of analysis and research required to evaluate the technical and financial feasibility of integrating BESS and resiliency capability with the existing RWPS NEM solar PV system, and the other three JPA operations that currently do not possess NEM solar PV projects is described below:

Phase 1: Data Collection, Site Due Diligence, and Initial Project Evaluation

Phase 2: Project Feasibility Assessment and Cost-benefit Analysis

Phase 3: Financial Analysis and Summary of Results

Each phase consists of a group of tasks that must be completed to progress to the next phase.

Note: Tasks associated with follow-on project development (including oversight of a RFP process) and project implementation management services are not included in this proposal but can be considered by the JPA following review of the feasibility assessment summary findings and are available upon request.

The BESS/resiliency feasibility assessment will include following JPA operations/sites:

- Recycled Water Pump Station (supported by an existing 1MW NEM solar PV PPA project)
- Tapia Treatment Plant
- Rancho Composting Facility
- District/JPA Headquarters and Maintenance Facilities

The feasibility assessment scope will include a cost/benefit evaluation for integrated NEM solar PV and BESS, where feasible, and standalone BESS where NEM solar is not feasible. This analysis will also include evaluating the use of microgrid control systems to provide local islanding to mitigate PSPS events or other grid outages. The analysis will consider at least two back-up power duration scenarios based on guidance from the JPA on critical load(s) designation for each site deemed feasible. These scenarios typically consist of 100% load coverage and a second scenario that will determine the load capacity that can be covered by an optimally sized BESS project (the baseline battery capacity defined by optimum financial benefit and compliance to SGIP rules for maximizing the performance based incentives).

In addition, if emergency generators are currently being utilized at any of the sites deemed feasible for a Solar + BESS + microgrid configuration, and the District can provide guidance on the avoided cost of

reducing or eliminating the use of emergency generators, these cost benefits can be added to the financial analysis.

Scope of Work:

Phase 1 – Data Collection, Due Diligence, and Initial Project Evaluation

1. Project Kickoff meeting to review goals, objectives, expectations, communication and data collection protocols, roles/responsibilities, and project milestone schedules. Review TerraVerde’s RFI list and set expectations for data collection.
2. Acquire and review 12 to 24 months of sequential 15-minute interval demand and billing data for the SCE accounts to be evaluated. Note: This process can be expedited with the use of “UtilityAPI”, a 3rd party utility data collection service TerraVerde uses to acquire interval consumption & billing data. If necessary, UtilityAPI data will be supplemented with SCE interval data acquired directly from SCE with the JPA’s authorization.
3. Acquire interval production data for the existing RWPS 1MW NEM solar PV system.
4. Perform QC checks on all interval data received and prepare the data for loading into TerraVerde’s demand profile modeling tool.
5. Confirm consumption and billing baseline profiles for each SCE account and identify SCE accounts to include in the BESS analysis, and perform demand profile analysis for the subset grouping.
6. Provide guidance on battery system sizing and discharge durations to achieve maximum incentive benefit.
7. Confirm eligibility for SGIP Equity Budget & Resiliency Budget incentives for sites under consideration.
8. Provide guidance to the JPA on the SGIP program, status of incentive tiers, GHG reduction requirements, estimated timing for application submittals, and submittal process requirements.
9. Collect all relevant information for the sites under consideration, including, but not limited to: Site plans, parcel maps, facilities drawings, as-built electrical designs and single line diagrams (SLDs).
10. Review the existing solar PV system energy generation profile, as-built designs, NEM 1.0 Interconnection Agreement and Tesla PPA contract.
11. Perform BESS sizing for integration with existing 1MW NEM solar PV system.
12. Consult with Tesla to determine if/what contract terms may require modification to allow the JPA to add a JPA-owned battery and microgrid control system to the Tesla-owned NEM solar PV system.
13. Perform preliminary feasibility assessment and system sizing analysis for new NEM Solar PV projects as applicable for proposed solar + BESS integration.
14. Provide guidance on the use of designated RES-BCT Benefitting accounts in the BESS/resiliency feasibility assessment.
15. Perform BESS sizing for sites identified as standalone battery applications (determined by solar PV feasibility assessment process).
16. If necessary, conduct site audits for proposed NEM solar PV + BESS projects to assess site conditions to support solar PV, existing electrical infrastructure, and interconnection feasibility.
17. Using the baseline systems sizing analysis and site due diligence create initial project installation cost estimate assumptions.
18. For the sites under consideration for solar PV + BESS projects, acquire the District’s guidance on solar PV array siting (layout/location), critical loads coverage preferences (for resiliency sizing options), and

relevant future CIP's or facility upgrades or obsolescence plans that could change current demand and energy use profiles.

19. Model solar PV system energy generation profiles using simulated hourly production data for each new PV system size, type, and initial configuration.
20. Provide initial solar PV array layouts for proposed sites modeled for solar + BESS and review with the JPA.

Phase 2 – Project Feasibility Assessment and Cost-benefit Analysis

21. Perform demand charge reduction analysis, and rate arbitrage analysis using SCE's current TOU rates and periods for sites under consideration (include Grandfathered TOU period rates for the existing 1MW solar PV system thru February 2024).
22. Provide guidance on additional potential BESS revenue streams (CAISO Demand Response Auction Mechanism program, and CPA CCA DER programs), as applicable.
23. Provide guidance on microgrid control system architecture, capabilities, and benefits. Provide narrative description and diagrams for microgrid control scenarios for each proposed resiliency site, including a description of hardware and software required to implement the microgrids.
24. Using the JPA's guidance for critical load coverage(s) determine backup power duration and battery cycling for the proposed sites and provide guidance on two load coverage scenarios: 100% multi-day backup, and baseline battery capacity duration (optimized financial benefit).
25. If applicable, include avoided cost for eliminating or limiting use of emergency generators (requires guidance from JPA on equipment type and cost, rental, fuel costs, historical operating schedule, etc.).
26. Generate assumptions for project costs inclusive of project design/build costs, estimated site preparation, estimated interconnection scope, current market data for battery systems equipment (and solar PV systems installations, as applicable), labor, materials, O&M costs, software maintenance costs, and monitoring/reporting costs. Generate expected budgets for cash purchase and 3rd party ownership scenarios.
27. If applicable, perform a rate optimization analysis for any standalone BESS sites/meters (based on calculated annual demand reduction and tariff demand threshold rules). Note: Standalone applications address demand charge savings and rate arbitrage benefits only and are not capable of providing resiliency capabilities without a source of islanded power generation support.
28. Update PV system generation profile(s) using PVWatts hourly simulation as needed for any changes made to system size, type, or orientation/location during analysis refinement.
29. Perform a rate optimization analysis to confirm post-solar installation rate tariff changes for NEM 2.0 projects (assuming battery integration) using current SCE TOU rate schedules, confirm net metering credit, and update calculated avoided cost as needed.
30. Provide guidance on project financing and ownership options, and provide comparative financial analyses using 15yr cash flow proformas for standalone BESS projects and adding BESS to the existing 1MW NEM solar project. And, provide 25yr cash flow proformas for cash purchase vs. solar + BESS PPA scenarios.

Phase 3 – Financial Analysis and Summary of Results

31. Run financial models (review all assumptions with JPA) for the proposed projects to confirm economic benefits. Provide comparative financial analysis per Task 30 above (including the microgrid control system for solar + BESS projects).



- 32. Prepare a summary of feasibility assessment findings based on the technical and financial feasibility factors, and including: an overview of BESS equipment, O&M requirements, microgrid architecture, operation, features/benefits, and intended outcomes. And, provide suggested next steps.
- 33. Meet with the JPA to review the summary of findings and respond to any questions or concerns.

Fee Proposal:

TerraVerde’s not-to-exceed (NTE) fixed-fee for the Scope of Work (Phases 1 thru 3) is based on TerraVerde’s standard rate schedule and includes estimated expenses and ACWA member discount: **\$24,980.**

Billing will be based on achieving defined project milestones and deliverables as described below.

Project Milestones:

Description of Billing Milestones & Deliverables	Task	% of Proposal
Completion of project kickoff meeting, data collection and data review/QC	Task 1 - 16	25%
Completion of initial modeling for new solar PV + BESS projects	Task 17 - 29	25%
Completion of financing analysis	Task 30 - 31	25%
Completion of summary findings report and deliver to JPA	Task 32	20%
Review summary of findings with the JPA Staff	Task 33	5%
 Total:		 100%

Project Schedule:

- Phase 1 Tasks: 2 weeks
- Phase 2 Tasks: 2 weeks
- Phase 3 Tasks: 2 weeks

We trust the JPA will find our industry leading experience, analytical capabilities, knowledge of solar PV, energy storage and microgrid project development, and SCE rate tariffs to be an excellent fit for the evaluation of BESS/resiliency project opportunities. If you have any questions, please feel free to contact me.

Sincerely,

Kevin Ross, VP Business Development

TerraVerde Energy, LLC

520 E. Avenida Pico #3793

San Clemente, CA 92674-9998 949-212-6555 Kevin.Ross@terraverde.energy