LAS VIRGENES - TRIUNFO
JOINT POWERS AUTHORITY
AGENDA

4232 Las Virgenes Road, Calabasas, CA 91302

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.

5:00 PM November 4, 2019

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 October 7, 2019 (Pg. 4)

Approve.

B Financial Review: First Quarter of Fiscal Year 2019-20 (Pg. 11)

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

5 ILLUSTRATIVE AND/OR VERBAL PRESENTATION AGENDA ITEMS

A Pure Water Project Las Virgenes-Triunfo: Update

6 ACTION ITEMS

A Proposed 2020 JPA Board Meeting Calendar (Pg. 19)

Review the proposed 2020 JPA Board Meeting Calendar and make any scheduling adjustments.

B Tapia Tertiary Filter Media Replacement: Authorization of Purchase Order (Pg. 23)

Authorize the General Manager/Administering Agent to issue a purchase order to Prominent Systems, Inc., in the amount of $81,970, for replacement of the media in Filter Nos. 3 and 4 at the Tapia Water Reclamation Facility.

C 20-Inch Recycled Water Valve Repair: Emergency Declaration (Pg. 25)

Pass, approve and adopt proposed Resolution No. 11, declaring an emergency due to a broken 20-inch recycled water valve at the intersection of Kanan Road and Thousand oaks Boulevard; approve an additional appropriation, in the amount of $45,000, for expenses related to repair work; and ratify the Administering Agent/General Manager's approval of a purchase order to Toro Enterprises, Inc.

RESOLUTION NO. 11

A RESOLUTION OF THE GOVERNING BOARD OF THE LAS VIRGENES-TRIUNFO JOINT POWERS AUTHORITY FINDING THAT AN EMERGENCY WILL NOT PERMIT A DELAY RESULTING FROM COMPETITIVE SOLICITATION FOR REPAIR OF A BUTTERFLY VALVE REGULATING RECYCLED WATER LOCATED IN THE INTERSECTION OF KANAN ROAD AND THOUSAND OAKS BOULEVARD

(Reference is hereby made to Resolution No. 11 on file in the Joint Powers Authority's Resolution book and this reference the same is incorporated herein.)

D Tapia Water Reclamation Facility Chloride Study: Recommendation Report and Scope Change (Pg. 29)

Receive and file the Recommendation Report; budget and appropriate an additional $40,000 for economic and antidegradation analyses; and authorize the Administering Agent/General Manager to approve a change in scope to the professional services agreement with Larry Walker Associates, Inc., in the amount of $40,000, for the Tapia Water Reclamation Facility Chloride Study.

E Pure Water Demonstration Project and Garden: License Agreement for JPA Use of Building No. 1 (Pg. 81)

Approve the proposed License Agreement with Las Virgenes Municipal Water District to allow the JPA to use the area in and around Building No. 1 for the Pure Water Demonstration Project and Garden.

7 BOARD COMMENTS

8 ADMINISTERING AGENT/GENERAL MANAGER REPORT

9 FUTURE AGENDA ITEMS

10 INFORMATION ITEMS

A State and Federal Legislative Update (Pg. 89)

B Woolsey Fire Damage Reimbursement Update (Pg. 117)

C Pure Water Demonstration Project: Agreement with Astound Group for Visitor Experience Elements (Pg. 119)

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 October 7, 2019

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance to the Flag was led by Jay Lewitt.

1. CALL TO ORDER AND ROLL CALL

The meeting was called to order at **5:00 p.m.** by Chair Orkney in the Board Room at Las Virgenes Municipal Water District headquarters at 4232 Las Virgenes Road in Calabasas, California. Josie Guzman, Clerk of the Board, conducted the roll call.

Present: Directors Caspary, Lewitt, Lo-Hill, Orkney, Pan, Polan, Shapiro, Tjulander, and Wall.
Absent: Director Renger

2. APPROVAL OF AGENDA

Director Caspary moved to approve the agenda. Motion seconded by Director Wall. Motion carried by the following vote:

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

3. PUBLIC COMMENTS

None.

4. CONSENT CALENDAR

A Minutes: Regular Meeting of September 3, 2019: Approve.

B Tapia Water Reclamation Facility Mercury Spill Remediation: End of Emergency

End the declaration of emergency for remediation of a mercury spill at the Tapia Water Reclamation Facility.

Director Polan moved to approve the Consent Calendar. Motion seconded by Director Caspary. Motion carried by the following vote:

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

5. ILLUSTRATIVE AND/OR VERBAL PRESENTATION AGENDA ITEMS

A Pure Water Project Las Virgenes-Triunfo: Update

Mike McNutt, Public Affairs and Communications Manager, presented the proposal for the Pure Water Demonstration Facility Mural and a draft version of the Pure Water Project Las Virgenes-Triunfo orientation video.

Joe McDermott, Director of Engineering and External Affairs, reported that construction activities had begun for the Pure Water Demonstration Facility. He noted that a recommendation to award the Demonstration Garden Project was included on the agenda. He also noted that an item regarding ongoing operating costs for the Pure Water Demonstration Facility would be placed on a future agenda.

Director Polan commented that the orientation video for the Pure Water San Diego Project focused on the purification process, and he suggested that the orientation video include the same detail. Mr. McDermott responded that the orientation video would not include the same level of detail; however, the advanced water treatment process would be discussed during the tour. He stated that the video would also be used in various ways, and would be posted on the website and on social media.

The Board provided the following comments regarding the orientation video:

- Add humor and warmth to the video.
- Include landscaping, medians, and schools when describing where recycled water is used.
- Add "California" when the video references "Orange County."
- Include information regarding the use of smart meters to conserve water.
- Emphasize in the voiceover when describing the requirement to treat water that the level of treatment would exceed current drinking water standards.
- Include display boards and videos containing information regarding the $100 million cost and additional ongoing operational costs for discharging highly treated water to Malibu Creek versus creating a new water resource for the same amount.

- Maximize the viewing of the orientation video.
- Ensure there is a pause when the video discusses recycled water being discharged to the ocean.
- Consider changing "… the water ends up in Santa Monica Bay" to "… the water ends up in Malibu Lagoon, which ends up in Santa Monica Bay".
- Refer to water coming from "Northern California" as opposed to "the far north."

The Board provided the following comments regarding the mural:

- Consider not including a paddle removing oils and floating contaminants in the ribbon demonstrating the water purification process.
- Depict the natural, clean, and safe way to treat the water in order to extend resources.
- Use coastal California scenery artwork as opposed to the scientific treatment processes.
- Include impactful imagery to depict the amount time and effort it takes for a drop of water to travel from Northern California to the tap, which would then be reused.
- Ensure that the materials used for the mural are durable due to the potential effects of sunlight and concern with fading.

6. ACTION ITEMS

A Pure Water Demonstration Garden Project: Construction Award

Award a construction contract to Terra Form, Inc., in the amount of $423,000; reject the remaining bid for the Pure Water Demonstration Garden Project; authorize the Administering Agent/General Manager to approve a Scope Change to Carollo Engineers, in the amount of $31,700, for engineering services during construction; and appropriate an additional $987,917 to fund the remaining costs for the Pure Water Demonstration Project.

Eric Schlageter, Principal Engineer, presented the report.

Director Lewitt moved to approve Item 6A. Motion seconded by Director Lo-Hill.

Director Caspary moved a substitute motion to eliminate Area D from the scope of work and reduce the construction contract contingency to five percent, which would result in appropriating a lesser amount ($802,262), to fund the remaining costs for the Pure Water Demonstration Project. Substitute motion seconded by Director Polan.

A discussion ensued regarding the proposal for eliminating Area D and reducing the construction contract contingency, garden signage, and monitoring the number of Carollo Engineer's site visits.

Chair Orkney requested that staff bring back the cost of the garden signage at the next meeting.

The substitute motion carried by the following vote:

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

B Amendment No. 1 to Joint Exercise of Powers Agreement: Approval in Concept

Approve in concept Amendment No. 1 to the Joint Exercise of Powers Agreement, increasing the authority of the Administering Agent to process budgeted works of improvement without further JPA approval from $25,000 to $35,000, and request that the Las Virgenes Municipal Water District and Triunfo Water & Sanitation District consider approval of the amendment at upcoming meetings of their respective Boards.

Administering Agent/General Manager David Pedersen presented the report.

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

Motion carried by the following vote:

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

7. BOARD COMMENTS

Director Polan reported that he attended tours of the Pure Water San Diego Project and Padre Dam Advanced Water Purification Demonstration Facility during the WateReuse Symposium. He recommended that the Board visit these facilities. He also reported that he and Directors Lewitt, Lo-Hill, and Shapiro attended the tour with the Israeli delegation on September 9th, which was arranged by Las Virgenes Municipal Water District.

Director Lo-Hill reported that she attended the Colorado River Symposium, which was held September 17 through 20, 2019, in Santa Fe, New Mexico. She stated that she was enlightened and impressed to learn of the Colorado River Compact amongst the seven U.S. states in the Colorado River Basin.

Director Pan reported that she attended a tour of a City of Thousand Oaks pilot project involving testing of two-stage reverse osmosis and recirculating technology. She noted that the Ventura County Public Works Agency was in the process of conducting pilot testing of zero liquid discharge technology at the Piru Wastewater Treatment Plant to reduce brine waste to zero. She stated that she would keep everyone informed, and invite the Board Members and staff to observe the process.

Chair Orkney asked that the sign at the Tapia Water Reclamation Facility be changed to reflect the new name of Triunfo Water & Sanitation District (TWSD).

8. ADMINISTERING AGENT/GENERAL MANAGER REPORT

Administering Agent/General Manager David Pedersen stated that staff contacted Padre Dam Municipal Water District to arrange a tour of their Advanced Water Purification Demonstration Facility and Ray Stoyer Water Recycling Facility on December 2, 2019, at 1:00 p.m. He noted that staff had attempted to arrange a tour of the Pure Water San Diego Project; however, a tour could not be arranged due to construction activities. He also stated that staff was proposing that the recycled water fill station at the Rancho Las Virgenes Compositing Facility be discontinued while the composting operation remains out of service. He suggested reassessing this program after the composting operation is restored. He responded to a question regarding the timeline for resuming the composting operation by stating that staff would bring back the timeline at the next JPA meeting.

9. FUTURE AGENDA ITEMS

None.

10. INFORMATION ITEMS

A State and Federal Legislative Update

11. PUBLIC COMMENTS

None.

12. CLOSED SESSION

A Conference with Legal Counsel – Existing Litigation (Government Code Section 54956.9(a)):

Zusser Company, Inc. v. Las Virgenes Municipal Water District

The Board recessed to Closed Session at **6:24 p.m.,** and reconvened to Open Session at **6:54 p.m.**

Authority Counsel Wayne Lemieux announced that the Board received a report during Closed Session, and there was no reportable action.

13. ADJOURNMENT

Seeing no further business to come before the Board, the meeting was duly adjourned at **6:55 p.m**.

Janna Orkney, Chair

ATTEST:

Jay Lewitt, Vice Chair

November 4, 2019 JPA Board Meeting

TO: JPA Board of Directors

FROM: Finance & Administration

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

SUMMARY:

The first quarter financial review presents data as of September 30, 2019. It is important to note that due to the timing of various projects and payments, the first 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 first 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 first quarter net uses of funds in Fiscal Year 2019-20 totaled $6.4 million, compared to $3.9 million for the same period in Fiscal Year 2018-19. There was a year-over-year increase in operating revenues (14.6%) and an increase in operating expenditures (5.1%). The increase in revenues was primarily due to increased recycled water sales. The increase in operating expenditures was due to increased energy usage associated with pumping recycled water. Capital project expenditures were approximately $2.43 million more than the prior year.

When comparing to Fiscal Year 2019-20 budget estimates through the first quarter, actual operating expenditures were approximately $416,000 (9.3%) below budget. Capital project expenditures were approximately $266,000 below budget estimates, which was 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 September 30, 2019

	FY 18-19 Actual YTD	FY 19-20 Budget YTD	FY 19-20 Actual YTD
Total Operating Revenues	$ 760,416	$ 948,812	$ 871,394
RW Pump Station	366,225	545,680	353,739
RW Tanks & Reservoirs	18,505	34,802	23,202
RW System Operations	5,919	11,063	-
RW Distribution	7,230	23,838	8,950
Sewer	30,540	34,795	20,307
Waste Water Treatment	1,756,627	2,171,524	2,033,135
Composting	1,305,095	1,302,978	1,320,592
Centrate Treatment	53,010	83,755	47,843
Adminstration	337,508	287,649	271,717
Total Operating Expenses	3,880,659	4,496,084	4,079,485
Net Operating (Expenses)	$ (3,120,243)	$ (3,547,272)	$ (3,208,091)

Joint Powers Authority Operations
Quarterly Update - Comparison to Budget & Prior Year at September 30, 2019

	FY 18-19 Actual YTD	FY 19-20 Budget YTD	FY 19-20 Actual YTD
Las Virgenes Share:			
Total Revenues			
Operating Revenues	$ 536,854	$ 669,861	$ 615,204
Total Revenues	536,854	669,861	615,204
Total Expenses			
Operating Expenses	$ 2,673,774	$ 3,011,532	$ 2,810,765
Capital Project Expenses	565,466	2,471,767	2,283,739
Total Expenses	3,239,240	5,483,300	5,094,504
Net (Uses) of Funds - LV	$ (2,702,386)	$ (4,813,438)	$ (4,479,300)
Triunfo Share:			
Total Revenues			
Operating Revenues	$ 223,562	$ 278,951	$ 256,190
Total Revenues	223,562	278,951	256,190
Total Expenses			
Operating Expenses	$ 1,206,885	$ 1,484,552	$ 1,268,720
Capital Project Expenses	235,477	1,029,320	951,019
Total Expenses	1,442,362	2,513,871	2,219,739
Net (Uses) of Funds - TSD	$ (1,218,800)	$ (2,234,920)	$ (1,963,549)
Total JPA Net (Uses) of Funds	$ (3,921,186)	$ (7,048,359)	$ (6,442,849)

Joint Powers Authority Operations

Quarterly Update - Comparison to Budget & Prior Year at September 30, 2019

	FY 18-19 Actual YTD	FY 19-20 Budget YTD	FY 19-20 Actual YTD
Total Revenues			
Operating Revenues	$ 760,416	$ 948,812	$ 871,394
Total Revenues	760,416	948,812	871,394
Total Expenses			
Operating Expenses	$ 3,880,659	$ 4,496,084	$ 4,079,485
Capital Project Expenses	800,943	3,501,087	3,234,758
Other	-	-	-
Total Expenses	4,681,602	7,997,171	7,314,243
Net (Uses) of Funds	$ (3,921,186)	$ (7,048,359)	$ (6,442,849)
Las Virgenes Share	(2,768,357)	(4,813,438)	(4,479,300)
Triunfo Share	(1,152,829)	(2,234,920)	(1,963,549)

Las Virgenes - Triunfo Joint Powers Authority
Capital Improvement Project Status
September 30, 2019

Job # - Description	LV %	TWSD %	Total Project Appropriations	Prior Year Expenditures	Current Year Expenditures	Total Project Expenditures	Project Balance	LV Balance	TWSD Balance
Projects to complete by June 30, 2019									
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.									
10626 - Process Air Improvements	**70.6%**	**29.4%**	**$5,829,710**	**$2,240,138**	**$2,726,863**	**$4,967,001**	**$862,709**	**$609,073**	**$253,636**
The first phase is to replace the existing Roots blowers with new, high effiency, 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									
10638 - Demonstration Project	**70.6%**	**29.4%**	**$3,777,132**	**$837,342**	**$138,768**	**$976,110**	**$2,801,022**	**$1,977,522**	**$823,500**
sub project of 10635 Pure Water Project Additional appropriation $185,934 approved by JPA Board 7/1/19, Item 6A.									
10665 - Cordillera Tank Rehab	**70.6%**	**29.4%**	**$1,201,267**	**$39,879**	**$0**	**$39,879**	**$1,161,388**	**$819,940**	**$341,448**
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.									
10667 - Tapia Headworks White Room	**70.6%**	**29.4%**	**$412,440**	**$52,373**	**$16,158**	**$68,531**	**$343,909**	**$242,800**	**$101,109**
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.									
Total Projects to complete by June 30, 2019			***$13,291,067***	***$4,908,102***	***$3,057,898***	***$7,966,000***	***$5,325,067***	***$3,759,497***	***$1,565,570***
Multi-Year Projects									
10567 - Progmble Logic Contrlr Upgrd	**70.6%**	**29.4%**	**$1,311,560**	**$107,455**	**$29,210**	**$136,665**	**$1,174,895**	**$829,476**	**$345,419**
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**	**$81,533**	**$259,708**	**$1,190,277**	**$840,336**	**$349,941**
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									

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									
10635 - PURE WATER PROJECT	**70.6%**	**29.4%**	**$3,456,482**	**$148,654**	**$7,100**	**$155,754**	**$3,300,728**	**$2,330,314**	**$970,414**
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									
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.									
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									
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.									
10680 - RLV Digester Cleaning & Repair	**70.6%**	**29.4%**	**$2,107,776**	**$438,305**	**$34,192**	**$472,497**	**$1,635,279**	**$1,154,507**	**$480,772**
Clean out and make all necessary repairs to digesters #2. the scope of repairs is based on the recently completed rehabilitation of digester # 1.									
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.									
10689 - WoolseyFire Rpr - Rancho	**70.6%**	**29.4%**	**$1,989,455**	**$2,943**	**$11,986**	**$14,929**	**$1,974,526**	**$1,394,015**	**$580,511**
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**	**$3,864**	**$3,864**	**$874,748**	**$617,572**	**$257,176**
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									
10695 - Rancho Reliability Imprv 19-20	**70.6%**	**29.4%**	**$100,000**	**$0**	**$0**	**$0**	**$100,000**	**$70,600**	**$29,400**
Replace or rehabilitate facilities and equipment at the Rancho facility based on failure, exceedence of useful life, or obsolescence.									

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									
10696 - TWRF Reliablity Imprv. FY 19-2	**70.6%**	**29.4%**	**$100,000**	**$0**	**$8,975**	**$8,975**	**$91,025**	**$64,264**	**$26,761**
Replace or rehabilitate facilities and equipment at the Tapia facility based on failure, exceedence of useful life, or obsolescence.									
10702 - Tapia Effint 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.									
10703 - Tapia Teritary Filters Rehab	**70.6%**	**29.4%**	**$60,000**	**$0**	**$0**	**$0**	**$60,000**	**$42,360**	**$17,640**
Tertiary Filters concrete rehabilitation.									
10707 - Brine Discharge Mgmnt Proj.	**70.6%**	**29.4%**	**$210,945**	**$0**	**$0**	**$0**	**$210,945**	**$148,927**	**$62,018**
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			***$14,045,237***	***$1,301,750***	***$176,860***	***$1,478,610***	***12,566,627***	***$8,872,039***	***$3,694,588***
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.									
Total Projects on Hold			***$93,100***	***$32,447***	***$0***	***$32,447***	***$60,653***	***$42,821***	***$17,832***
Totals			**$27,429,404**	**$6,242,299**	**$3,234,758**	**$9,477,057**	**$17,952,347**	**$12,674,357**	**$5,277,990**
Totals: Las Virgenes MWD			**$19,365,159**	**$4,407,063**	**$2,283,739**	**$6,690,802**	**$12,674,357**		
Totals: Triunfo Water and Sanitation District			**$8,064,245**	**$1,835,236**	**$951,019**	**$2,786,255**	**$5,277,990**		

November 4, 2019 JPA Board Meeting

TO: JPA Board of Directors

FROM: General Manager

Subject : Proposed 2020 JPA Board Meeting Calendar

SUMMARY:

The JPA Board regularly meets on the first Monday of each month. When the first Monday of a month falls on a holiday, the Board meeting is held the following day. As previously approved by the Board, the March and September JPA Board meetings are held at the Oak Park Library. Attached for reference is the proposed 2020 JPA Board Meeting Calendar.

RECOMMENDATION(S):

Review the proposed 2020 JPA Board Meeting Calendar and make any scheduling adjustments.

FISCAL IMPACT:

No

ITEM BUDGETED:

No

DISCUSSION:

The Proposed 2020 JPA Board Meeting Calendar is presented to review for any potential conflicts.

- The May 4, 2020 JPA Board Meeting is scheduled the same week as the ACWA Spring Conference scheduled May 5 through 8, 2020.
- The first Monday in September 2020 falls on the Labor Day holiday; therefore, the regular meeting will be held on Tuesday, September 8, 2020.

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

ATTACHMENTS:

Proposed 2020 JPA Board Meeting Calendar

2020

JANUARY						
S	M	T	W	T	F	S
			1	2	3	4
5	6 JPA	7 LV	8	9	10	11
12	13	14	15	16	17	18
19	20	21 LV	22	23	24	25
26	27	28	29	30	31	

CASA Winter Conf. Indian Wells 01/21- 01/23

FEBRUARY						
S	M	T	W	T	F	S
						1
2	3 JPA	4 LV	5	6	7	8
9	10	11	12	13	14	15
16	17	18 LV	19	20	21	22
23	24	25	26	27	28	29

CASA Washington DC Forum 02/24 – 02/26
ACWA Washington DC 02/25 – 02/27

MARCH						
S	M	T	W	T	F	S
1	2 JPA	3 LV	4	5	6	7
8	9	10	11	12	13	14
15	16	17 LV	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

WateReuse Conf. San Francisco 03/15 – 03/17

APRIL						
S	M	T	W	T	F	S
			1	2	3	4
5	6 JPA	7 LV	8	9	10	11
12	13	14	15	16	17	18
19	20	21 LV	22	23	24	25
26	27	28	29	30		

California Water Policy Conf. U.C. Davis 04/02 – 04/03
Passover 04/10 – 04/09 & -4/15 – 04/16 (beings at sundown day before)

MAY						
S	M	T	W	T	F	S
					1	2
3	4 JPA	5 LV	6	7	8	9
10	11	12	13	14	15	16
17	18	19 LV	20	21	22	23
24	25	26	27	28	29	30
31						

JUNE						
S	M	T	W	T	F	S
	1 JPA	2 LV	3	4	5	6
7	8	9	10	11	12	13
14	15	16 LV	17	18	19	20
21	22	23	24	25	26	27
28	29	30				

ACWA Spring Conf. Monterey 05/05 – 05/08
Shavuot 05/29 – 05/30 (begins at sundown day before)

	LVMWD Meeting
	JPA Meeting
	District Holiday

2020

JULY						
S	M	T	W	T	F	S
			1	2	3	4
5	6 JPA	7 LV	8	9	10	11
12	13	14	15	16	17	18
19	20	21 LV	22	23	24	25
26	27	28	29	30	31	

AUGUST						
S	M	T	W	T	F	S
						1
2	3 JPA	4 LV	5	6	7	8
9	10	11	12	13	14	15
16	17	18 LV	19	20	21	22
23	25	25	26	27	28	29
30	31					

CASA Annual Conf. Lake Tahoe 08/12 – 08/14

SEPTEMBER						
S	M	T	W	T	F	S
		1 LV	2	3	4	5
6	7	8 JPA	9	10	11	12
13	14	15 LV	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

WateReuse Symposium TBD
Rosh Hashanah 09/19 – 09/20 (begins at sundown day before)
Yom Kippur 09/28 (begins at sundown day before)

OCTOBER						
S	M	T	W	T	F	S
				1	2	3
4	5 JPA	6 LV	7	8	9	10
11	12	13	14	15	16	17
18	19	20 LV	21	22	23	24
25	26	27	28	29	30	31

Sukkot 10/03 – 10/04 (begins at sundown day before)
Shmini Atzeret 10/10 (begins at sundown day before)
Simchat Torah 10/11 (begins at sundown day before)

NOVEMBER						
S	M	T	W	T	F	S
1	2 JPA	3 LV	4	5	6	7
8	9	10	11	12	13	14
15	16	17 LV	18	19	20	21
22	23	24	25	26	27	28
29	30					

DECEMBER						
S	M	T	W	T	F	S
		1 LV	2	3	4	5
6	7 JPA	8	9	10	11	12
13	14	15 LV	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

ACWA Fall Conf. Indian Wells 12/01 – 12/04
Chanukah 12/11 – 12/18 (begins at sundown day before)

	LVMWD Meeting
	JPA Meeting
	District Holiday

November 4, 2019 JPA Board Meeting

TO: JPA Board of Directors

FROM: Facilities & Operations

Subject : Tapia Tertiary Filter Media Replacement: Authorization of Purchase Order

SUMMARY:

One of the scheduled projects included in the adopted Fiscal Year 2019-20 JPA Budget is for replacement of the media in the tertiary filters at the Tapia Water Reclamation Facility. The tertiary filters are used to remove particulate matter before disinfection and discharge of the effluent. For Fiscal Year 2019-20, the media for Filter Nos. 3 and 4 is scheduled for replacement. Staff recommends issuing a purchase order to Prominent Systems, Inc., in the amount of $81,970, for the work.

RECOMMENDATION(S):

Authorize the General Manager/Administering Agent to issue a purchase order to Prominent Systems, Inc., in the amount of $81,970, for replacement of the media in Filter Nos. 3 and 4 at the Tapia Water Reclamation Facility.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

Sufficient funding is available in the adopted Fiscal Year 2019-20 JPA Budget for this work.

DISCUSSION:

There are 12 tertiary filters at Tapia that need a media replacement approximately every 12 to 15 years due to a loss of anthracite from backwashing and a decrease in performance due to continued use. For Fiscal Year 2019-20, the media for Filter Nos. 3 and 4 is scheduled for replacement. The last time the media was replaced in these filters was 2006. Each filter contains approximately four feet of anthracite placed over a one foot layer of gravel that separates the anthracite from the underdrain. A request for quotations was advertised

on LVMWD's website, and the following two bids were received for the work.

Prominent Systems, Inc.	$ 40,985.00 per filter
Carbon Activated Corp.	$ 55,085.00 per filter

The cost of the work per filter has remained consistent since last year when the media for Filter Nos. 1 and 2 was replaced at a cost of $41,675.49 per filter. Staff recommends issuing a purchase order to Prominent Systems, Inc., for the work.

Prepared by: Brett Dingman, Water Reclamation Manager

November 4, 2019 JPA Board Meeting

TO: JPA Board of Directors

FROM: Facilities & Operations

Subject : 20-Inch Recycled Water Valve Repair: Emergency Declaration

SUMMARY:

On October 9, 2019 at 12:00 a.m., staff responded to a reported water main leak at the intersection of Kanan Road and Thousand Oaks Boulevard. To assess the water main leak and allow for its repair, staff closed a 20-inch valve to isolated the leak. A shear pin within the valve broke off and left the valve inoperable in the closed position. The closed valve interrupted the delivery of recycled water to the District and JPA service areas west of Kanan Road, which constitutes approximately 50% of the system. Potable water supplement was used temporarily to maintain recycled water service to the affected areas. Given the large portion of the recycled water system that was affected and the estimated cost to repair the broken valve, which is approximately 10 feet deep in a very busy intersection, the Administering Agent/General Manager recommended that the repair work be performed without delay on an emergency basis. Staff recommends adoption of proposed Resolution No. 11 for the Board to declare an emergency for repair of the 20-inch recycled water valve.

RECOMMENDATION(S):

Pass, approve and adopt proposed Resolution No. 11, declaring an emergency due to a broken 20-inch recycled water valve at the intersection of Kanan Road and Thousand oaks Boulevard; approve an additional appropriation, in the amount of $45,000, for expenses related to repair work; and ratify the Administering Agent/General Manager's approval of a purchase order to Toro Enterprises, Inc.

RESOLUTION NO. 11

A RESOLUTION OF THE GOVERNING BOARD OF THE LAS VIRGENES-TRIUNFO JOINT POWERS AUTHORITY FINDING THAT AN EMERGENCY WILL NOT PERMIT A DELAY RESULTING FROM COMPETITIVE SOLICITATION FOR REPAIR OF A BUTTERFLY VALVE REGULATING RECYCLED WATER LOCATED IN THE INTERSECTION OF KANAN ROAD AND THOUSAND OAKS BOULEVARD

(Reference is hereby made to Resolution No. 11 on file in the Joint Powers Authority's Resolution book and this reference the same is incorporated herein.)

FISCAL IMPACT:

Yes

ITEM BUDGETED:

No

FINANCIAL IMPACT:

The total cost of the work is not expected to exceed $45,000. An additional appropriation, in the amount of $45,000, is required because the repair work was not anticipated and included in the adopted Fiscal Year 2019-20 JPA Budget. The cost of the work will be allocated 70.6% to LVMWD and 29.4% to Triunfo Water and Sanitation District.

DISCUSSION:

Based on staff experience, repairs have been made to valves with broken shear pins in this area over the years. Once the broken shear pins have been replaced, no other operational issues have been encountered with the subject valves. These types of repairs would normally be performed by staff; however, the broken valve was approximately 10-feet-deep due to a large buried drainage pipe over the recycled water main, and the construction work had to be performed at night to avoid impacts to residents and businesses around the busy intersection. The expeditious repair of the valve avoided a larger expense associated with the temporary use of potable supplement to approximately 50% of JPA's recycled water system.

Prepared by: Jim Korkosz, Facilities Manager

ATTACHMENTS:

Proposed Resolution No. 11

RESOLUTION NO. 11

A RESOLUTION OF THE GOVERNING BOARD OF THE LAS VIRGENES-TRIUNFO JOINT POWERS AUTHORITY FINDING THAT AN EMERGENCY WILL NOT PERMIT A DELAY RESULTING FROM A COMPETITIVE SOLICITATION FOR REPAIR OF A BUTTERFLY VALVE REGULATING RECYCLED WATER FLOW LOCATED IN THE INTERSECTION OF KANAN ROAD AND THOUSAND OAKS BOULEVARD

WHEREAS, at approximately 12:00 a.m. on October 9, 2019, staff responded to a leak located in and around the western portion of the JPA's recycled water system near the intersection of Kanan Road and Thousand Oaks Boulevard;

WHEREAS, staff responded immediately to the incident, assessed the potential sources and causes of the leak and began the process to shut off the water supply;

WHEREAS, in the process of isolating the leak, staff closed a 20-inch butterfly valve in the east to west recycled water supply line, causing the shear pin on the valve to break;

WHEREAS, the broken shear pin left the valve in the closed position, stopping the flow of recycled water to the area west of Kanan Road and necessitating the use of potable water supplement to maintain service to the recycled water system;

WHEREAS, the broken shear pin appeared to have failed due to age, and the valve could not be reasonably accessed as it is located approximately ten (10) feet under the pavement in the middle of a very busy intersection;

WHEREAS, a competitive bidding process is normally required for construction projects involving an amount of $35,000 or more pursuant to California Public Contract Code §20642;

WHEREAS, one exception to the requirement to give notice for bids to let such contracts is in the case of emergency;

WHEREAS, "emergency" means a sudden, unexpected occurrence that poses a clear and imminent danger, requiring immediate action to prevent or mitigate the loss or impairment of life, health, property, or essential public services (California Public Contract Code §1102);

WHEREAS, in an emergency, the JPA may, pursuant to California Public Contract Code §22050, repair or replace a public facility, take any directly related and immediate action required, and procure the necessary equipment, services, and supplies for those purposes without engaging in the competitive bidding process; and

WHEREAS, staff recommends an emergency declaration to perform emergency repairs of the butterfly valve and restoration/clean-up of the surrounding area.

NOW, THEREFORE, BE IT RESOLVED BY THE GOVERINING BOARD OF THE LAS VIRGENES-TRIUNFO JOINT POWERS AUTHORITY AS FOLLOWS:

1. Substantial evidence supports a finding that the above-described circumstances constitute an emergency that will not permit a delay resulting from a competitive

solicitation for bids and the above-described actions are necessary to respond to this emergency.

2. The Board authorizes the Administering Agent/General Manager to proceed with the above-described actions in response to this emergency.

3. The Board shall review these emergency actions at the next Board meeting and, if those actions continue, shall terminate those actions at the earliest possible date that conditions warrant so that the remainder of the emergency actions may be completed by giving notice for bids to let contracts should sufficient time then exist to secure the necessary services.

PASSED, APPROVED, AND ADOPTED this 5th day of November, 2019.

_____
Janna Orkney, Chair

ATTEST:

_____
Jay Lewitt, Vice Chair

APPROVED AS TO FORM:

_____
Legal Counsel

November 4, 2019 JPA Board Meeting

TO: JPA Board of Directors

FROM: Facilities & Operations

Subject : Tapia Water Reclamation Facility Chloride Study: Recommendation Report and Scope Change

SUMMARY:

On November 6, 2017, the JPA Board accepted a proposal from Larry Walker Associates, Inc. (LWA), to perform the Tapia Water Reclamation Facility Chloride Study. The study is required by a Time Schedule Order (TSO) in the 2017 Tapia NPDES Permit. The purpose of the study is to evaluate and address levels of chloride discharged from Tapia to the Los Angeles River. The Los Angeles River discharge concentration limit for chlorides will be reduced from 190 to 150 mg/L, effective August 1, 2022, unless the regulatory limit is amended by the Los Angeles Regional Water Quality Control Board (RWQCB).

Attached is a copy of the Recommendation Report, which is the fourth and final of the sub-reports included as part LWA's scope of work. The report must be submitted to the RWQCB by January 1, 2020. The purpose of this report is to use the information from the previously completed Chloride Source Investigation Report, Evaluation Report, and Identification of Options Report to present a recommendation to address compliance with the lower chloride limit.

The Recommendation Report concluded that there are no technological or economically feasible source control options for chloride. Therefore, a regulatory solution is the only reasonable alternative. The conclusion was based upon the following findings from the three previous reports:

- Tapia influent flow accounts for 89% of the effluent chloride load.
- Only a few of the sources that contribute to chloride loading at Tapia are controllable or partially controllable. Of the controllable sources, some are not economically feasible to control.
- Tapia's discharge to the Los Angeles River has no potential agricultural uses downstream. Agricultural uses are considered to be the most sensitive to chloride. Additionally, the water quality objective downstream had been previously established at 190 mg/l for dischargers in the lower reaches.

Based on these findings, the report recommends developing a Site Specific Objective of 190 mg/L for Tapia's discharge to the Los Angeles River because it is protective of beneficial uses and is the most straightforward with respect to process of the strategies evaluated.

Staff recommends that the Board receive and file the Recommendation Report and authorize

a change in scope for LWA. During a meeting with RWQCB staff, they requested that the JPA prepare the full justification needed for a Basin Plan Amendment, including economic and antidegradation analyses. The original scope of work for the project did not include economic and antidegradation analyses. The estimated additional cost to complete the additional work as requested by the RWQCB and for LWA to participate in follow-up meetings is $40,000.

RECOMMENDATION(S):

Receive and file the Recommendation Report; budget and appropriate an additional $40,000 for economic and antidegradation analyses; and authorize the Administering Agent/General Manager to approve a change in scope to the professional services agreement with Larry Walker Associates, Inc., in the amount of $40,000, for the Tapia Water Reclamation Facility Chloride Study.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

No

FINANCIAL IMPACT:

An appropriation is needed for the cost of the additional work in the amount of $40,000. The cost of the work will be allocated 70.6% to LVMWD and 29.4% to Triunfo Water and Sanitation.

DISCUSSION:

In 1999, Tapia began periodically discharging its treated effluent to the Los Angeles River to comply with a prohibition on discharges to Malibu Creek from April 15th to November 15th each year. Discharges to the Los Angeles River were originally permitted under NPDES Order No. 99-066, which prescribed a chloride limit of 190 mg/L rather than the 150 mg/L Basin Plan Water Quality Objective. The rationale for the higher chloride limit was RWQCB Resolution No. 97-02 that revised the chloride limit from 150 mg/L to 190 mg/L for various surface waters, including certain reaches of the Los Angeles River due to the impacts of drought on chloride levels in potable source waters. The 190 mg/L chloride limit for discharge has been maintained in all subsequent permits for Tapia based on the same rationale.

During the renewal of Tapia's NPDES permit in 2017, RWQCB staff discovered that the long-standing application of Resolution No. 97-02 was in error because it only covered the portions of the Los Angeles River downstream of the Sepulveda Flood Control Basin and Tapia's discharge occurs upstream. The reason that the 1997 Resolution did not include the portions of the Los Angeles River upstream of Sepulveda Flood Control Basin is because there were no discharges upstream of the Tillman Water Reclamation Plant, which is adjacent to the Sepulveda Flood Control Basin, at that time. Tapia's permitted-discharges to the upstream reach of the Los Angeles River did not begin until two years later, in 1999.

Tapia's discharge to the Los Angeles River is vital to the success of the Pure Water Project Las Virgenes-Triunfo. The new NPDES permit has stipulations that allow for discharge to Malibu Creek during heavy rain events when daily flows exceed 11 MGD. The rationale for the 11 MGD trigger point was that 6 MGD could be sent to the advanced water treatment facility and 5 MGD could be pumped to the Los Angeles River. If the option to discharge to the Los Angeles River is not available, then the capacity to dispose of excess effluent during heavy rain events is reduced to 6 MGD. Additionally, discharge to the Los Angeles River may also be necessary to dispose of small amounts of effluent when there is not enough water available to start up and maintain operation of the advanced water treatment plant.

During the draft permit comment period, JPA staff requested that the RWQCB issue a Time Schedule Order (TSO), which would culminate in a proposed Basin Plan Amendment. At the June 1, 2017 permit hearing, the RWQCB issued a TSO, which requires a study containing six sub-reports. These reports include: an investigation into chloride sources, an evaluation of the impact of chloride levels and source control, an identification of options to address compliance including regulatory remedies, a recommendation, implementation, and confirmation of compliance. Larry Walker Associates, Inc. were retained to complete the first four of these sub-reports.

The Recommendation Report, which is the fourth and final report included in LWA's scope of work, is the subject of this memorandum. In the Recommendation Report, information from the previous three reports was presented outlining the following findings:

1. Influent sources of chloride to Tapia account for 89% of the effluent chloride load. Of this, potable water supply accounts for approximately half of the total chloride load into Tapia.
2. Only a few of the sources that contribute to chloride loading at Tapia are controllable or partially controllable. Of the controllable sources, some control methods are not economically feasible.
3. The location of Tapia's discharge to the Los Angeles River occurs in Reach 6, which has no potential agricultural uses. Agricultural uses are considered to be the most sensitive to chloride. Additionally, the water quality objective downstream of Reach 6 has been established to be 190 mg/l for dischargers in the lower reaches.
4. Because technologically and economically feasible source control options for chloride were not identified that would result in consistent compliance with the 150 mg/l chloride effluent limit, regulatory solutions were evaluated.
5. The report recommends the development of a Site Specific Objective of 190 mg/L because it is protective of beneficial uses and is the most straightforward with respect to process of the strategies evaluated.

Larry Walker Associates' scope of work was based on completing the four sub-reports required in the TSO's compliance schedule including the Chloride Source Investigation Report, Evaluation of Options Report, Identification of Options Report and the Recommendations Report. LWA and JPA staff met with the RWQCB in April 2019 to review the work completed and discuss the approach to justifying a Basin Plan Amendment thorough a Site Specific Objective. The RWQCB requested that economic and antidegradation analyses be included with the Recommendation Report.

To complete the additional work for the report, LWA needs to include the full justification for the Basin Plan Amendment, including economic and antidegradation analyses. The original scope of work for the project did not include any regulatory analyses required by the RWQCB to gain approval of the recommended regulatory option. The remaining estimated effort to complete

and submit the Recommendation Report as requested by the RWQCB and participate in follow-up meetings is an additional $40,000. The original cost of the scope of work was $91,850.

Prepared by: Brett Dingman, P.E., Water Reclamation Manager

ATTACHMENTS:

Recommendation Report
Scope Change Request

OCTOBER 14, 2019

LAS VIRGENES MUNICIPAL WATER DISTRICT

Recommendation Report

Prepared by:
LARRY WALKER ASSOCIATES

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1 Introduction

Tapia Water Reclamation Facility (WRF) is owned and operated by the Las Virgenes – Triunfo Joint Powers Authority (JPA), which consists of the Las Virgenes Municipal Water District (LVWMD) and Triunfo Sanitation District. The Tapia WRF discharges tertiary treated wastewater primarily to Malibu Creek (Discharge Point 001) and occasionally to the Los Angeles (LA) River (Discharge Point 005), under Order No. R4-2017-0124, NPDES No. CA0056014, issued by the Los Angeles Regional Water Quality Control Board (Regional Board) to LVMWD[1]. Tapia WRF discharges to Arroyo Calabasas, a tributary to the LA River when necessary to comply with a seasonal discharge prohibition for Malibu Creek from April 15th to November 15th.

Order No. R4-2017-0124 revised the chloride effluent limitation for the Tapia WRF discharge to the LA River from 190 mg/L to 150 mg/L. The Tapia WRF is not able to consistently comply with the new chloride effluent limit and, therefore, a time schedule order (TSO,Order No. R4-2017-0125) was issued by the Regional Board that contains interim limits and milestones to allow the Tapia WRF time to achieve consistent compliance.

1.1 SUMMARY OF TSO REQUIREMENTS

The TSO requires specific actions to identify and evaluate effluent chloride sources and identify options to reduce chloride sources or regulatory options to amend the new effluent limitation, which may include a Site-Specific Objective, a Basin Plan Amendment, and/or a discharge specific variance. The TSO establishes a schedule to comply with or recommend regulatory actions to address Tapia WRF's ability to comply with the effluent limitation of 150 mg/L, during which time, Tapia WRF is subject to an interim effluent limitation of 190 mg/L.

The first requirement and milestone in the TSO was to investigate chloride sources and submit a Chloride Source Investigation Report, which was submitted as required to the Regional Board on March 29, 2018. The Chloride Source Investigation Report quantified sources of chloride in Tapia WRF's effluent. The second requirement and milestone in the TSO was to evaluate data from the Chloride Source Investigation Report and impacts on chloride levels in the final effluent. The Chloride Evaluation of Options Report was submitted to the Regional Board on August 27, 2018. The Regional Board provided comments and a revised version was submitted December 2018. The third requirement and milestone in the TSO was to identify options to meet this requirement and use the information from the first two reports to identify potential implementation and regulatory options for meeting or adjusting the chloride effluent limitations. The Identification of Options Report was submitted to the Regional Board in December 2018.

The final requirement and milestone in the TSO, the Recommendation Report, is due to the Regional Board on January 1, 2020. The purpose of this report is to use the information from previous reports and other supporting data to recommend appropriate remedial actions such as source reduction activities and site-specific or discharge-specific regulatory actions for meeting

[1] LVMWD is the Permittee under Order No. R4-2017-0124 though Tapia WRF is jointly owned/operated by the JPA.

or adjusting the chloride effluent limitations. **Table 1-1** lists the TSO requirements including the requirements for the Recommendation Report and where each element is addressed.

An overview of the findings in the previous reports and the basis for the recommended actions in this report are provided in the following sections:

- Section 1.2, Overview of Submitted Reports and Recommendation
- Section 2, Basin Plan Objectives
- Section 3, Recommended Remedial Action – Development of a Site Specific Objective
- Section 4, Supporting Data
- Section 5, Final Recommendation

Table 1-1. TSO (Order No. R4-2017-0125) Requirements and Schedule

Requirement	Section/Report
1. Identify chloride levels in source waters delivered to residents in LVMWD's service area from 1999-present. The composition of the various sources of water delivered to the service area shall be described, including but not limited to water from the State Water Project (SWP), Colorado River Aqueduct, Los Angeles Department of Water and Power, and Las Virgenes Reservoir.	**Chloride Source Investigation Report**
2. Evaluate data from the Chloride Source Investigation Report and impacts on chloride levels in the final effluent.	**Chloride Evaluation of Options Report**
3. Evaluate beneficial uses of the receiving water downstream of Discharge Point 005, the frequency of the discharge, characterization of discharge location and flow path, and the impact the discharge may have on the receiving water.	**Chloride Evaluation of Options Report**
4. Evaluate potential source reduction activities that the Permittee can feasibly implement to reduce chloride in the influent and effluent, including timeframes for each activity.	**Chloride Evaluation of Options Report**
5. Evaluate the effect of drought on chloride levels in source and influent water and substantiate whether or not the findings in 97-02 are applicable to Tapia WRF's discharge.	**Chloride Evaluation of Options Report**
6. Propose possible source reduction activities including, but not limited to, public outreach, chloride dose optimization, and the impact and feasibility of installing an ultraviolet light disinfection system.	**Chloride Identification of Options Report**
7. Propose solutions to the Regional Water Board that may include utilizing the Chloride Source Investigation and Evaluation Reports, development of a Site-Specific Objective, a Basin Plan Amendment, and/or a discharge-specific variance for consideration by the Regional Water Board.	**Chloride Identification of Options Report**
8. Present recommendation and supporting data for appropriate remedial actions including possible source reduction activities and site-specific or discharge-specific regulatory actions.	**Sections 3,4 and 5 of this Report**

1.2 OVERVIEW OF SUBMITTED REPORTS AND RECOMMENDATION

The findings of the reports submitted previously as required by the TSO are provided below along with the recommendation based on these reports.

1.2.1 Sources of Chloride

The Chloride Source Investigation Report estimated the relative contributions of sources to chloride levels in the effluent. **Table 1-2** and **Figure 1-1** show a summary of estimated loads from sources of chloride in Tapia WRF effluent for the period from June through December 2017. The monthly average influent chloride concentration during the period from June through December 2017 was 148 mg/L. Using the monthly average influent flow during that period, 7.6 MGD, the average influent chloride load was 9,400 lbs/day. Over the same period, the average effluent load was 10,600 lbs/day, based on an average monthly effluent concentration of 164 mg/L and an average monthly effluent flow of 7.8 MGD.

Table 1-2. Summary of Estimated Chloride Loads to Tapia WRF, June-December 2017

Source	Estimated Load	% Contribution to Effluent Load
Influent sources	**9,400 lbs/day**	**89%**
Water supply	4,900 lbs/day	46%
Industrial sources	48 lbs/day	1%
Residential water softeners	2,300 lbs/day	22%
Residential uses	1,700 lbs/day	16%
Commercial uses	230 lbs/day	2%
Unidentified influent sources	220 lbs/day	2%
In-plant sources	**1,200 lbs/day**	**11%**
Sodium hypochlorite	1,200 lbs/day	11%
Average Effluent Load, June-December 2017	**10,600 lbs/day**	

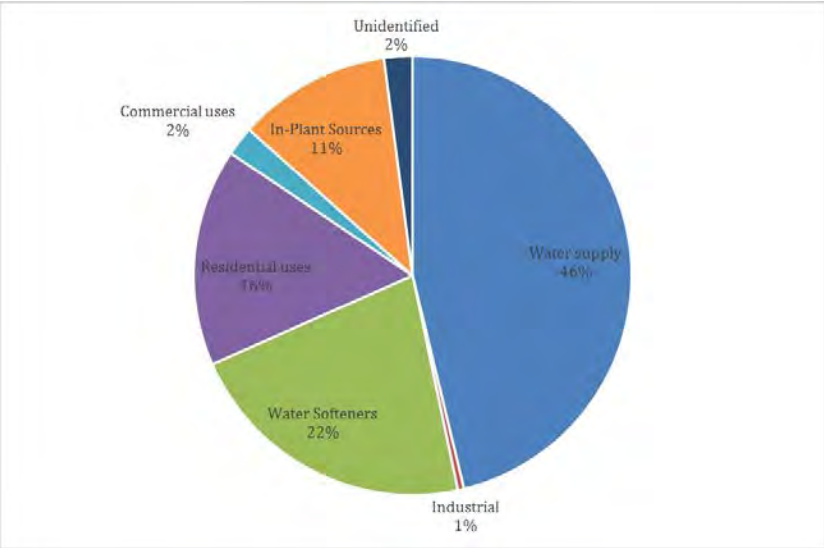

Figure 1-1. Summary of Estimated Effluent Chloride Loads from Tapia WRF, June-December 2017

The water supply accounts for almost half the total effluent chloride load, followed by residential water softeners accounting for over one-fifth of the total effluent load. Of the other sources evaluated, over one-third of the total effluent chloride load originates from residential uses or in-plant sources. Commercial and industrial uses together comprise a very small portion (3%) of the total effluent chloride load. All identified load sources make up 98% of the total effluent load. One potential source which may contribute to the remaining 2% of effluent chloride loading is collection system inflow and infiltration from groundwater. However, data is not currently available to estimate contributions from inflow and infiltration. The difference between identified source loads and total influent load may also be related to uncertainties and data variability associated with the estimated source analysis.

1.2.2 Potential Strategies to Reduce Chloride Loads

The Evaluation of Options Report assessed the technical and economic feasibility of controlling the identified sources and evaluated impacts of the discharges with respect to the beneficial uses of the receiving water. Among the identified key sources of chloride to the Tapia WRF, only a few are controllable or partially controllable by actions from LVMWD. Industrial and commercial uses are considered controllable while residential water softener use is partially controllable. Chloride levels in the imported water supply are not controllable and loads from residential uses may be partially controllable. Unidentified loads are also not controllable without further investigation to determine their specific source, or the degree to which the 2% contribution from unidentified loads can be attributed to uncertainty associated with the source identification analysis. **Table 1-3** lists the potential strategies or approaches to reduce chloride loads from each source.

While reduction in chloride contributions from the Las Virgenes Reservoir and from in-plant sources (i.e., chlorine disinfection) may be technically feasible, they were determined to not be economically feasible. Covering and lining the reservoir, estimated to cost in the range of $12.6M to over $20M, would only result in reducing a portion of 4% of the total effluent chloride load. Controlling in-plant chloride load sources can be fulfilled by conversion to UV disinfection, which requires planning, design, construction, testing, and regulatory approvals. This process is estimated to cost $18,000,000 to construct and $600,000 for annual operation and maintenance (O&M) to address a portion of 11% of the total effluent chloride load.

The Evaluation of Options Report also assessed impacts to the beneficial uses of the receiving water. The reach to which Tapia discharges in the Los Angeles River Watershed (i.e., Reach 6 of the Los Angeles River) does not have any existing or potential agricultural beneficial uses, which are considered to be the most sensitive to chloride concentrations. Reaches downstream of the Tapia Discharge also have no existing or potential agricultural beneficial uses. The existing discharge concentration is less than the 190 mg/L water quality objective that is applicable in other reaches of the Los Angeles River watershed and is considered to be protective of the designated beneficial uses in the watershed.

Table 1-3. Controllability of Chloride Load Sources and Reduction Strategies

Source		% Contribution to Effluent Load	Controllability	Chloride Reduction Strategies/Approaches
Influent sources		***89%***		
Water supply	Imported Water	42%	Not controllable	N/A
	Las Virgenes Reservoir Sources	4%	Partially Controllable	1) Conversion to a non-chlorine primary disinfection system 2) Lining or covering the reservoir to reduce groundwater influence or evaporation
Industrial/ Commercial uses		3%	Controllable	1) Product substitution or reducing quantities of products used 2) Modification of equipment practices or processes, such as eliminating salt-based water softeners, maximizing reverse osmosis efficiency, minimizing pH adjustments, boiler blowdown and cleaning methods 3) Redirecting the waste stream for on-site reuse 4) Pretreatment, such as membrane treatment methods, or elimination of discharges by redirecting the waste stream
Residential water softeners		22%	Partially Controllable	1) Public outreach, education, and encouraging residents to voluntarily stop using water softeners or to switch to non-salt discharging alternatives 2) Rebates or other financial incentives for residents to remove self-regenerating water softeners (SRWSs) 3) Ordinances banning or restricting residential SRWSs
Residential uses		16%	Partially controllable	Education and outreach to promote more environmentally friendly practices such as using high efficiency detergents, etc.
Unidentified influent sources		2%	Not controllable unless identified	N/A
In-plant sources		***11%***		
Sodium hypochlorite		11%	Controllable	1) Conversion to non-chlorine disinfection, such as ultra-violet (UV) disinfection

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1.2.3 Potential Regulatory Solutions

The Identification of Options Report assessed the identified source reduction options and proposed "solutions to the Regional Water Board that may include utilizing the Chloride Source Investigation and Evaluation Reports, development of a Site-Specific Objective, a Basin Plan Amendment, and/or a discharge-specific variance for consideration by the Regional Water Board." Because technically and economically feasible source control options were not identified that would result in consistent compliance with the current chloride effluent limit, the Identification of Options report evaluated regulatory solutions.

Regulatory solutions could be developed that would likely require fewer resources than the control strategies and still be protective of the Los Angeles River watershed beneficial uses. The Chloride Identification of Options Report evaluated modifying objectives, modifying effluent limitations through a variance and developing implementation provisions in the Basin Plan. **Table 1-4** provides a summary of the potential options and relevant considerations for evaluating the options.

Of the strategies in **Table 1-4**, LVMWD is recommending developing a Site Specific Objective of 190 mg/L because it is protective of beneficial uses and is the most straightforward with respect to process of the strategies evaluated.

Justification for this objective is presented below with respect to history and background related to the chloride water quality objectives applied to the LA River and considerations of impacts to water quality and benefit to the people of the State as required by antidegradation provisions and other regulatory requirements.

Table 1-4. Summary of Potential Regulatory Solutions

Regulatory Strategy	Result in Modifications to Effluent Limits that are Achievable?	Costs of Strategy as compared to implementation action costs	Protection of Designated Beneficial Uses?	Time Frame
Site Specific Objective of 190 mg/L	Yes	Low	Yes	<1 year if information from 97-XX can be used. Possibly additional time if new information needs to be developed
Adopt USEPA Criteria of 230 mg/L	Yes	Low, but higher than SSO of 190 mg/L	Yes	1 to 1.5 years because new information may need to be developed to demonstrate that the higher objective is protective of all beneficial uses
Variance	Yes, for the current permit term, but is subject to review and is not a permanent modification of the objectives	Lower than implementation, but higher than previous two options because requires Use Attainability type analysis	Yes	Minimum of 1 year, but could be longer. Requires development of significant new information to meet 40 CFR 131.14 requirements.
Implementation BPA	Possibly. This option does not have established precedents and is therefore more unclear as to how the process and results would be determined	Low because implementation provisions are easier to adopt than site-specific objectives, but costs are more uncertain because of the lack of precedents	Yes	Could be the quickest option, but more uncertain because of lack of precedents

2 Basin Plan Objectives

The Tapia WRF discharges on a seasonal basis to Arroyo Calabasas which is tributary to Reach 6 of the Los Angeles River. Chloride objectives to protect beneficial uses applicable to Reach 6 include 250 mg/L for municipal drinking water and 230 mg/L for aquatic life. Chloride levels between 100-120 mg/L are considered to be protective of salt-sensitive agriculture. However, there is no agriculture beneficial use applicable to the LA River. The chloride water quality objective of 150 mg/L in Reach 6 of the Los Angeles River appears to have been established based on historic background concentrations. Chloride water quality objectives that are applicable to other reaches of the Los Angeles River were originally established based on historic background concentration data and revised in response to drought conditions.

In 1975, the Regional Board used *background concentrations* of chloride to establish water quality objectives for chloride in most of the Los Angeles Region's waterbodies in accordance with the the State Antidegradation Policy (State Board Resolution No. 68-16) and the Federal Antidegradation Policy (40 CFR 131.12). In establishing these water quality objectives, the Regional Board assumed these concentrations would remain relatively constant; however, during the late 1980s and in 1990, drought in northern California watersheds, where the imported supply water originates, made it difficult for many dischargers in the Region to comply with water quality limits for chloride. This was because water supplies from these watersheds often had higher than normal chloride concentrations resulting in waste discharges that exceeded chloride limitations.

2.1 THE DROUGHT POLICY (RESOLUTION 90-004)

To provide a measure of relief to dischargers unable to meet chloride limitations, the Regional Board adopted Resolution No. 90-004, Effects of Drought Induced Water Supply Changes and Water Conservation Measures on Compliance with Waste Discharge Requirements within the Los Angeles Region. This policy, adopted on March 26, 1990, temporarily raised chloride limitations for a period of three years and set them at the lesser of 250 mg/L, or the supply concentration plus 85 mg/L[2].

This approach was developed in coordination with several dischargers who provided data to confirm that supply waters imported into the Region were the cause of exceedances of chloride limits. To determine the level of chloride loading that occurs during use and treatment of supply waters and wastewaters, the Regional Water Board staff used data from POTWs' self-monitoring reports and other information submitted by dischargers and recommended use of a chloride loading factor of 85 mg/L[3].

[2] California Regional Water Quality Control Board, Los Angeles Region, 1994, Water Quality Control Plan Los Angeles Region, Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties.

[3] California Regional Water Quality Control Board, Los Angeles Region, 1997, 400th Regular Board Meeting. Amendment to the Water Quality Control Plan (Basin Plan) to incorporate a "Policy for Addressing Levels of

2.2 THE 1994 BASIN PLAN

The drought ended before the Drought Policy was due to expire in 1993. Therefore, the 1994 Basin Plan did not modify the water quality objectives for chloride of 150 mg/l for the reaches above Los Angeles River Estuary. However, since water supply reservoirs still had high chloride concentrations and it was estimated that it would take 12 to 18 months for complete replenishment of imported waters to be released from the reservoirs, the Regional Board renewed the Drought Policy in June 1993 and again in February 1995. The Drought Policy was due to expire on the earlier of February 27, 1997 or when chloride levels in imported water supplies returned to pre-drought conditions. However, chloride levels in supply waters imported into the Region remained higher than pre-drought conditions.

The elevated levels of chloride concentrations in the imported supply water along with the anticipated effects of future droughts caused the Regional Board to develop a long-term solution to address chloride and work with a group of technical advisors, known as the Chloride Subcommittee of the Surface Water Technical Review Committee, which represented a variety of interests, including: water supply, reclamation, and wastewater management; environmental protection; and water softener industry interests. This group sought an approach to permanently reset water quality objectives for chloride in certain waterbodies, using levels of chloride in water supply plus a chloride loading factor.

2.3 CHLORIDE POLICY

On January 27, 1997, the Regional Board adopted Resolution No. 97-02, Amendment to the Water Quality Control Plan for the Los Angeles Region to Incorporate a Policy for Addressing Levels of Chloride in Discharges of Wastewaters. With the adoption of this resolution, the Regional Board redefined reaches on the Los Angeles River and split the reach "Los Angeles River above Figueroa Street" into the following two reaches:

i. Los Angeles River and tributaries upstream Sepulveda Flood Control Basin (i.e., Reaches 5 and 6)
ii. Between Sepulveda Flood Control Basin and Figueroa Street (including Burbank Western Channel only) (i.e., Reaches 3 and 4)

The Regional Board revised the chloride objectives from 150 mg/L to 190 mg/L for Reaches 1-4 (between the estuary and the Sepulveda Flood Control Basin) on January 27, 1997, but kept the 150 mg/L objective for Reaches 5 and 6, the reaches upstream of Sepulveda Flood Control Basin. The Tapia WRF discharges into a tributary to Reach 6 of the Los Angeles River.

Chloride in Discharges of Wastewaters," Available at https://www.epa.gov/sites/production/files/2015-03/documents/ca4-amend-losangeles-region.pdf

The basis for recommending the new objectives were the lower of (i) levels needed to protect beneficial uses, or (ii) chloride levels in supply waters imported into the Region plus a chloride loading factor of 85 mg/L (**Table 2-1**).

Table 2-1 New (1997) and Historic (pre-1997) Water Quality Objectives for Chloride in Los Angeles River Reaches[4]

Waterbody	Background Level (mg/L)	Supply Water Baseline* (mg/L)	Loading Factor (mg/L)	1997 Objective (mg/L)	Pre-1997 Objective (mg/L)
Los Angeles River and tributaries - upstream Sepulveda Flood Control Basin (Reaches 5 and 6)	128	-	-	150	150
Los Angeles River - Between Sepulveda Flood Control Basin and Figueroa Street (Reaches 3 and 4)	128	105	85	190	150
Other tributaries to Los Angeles River - Between Sepulveda Flood Control Basin and Figueroa Street	108	-	-	150	150
Los Angeles River - Between Figueroa Street and estuary (Reaches 1 and 2)	140	105	85	190	150
Other tributaries to Los Angeles River - Between Figueroa Street and estuary	90	-	-	150	150

*To determine baseline levels of chloride in supply waters, Regional Water Board staff used information provided by agencies that import water

The reach to which the Tapia WRF discharges, "Los Angeles River and tributaries - upstream Sepulveda Flood Control Basin (Reaches 5 and 6)," has the same background level as the reaches just downstream, which have a revised chloride objective of 190 mg/L. However, for the reach to which the Tapia WRF discharges, the 1997 objective was retained rather than basing it on the water supply baseline and loading factor that was considered for the other reaches with similar background levels.

For Reaches 1-4, a chloride concentration of 190 mg/L was found to be fully protective of the beneficial uses and was consistent with the State and Federal Antidegradation Policies.

2.4 CURRENT OBJECTIVES

The revised chloride water quality objective of 190 mg/L described in Resolution No. 97-02 was used as the basis to set the final effluent limitations for chloride in Order R4-2010-0165 for the Tapia WRF discharge to a tributary to Reach 6 of the Los Angeles River. However, this water quality objective was later determined to not be applicable to Tapia WRF's discharge as the

[4] Adapted from California Regional Water Quality Control Board Los Angeles Region, Staff Report: Revised Policy for Addressing Levels of Chloride in Discharges of Wastewaters, November 15, 1996.

reach applicable to the Tapia WRF discharge is Reach 6 with a chloride objective of 150 mg/L. The 2013 Basin Plan Amendment, Resolution R13-003 adopted on May 02, 2013, also included additional reaches along the Los Angeles River and revised the Water Quality Objectives for chloride for those reaches specified in Resolution No. 97-02.

3 Recommended Remedial Action-SSO

With no existing or potential agricultural beneficial uses in Arroyo Calabasas or downstream reaches of the Los Angeles River, chloride objectives necessary to protect those more sensitive beneficial uses are not applicable to the receiving water to which the Tapia WRF discharges. Therefore, an alternative chloride water quality objectives that will be protective of the applicable beneficial uses should be considered. In addition, cost-effective control strategies are not available that would achieve the needed reduction that would ensure compliance with the current objective of 150 mg/L.

Justification for establishing a Site Specific Objective of 190 mg/L is discussed below including how this value was determined, how it compares to current conditions in the receiving water and how the discharge may be impacted by future conditions including water conservation, future droughts and JPA's planned Pure Water Project.

3.1 DETERMINATION OF PROPOSED CHLORIDE SSO

As discussed in **Section 2.4** and presented in **Table 2-1**, the Regional Board staff used a Supply Water Baseline concentration of 105 mg/L and a loading factor of 85 mg/L for two reaches of the LA River just downstream of the Sepulveda Flood Control Basin to recommend a chloride objective of 190 mg/L for these reaches. The new objective for the reaches downstream was intended to accommodate discharges from the Donald C. Tillman, Los Angeles-Glendale Water Reclamation Plant (City of Los Angeles), and City of Burbank Water Reclamation Plant. Although this new objective was found to be fully protective of beneficial uses, Resolution No. 97-02 kept the existing objective of 150 mg/L above the Sepulveda Flood Control Basin "to protect the streams in the headwaters of the watershed with the existing objective."

The chloride baseline concentration was determined using information provided by the City of Los Angeles and Metropolitan Water District (MWD) for the water supplies to the City of LA service areas including the Jensen, Weymouth, and Los Angeles Aqueduct filtration plants. The water supply baseline was determined to be 105 mg/L using monthly chloride concentrations for the period of January 1976 to June 1996 for water from Jensen. This baseline was also found to be representative of water supplies from Weymouth and Los Angeles Aqueduct. Jensen's monthly frequency distribution (**Figure 3-1**) showed two peaks, at 45 mg/L and 105 mg/L. The Regional Board staff believed that the second peak, 105 mg/L, reflected drought conditions. To address concerns that post-drought concentrations of chloride would remain high, the Regional Board staff analyzed data for 1993 through 1996 and calculated the average chloride concentration during this period to be 62 mg/L, with a maximum of 93 mg/L. Therefore, it was

determined that a baseline concentration of 105 mg/L would be adequate to accommodate fluctuations in supply conditions[5].

Jensen is also the source of water supply for the service area of Tapia WRF and therefore the expected water supply concentrations during drought conditions would be similar to those to the City of Los Angeles and Burbank Water Reclamation Plants. However, as shown in **Table 2-1,** no baseline and loading factor had been considered for the reach of Los Angeles River to which the Tapia WRF discharges when establishing the chloride objectives. Using the same approach as the Resolution 97-02, a baseline chloride concentration of 105 mg/L would reasonably also be applicable to this reach.

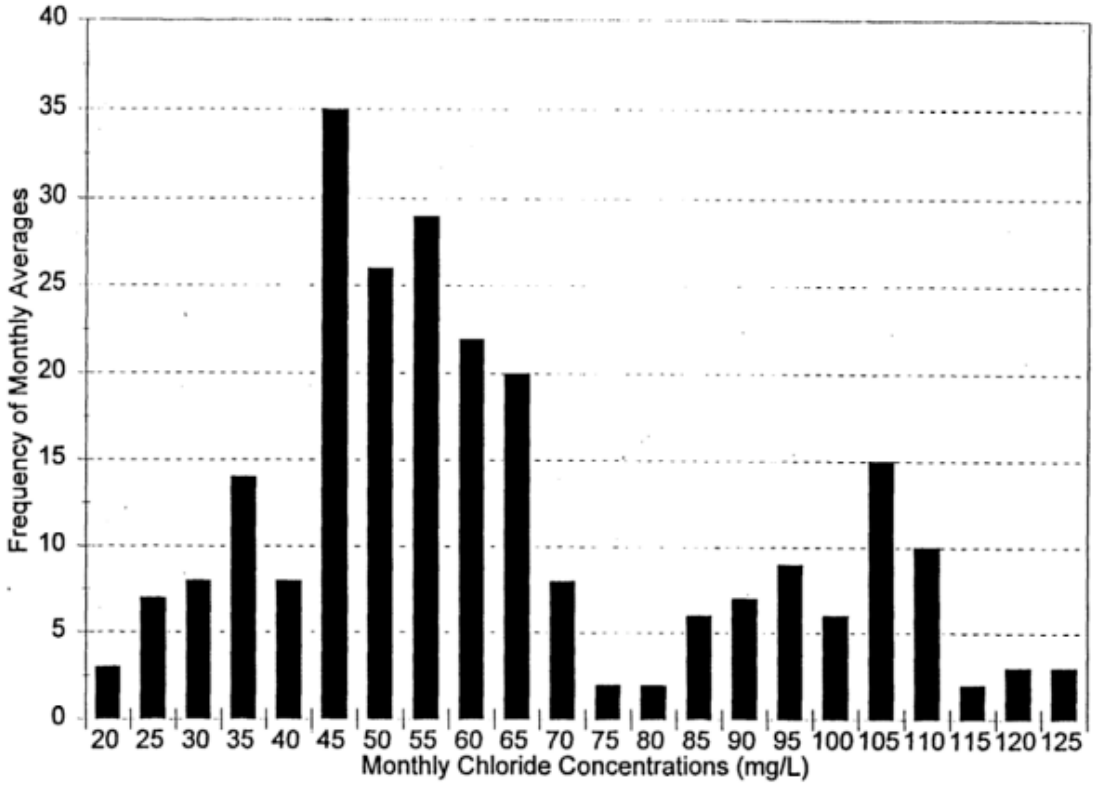

Figure 3-1 Frequency of monthly average chloride concentrations at Joseph Jensen Filtration Plant (January 1976 - June 1996)

The chloride loading factor of 85 mg/L used to establish the 1997 objectives in Los Angeles River Reaches 1-4 was determined based on data from POTWs' self-monitoring reports and other information submitted by dischargers in 1990. The loading factors calculated for each discharger are presented in **Table 3-1**. An additional 6 years of monitoring, data was used to confirm that 85

[5] California Regional Water Quality Control Board, Los Angeles Region, 1997, 400th Regular Board Meeting. Amendment to the Water Quality Control Plan (Basin Plan) to incorporate a "Policy for Addressing Levels of Chloride in Discharges of Wastewaters," Available at https://www.epa.gov/sites/production/files/2015-03/documents/ca4-amend-losangeles-region.pdf

mg/L was an appropriate chloride loading factor to use in the development of the revised chloride objectives in the Chloride Policy, Resolution No. 97-02.

To calculate monthly loading factors for all dischargers in the Region, the Regional Board staff subtracted the monthly imported water supply chloride concentration from the reported monthly effluent chloride concentrations of each plant. Per the Staff Report for the Chloride Policy, the loading factor of 85 mg/L represented 90% of all loading factors reported by dischargers.

Table 3-1 Loading Factors for LA Region Dischargers[6]

Water Reclamation Plant	Dates	Mean (mg/L)	Standard Deviation	Maximum (mg/L)
City of Burbank	Aug 86 - Mar '96	71	30	293
Los Angeles-Glendale	Jun '90 - Jun '96	80	16	146
D. C. Tillman	Jun '90 - Jun '96	49	17	90
Simi Valley	Jan '82 - Jun '96	65	15	121
San Jose Creek East and West	Jan '89 - May'96	42	12	70
Whittier Narrows	Jan '89 - May'96	1.3	10	23
Pomona	Jan '89 - May'96	31	14	63
Saugus	Jan '90 - May'96	36	18	81
Valencia	Jan '90 - May'96	62	24	115
Hill Canyon	Aug '85 - Jun '96	68	13	109
Olsen Road	Jan '90 - Jun '96	67	14	131
Camarillo	July '90 - Mar '96	102	18	153

The approach described above was used to calculate a loading factor for Tapia WRF based on recent data. Monthly effluent chloride concentration data are available for this facility from 2002 to 2018 and annual chloride concentration data for water supply is available from 2005 to 2016. These data are shown in Figure 3-2. To calculate the loading factor for Tapia, the average annual water supply concentration was subtracted from monthly effluent data. This resulted in an average chloride loading factor of 77.2 mg/L with standard deviation of 9.4, maximum of 104 mg/L, and 90th percentile value of 89 mg/L. Therefore, a loading factor up to 89 mg/L for Tapia WRF would be consistent with the approach used for the other facilities.

In addition, a loading factor of 85 mg/L is consistent with other municipal wastewater treatment plants just downstream of the Sepulveda Flood Control Basin for which the chloride objective of 190 mg/L is applicable (i.e., Tillman, Glendale and Burbank WRPs). The calculated Tapia

[6] California Regional Water Quality Control Board, Los Angeles Region, 1997, 400th Regular Board Meeting. Amendment to the Water Quality ControlPlan (BasinPlan) to incorporate a "Policy for Addressing Levels of Chloride in Discharges of Wastewaters."

loading factor is generally within the range of the values calculated for these facilities as shown above in **Table 3-1**.

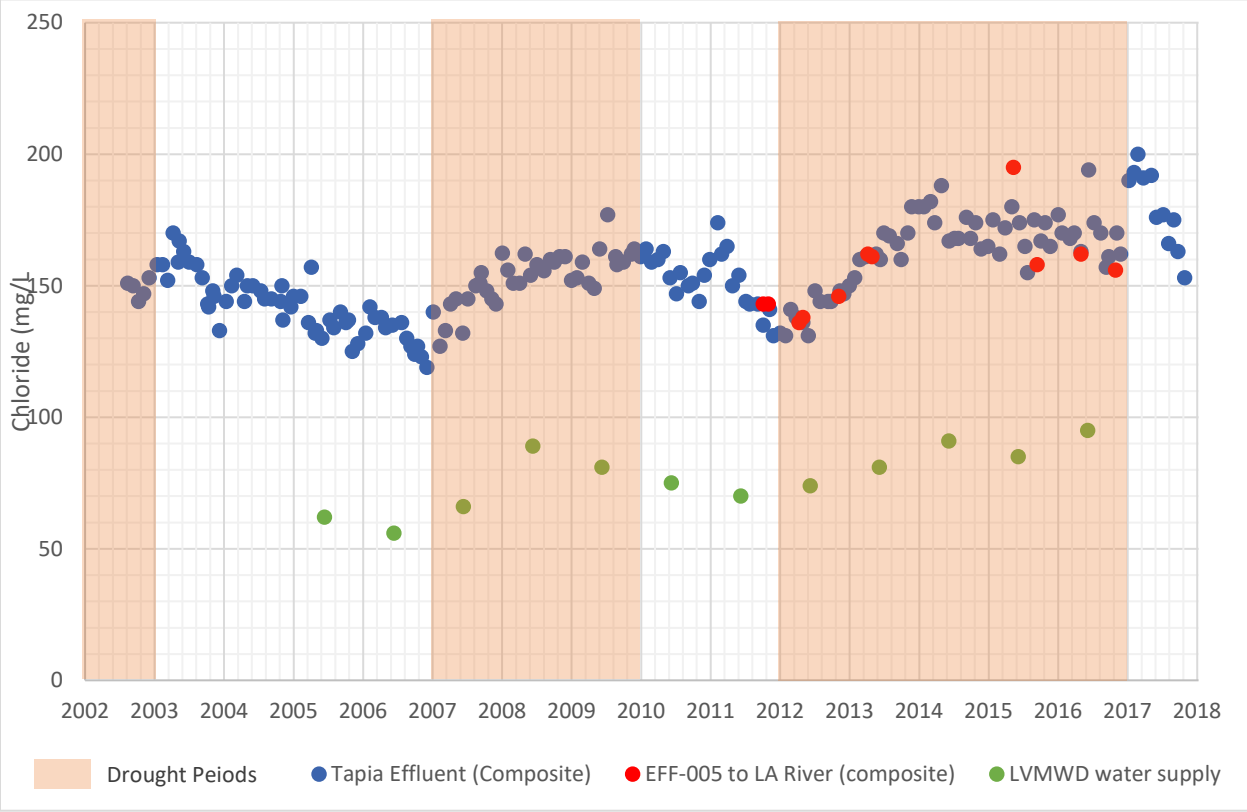

Figure 3-2 Chloride concentrations in Tapia effluent and water supply

3.2 PROPOSED SSO

Based on the information presented above and in previous reports, LVMWD is proposing a revised chloride objective of 190 mg/L for Reach 6 of the LA River to which the Tapia WRF discharges. This value is based on a baseline chloride concentration of 105 mg/L, which is adequate to accommodate fluctuations in supply conditions, and a loading factor of 85 mg/L, which also considers water conservation effects on chloride concentrations. As described below in Section 4, the proposed chloride objective has been evaluated in accordance with Basin Plan requirements and with respect to State and Federal Antidegradation policies and Section 13241 of the California Water Code.

The benefits of the proposed SSO are discussed below with respect to future planning associated with future droughts and water conservation, and LVMWD's planned Pure Water Project.

3.2.1 Water Conservation Impacts on Chloride Levels

Water conservation, both in response to drought conditions and long term statewide water sustainability goals, impacts chloride concentrations entering Tapia WRF, as less water use

results in lower dilution of chloride sources and higher concentrations. Statewide restrictions on water use during the most recent drought from 2012 to 2017 culminated with restrictions imposed by the State Water Resources Control Board aimed to achieve a 25% reduction in urban potable water use[7]. Mandatory conservation measures issued by LVMWD in response to these restrictions resulted in an annual water conservation rate of 27%[8] during the drought.

Changes in water demand due to conservation are evident in decreases in influent flow to Tapia WRF over time, and coincide with increases in effluent chloride concentrations, as shown in **Figure 3-3**, which also shows periodic increases in chloride concentrations in Tapia WRF effluent corresponding to drought conditions from 2012 through 2017, 2007 through 2009 and 2001 through 2002[9].

Further details about drought and water conservation impacts on chloride concentrations are provided in Section 4 of the Chloride Source Investigation Report.

The proposed SSO will assist LVMWD in more effectively managing discharges that are impacted by water conservation while still protecting the beneficial uses of the LA River.

[7] State of California Executive Department, 2015. Executive Order B-29-15.
[8] http://www.lvmwd.com/your-water/drought
[9] United States Geological Survey (USGS), 2017. 2012-2016 California Drought: Historical Perspective. Accessed February 15, 2017. https://ca.water.usgs.gov/california-drought/california-drought-comparisons.html

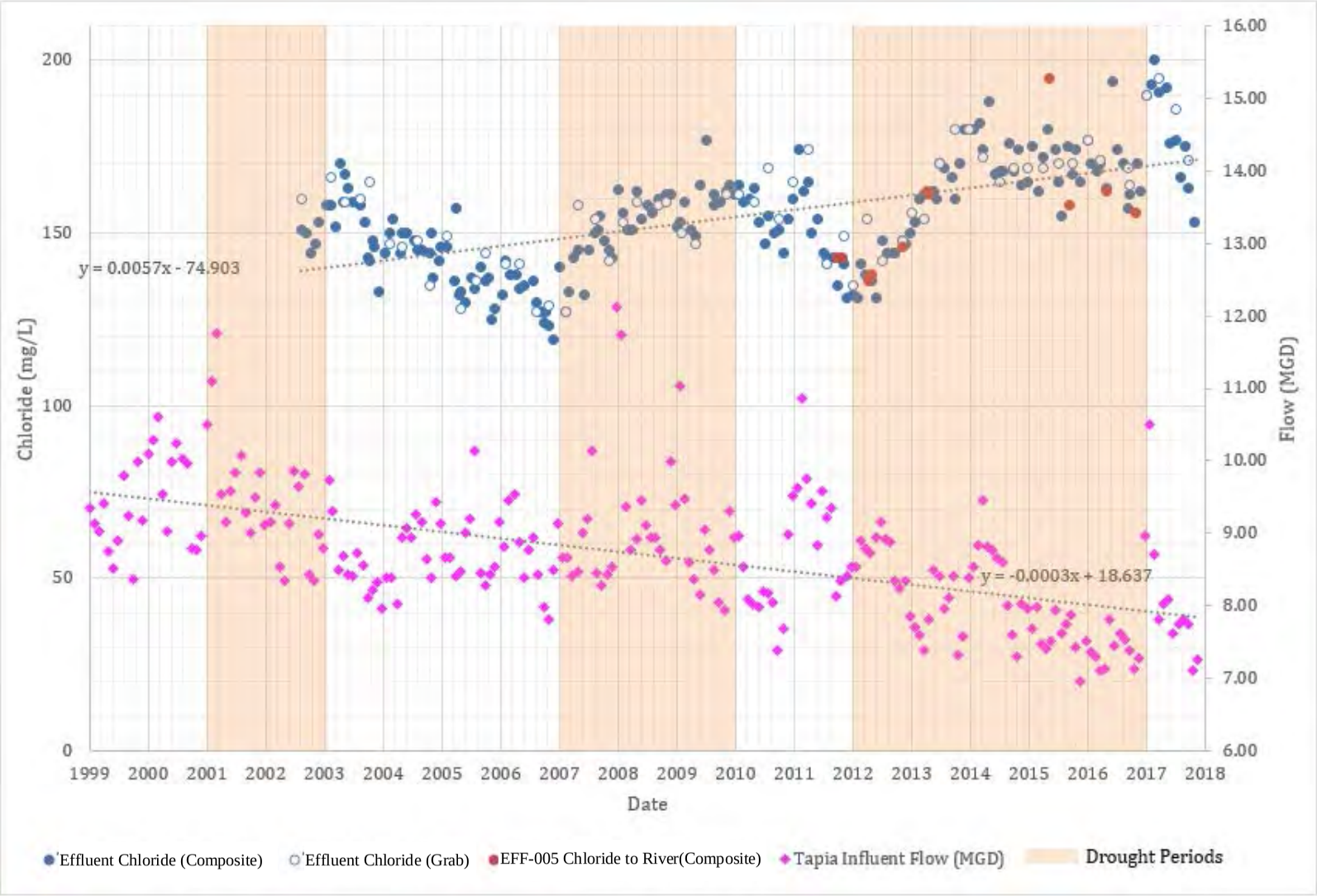

Figure 3-3 Tapia Average Monthly Influent Flows (1999-2017), Tapia Effluent Chloride Concentrations (2002-2017), and Drought Conditions

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3.2.2 Impact of the Pure Water Project

Las Virgenes-Triunfo JPA is implementing the Pure Water Project using a potable reuse water supply strategy to enhance local water supply reliability and drought resilience while eliminating discharges to Malibu Creek.

The Pure Water Project is a multi-agency and multi-county collaborative project, planned to be fully operational by 2030. Through this project, an advanced water purification plant will be constructed that will further treat WRF discharges through an ultrafiltration/reverse osmosis process. The required infrastructure will be installed to deliver tertiary treated effluent to the proposed advanced water treatment facility. The purified water from this facility will be distributed through a pipeline to Las Virgenes Reservoir to blend with the existing imported water. The entire reservoir water will then be treated to drinking water standards at the Westlake Filtration Plant before being supplied to homes and businesses.

The Pure Water Project is expected to provide multiple benefits to the environment and the community. By eliminating effluent discharges into Malibu Creek, nutrients and algae will be reduced, enhancing in-stream habitat. The water that would otherwise be discharged into the creek will then become a source for potable, locally-produced water, providing long-term cost benefits. By being cost-competitive with imported water, it will also help to stabilize water rates, and safeguard the local economy. It will also have the benefit of reducing the uncertainty of water supply associated with importing water due to long-term drought conditions, climate change, and natural disasters such as earthquakes.

The Pure Water Project will be operated whenever the Tapia WRF effluent volume is greater than the demand associated with recycled water uses. Effluent that is not delivered for recycled water uses or directed to the Pure Water Project will be discharged to the Los Angeles River (Figure 3-4). If the surplus is greater than 6 MGD but less than 11 MGD, up to 5 MGD will be discharged to the Los Angeles River. This represents an increase in discharges to the LA River compared to current discharge levels but still well below the permitted dry weather flow of 12 MGD. Without the possibility for the discharge to the Los Angeles River, the viability of the Pure Water Project operations may be impacted. As shown in (**Figure 3-4**) if the surplus is greater than 11 MGD, it will be discharged into Malibu Creek on a mass-based limit.

The proposed SSO will facilitate the success of the Pure Water Project by allowing resources to be focused on its development rather than expending resources to treat effluent to a level that will not provide any additional protection of beneficial uses in the LA River.

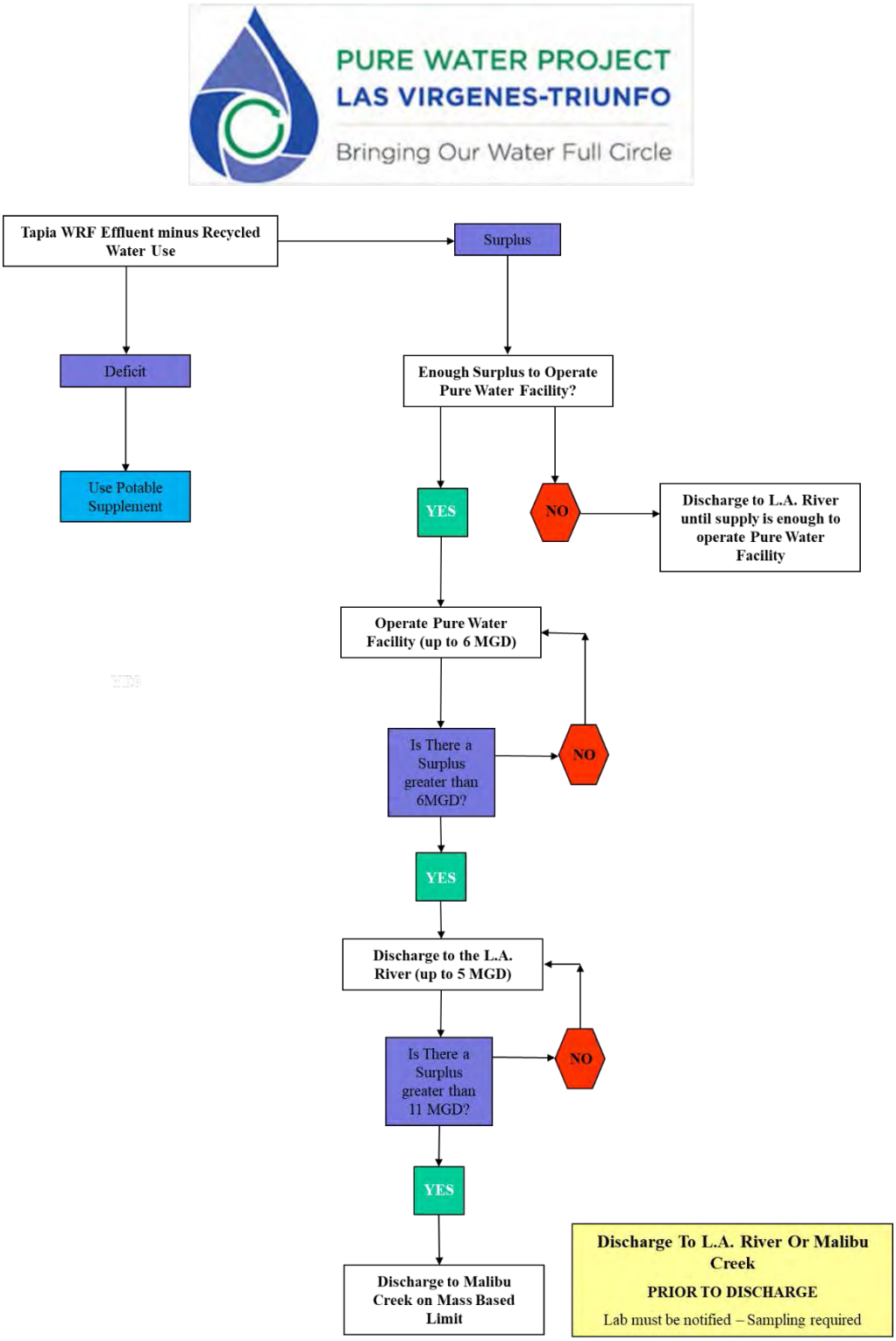

Figure 3-4 Pure Water Project Operation

4 Supporting Data for Appropriate Remedial Actions

The approach to demonstrating the need for an SSO is described in Chapter 3 of the 2019 Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan). It states that 'there may be several acceptable methods for developing site-specific objectives' but the SSO 'must be based on sound scientific data in order to assure protection of beneficial uses.' Elements that should be included in the development of an SSO and how they are being addressed for this project are shown in **Table 4-1**.

Table 4-1 Basin Plan Elements for an SSO

Basin Plan Element	Approach to addressing requirement
Demonstration that the site in question has different beneficial uses (e.g., more or less sensitive species) as demonstrated in a UAA or that the site has physical or chemical characteristics that may alter the biological availability or toxicity of the chemical.	Beneficial uses and applicable chloride objectives downstream of the Tapia WRF discharge to the Los Angeles River are discussed in Section 2 and 4.1 of this report. Protection of applicable beneficial uses is also discussed in Section 3.2 of the Evaluation of Options Report and in Section 3.1 of the Identification of Options report.
Provide a thorough review of current technology and technology-based limits which can be achieved at the facility(ies) on the study reach.	Source control and treatment strategies to reduce chloride to meet the current effluent limit are evaluated with respect to technical and economic feasibility in the Evaluation of Options Report and Identification of Options report and discussed in Section 4.1.2 of this report.
Provide a thorough review of historical limits and compliance with these limits at all facilities in the study reach.	Effluent limit compliance and factors affecting compliance (including chloride sources, treatment processes, and water conservation/drought) are discussed in the Source Investigation Report and in Section 4.1.3 of this report.
Conduct a detailed economic analysis of compliance with existing, proposed objectives.	Economic analysis for complying with the current objectives was discussed in Section 4 of the Evaluation of Options report and discussed below in Section 4.1.4 of this report.
Conduct an analysis of compliance and consistency with all federal, state, and regional plans and policies.	Analyses required by State and Federal Antidegradation Policies and by Section 13241 of the Calfiornia Water Codes are discussed in Sections 4.2 and 4.3 of this report.

4.1 BASIN PLAN REQUIREMENTS

As outlined in **Table 4-1**, the Basin Plan provides that several elements should be addressed to justify the need for an SSO. These elements and the results of the analyses for each are summarized below.

4.1.1 Evaluation of Protection of Beneficial Uses

As outlined in multiple chloride TMDLs in the Los Angeles Region, the agricultural (AGR) beneficial use has been determined to be the most sensitive to chloride concentrations[10,11,12]. The chloride level considered to be protective of aquatic life beneficial uses (i.e., 230 mg/L) is higher than generally needed to protect agricultural beneficial uses, particularly if salt sensitive agriculture (avocados, citrus, and strawberries) is present. Chloride levels in the range of 100-120 mg/L are considered protective of this use. Chloride levels have also been established to protect the beneficial use for municipal drinking water (i.e., 250 mg/L).

As mentioned earlier, there are no agricultural beneficial uses in any portion of the LA River. Receiving water beneficial uses for both Arroyo Calabasas and Reach 6 of the LA River are established in the Basin Plan. Arroyo Calabasas has one existing beneficial use, non-contact water recreation, and its potential beneficial uses include water contact recreation, municipal and domestic water supply, and habitat for water freshwater aquatic life and wildlife. Existing beneficial uses in Reach 6 of the LA River include water contact recreation, non-contact water recreation, habitat for water freshwater aquatic life, wildlife and wetland habitat, as well as groundwater recharge. Municipal and domestic water supply, and industrial service supply are potential beneficial uses in Reach 6.

The proposed SSO of 190 mg/L would be protective of the existing and potential uses in Arroyo Calabasas and Reach 6 of the LA River.

In addition, Order No. 97-02 sets objectives for several downstream reaches[13] of the main stem of LA River, as well as Burbank Western Channel, at 190 mg/L, and stated that they are expected to be "fully protective of drinking water and freshwater aquatic life". There are no existing or potential beneficial uses in Arroyo Calabasas or Reach 6 of the LA River that are not also beneficial uses of one or more of the downstream reaches with a chloride objective of 190 mg/L established in Order No. 97-02. Therefore, 190 mg/L is also protective of beneficial uses in the receiving waters downstream of Tapia WRF's discharge to Arroyo Calabasas.

[10] Larry Walker Associates, 2007. Calleguas Creek Watershed Boron, Chloride, TDS, and Sulfate TMDL. Public Review Technical Report. April 2007.

[11] California Water Boards Los Angeles Region, 2007, Proposed Amendment to the Water Quality Control Plan – Los Angeles Region to Incorporate the Total Maximum Daily Load for Boron, Chloride, Sulfate, and TDS (Salts) in the Calleguas Creek Watershed, Attachment A to Resolution No. R4-2007-016.

[12] California Water Boards Los Angeles Region, 2014, Revision of the TMDL for Chloride in the Upper Santa Clara River, Attachment B to Resolution No. R4-2014-010.

[13] Los Angeles River-between Sepulveda Flood Control Basin and Figueroa Street, and between Figueroa Street and the estuary, which encompass Reaches 1 through 4.

4.1.2 Current Technology and Technology-Based Limits to Comply with Existing WQO, Which Can Be Achieved at the Facilities on the Study Reach

Compliance with the existing water quality objective requires the Tapia WRF to meet a final monthly average effluent limitation of 150 mg/L.

The Chloride Evaluation of Options Report evaluated several strategies and technologies as source reduction activities for chloride concentrations. While each of these activities could help reduce chloride levels to some extent regardless of their economic feasibility, none of them, including installation of an ultra-violet disinfection system, could reduce chloride concentrations to levels that would consistently comply with the existing WQO. Therefore, chloride concentration of 150 mg/L cannot be achieved through source control alone.

Installation of a reverse osmosis (RO) system is the only option to ensure that the entire discharge volume meets 150 mg/L at all times. RO has been identified as the best available technology (BAT) by EPA for salt removal, and has been used in other water reclamation facilities.

The use of reverse osmosis to remove chloride is also constrained by the amount of brine waste, a by-product of the desalination process, that can be disposed of locally. The feasibility of various brine reduction technologies to minimize the expense of disposing of the brine waste stream generated during RO treatment would also need to be investigated for Tapia WRF. Examples of brine reduction technologies include solar evaporation, crystallization, chemical precipitation, brine concentrating membranes, and freeze drying. These technologies may have significant disadvantages related to land and energy requirements as well as unproven technology, which would leave direct disposal of the RO reject stream as the most practical option. Therefore, although the installation of reverse osmosis is an available technology, treating to allow full discharge at 150 mg/L from Tapia WRF would be costly and brine disposal options could have unintended environmental and political consequences.

In addition, LVMWD has committed substantial resources for the Pure Water Project. Requiring treatment to 150 mg/L for the entire discharge may add costs that would make the overall project too expensive for the community especially considering that there would be no additional benefit associated with the added expense. The Pure Water Project is located near the Reservoir and not near the WRF. Existing recycled water infrastructure will be used to deliver tertiary treated water to the Pure Water Project site. Adding RO at the WRF would constitute a completely separate project requiring significant additional infrastructure in addition to a separate brine disposal facility. Finally, there is no additional space available at the WRF site for the construction of the RO facility which would also mean additional expense and effort to identify a suitable location.

In addition, an alternative discharge location is important for addressing situations where the demand for advanced treated recycled water decreases or the treated water does not meet the standards required for augmenting the reservoir for reasons beyond LVMWD's control.

4.1.3 A Thorough Review of Historical Limits and Compliance with These Limits at all Facilities in the Study Reach

As explained above in **Section 2**, Resolution No. 97-02 revised the chloride objectives for the Los Angeles River between Sepulveda Flood Control Basin and Figueroa Street, and the Los Angeles River between Figueroa Street and the Estuary from 150 mg/L to 190 mg/L. The

proceeding Water Discharge Requirements, i.e. R4-2005-0074 and R4-2010-0165, included final effluent limitations for chloride of 190 mg/L for discharges to the Los Angeles River. Order No. R4-2017-0124, however, revised the chloride effluent limitation for Tapia WRF discharge to the LA River from 190 mg/L to 150 mg/L. Before 2017, the chloride effluent limits have historically been 190 mg/L.

Tapia WRF primarily discharges to Malibu Creek at discharge point EFF-001. Limited chloride concentration data from effluent discharge to the LA River (EFF-005) were available due to the low volumes and sporadic frequency of discharges to the LA River. However, effluent water quality does not depend on the discharge point used. **Figure 4-1** shows a time series plot of final effluent concentrations from 2002 to 2017, which are compared to the interim and final effluent limitations for discharge to the LA River.

The effluent chloride concentrations show similar trends when compared to water supply data. They show periodic fluctuations, with increases in chloride levels corresponding to drought conditions. The effluent chloride concentrations have historically had some minor exceedances of the 190 mg/L objective, including two exceedances during the 2012 to 2017 drought and five exceedances immediately following this drought condition that may carry over the drought effects as by estimate, it would take 12 to 18 months for complete replenishment of imported waters to be released from the Las Virgenes Reservoir where the imported water with higher chloride concentrations is stored. The highest effluent chloride concentration occurred on March 7, 2017 with a concentration of 200 mg/L. As discussed in Section 3.2.2, effluent chloride levels have gradually increased overall from 2002 to 2017 due to water conservation and effects of the drought.

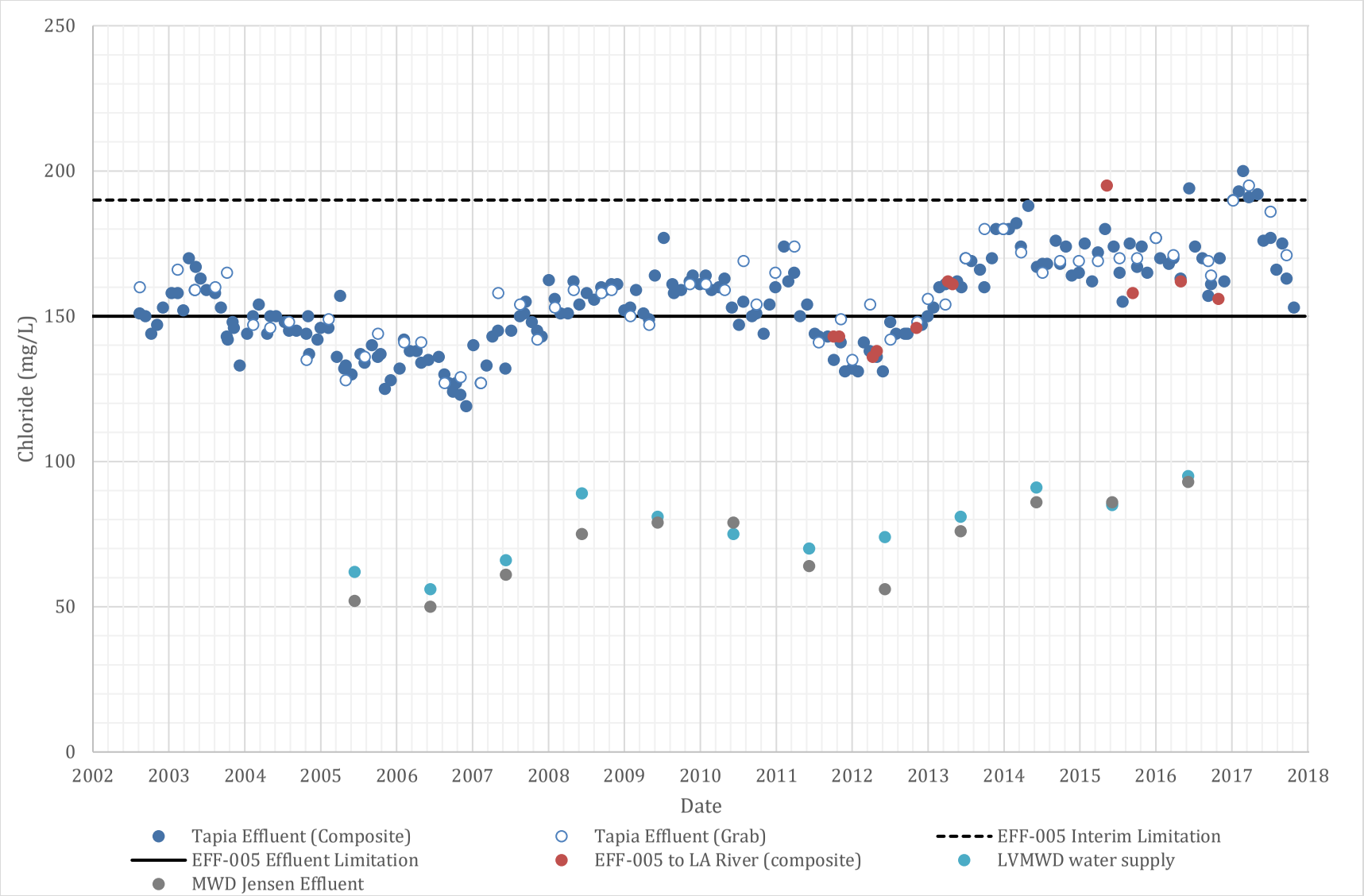

Figure 4-1. Tapia Effluent Chloride Concentrations, 2002-2017, and Water Supply Chloride Concentrations, 2005-2018

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4.1.4 A Detailed Economical Analysis of Compliance with Existing and Proposed Objectives

The discussion below concerns the economic impacts associated with facility upgrades to the WRP that would be needed to comply with existing chloride objective of 150 mg/L compared to the proposed objective of 190 mg/L.

4.1.4.1 Economic Analysis of Compliance with 150 mg/L Limit

This section evaluates the potential costs for implementing compliance options for a final effluent chloride limit of 150 mg/L. Tapia WRF provides primary, secondary and tertiary treatment. These conventional treatment processes remove organic compounds and pathogens and produce high quality recycled water, but are not designed for the treatment or removal of dissolved salts such as chloride from wastewater.

Of the technologies available to remove chloride from wastewater, reverse osmosis treatment achieves a high removal of chloride and is less costly than the other desalination technologies, such as: other membrane processes (nanofiltration and electrodialysis), thermal process (multi-stage flash distillation, multi-effect distillation, and mechanical vapor compression technologies), as well as ion exchange processes[14,15].

These studies also concluded that reverse osmosis treatment requires appropriate pretreatment of recycled water to prevent fouling of the membranes used in the reverse osmosis process, which would result in loss of treatment efficiency. The conventional treatment processes at Tapia WRF may not be sufficient for the direct treatment of tertiary recycled water with reverse osmosis membranes, without some form of pre-treatment, such as utilizing either micro filtration and/or a membrane bioreactor technology (which provides both biological treatment and low pressure membrane filtration). In addition, reverse osmosis technologies produce a brine waste that also requires disposal.

Therefore, maximum advanced treatment to comply with the 150 mg/L objective consists of the installation and operation of advanced treatment facilities (MF/RO and/or MBR/RO) and brine disposal facilities at Tapia WRF. LVWMD would need to install sufficient advanced treatment capacity to discharge recycled water with chloride levels that would meet 150 mg/L for the full discharge to the Los Angeles River.

LVMWD estimated the cost to treat the WRF effluent that would be discharged to the LA River (i.e., flow that is in excess for the volume to be processed by the Pure Water Project) to remove chloride such that the discharge would consistently comply with a chloride effluent limit of 150 mg/L. The analysis is found in **Attachment A** and summarized below.

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[14] MWH, 2002. *Cost Impacts for Compliance with 100 mg/L instantaneous Chloride Discharge Limit at the Santa Clarita Valley Water Reclamation Plants.* October 2002.

[15] Trussell, 2007. Trussell Technologies, Inc. *Technical Memorandum No. 6.002 – 008 (TM 8), Analysis of Treatment Costs for Chloride for the Santa Clarita Valley Joint Sewerage System (SCVJSS)*. March 23, 2007. R. Shane Trussell, Ph.D., P.E. and Ramesh R. Sharma, Ph.D.

The system capacity needed and associated cost was developed for two scenarios, one based on the current average effluent chloride concentration of 164 mg/L and the other one based on the 90th percentile value for effluent chloride concentrations of 180 mg/L. The treatment process analysis was developed to achieve an effluent chloride concentration of 120 mg/L, which is 80% of the 150 mg/L objective, to be conservative and provide a greater reliability for meeting the objective.

To achieve this goal, a portion of the WRF would be treated by RO then blended with tertiary treated WRF effluent as shown in **Figure 4-2**. The blended water would meet the concentration goal. It was assumed that an approximate flow of 2 mgd would need to be treated by RO. Other assumptions include 80% operating recovery of the RO treatment; and a membrane pretreatment, such as microfiltration (MF) or ultrafiltration (UF).

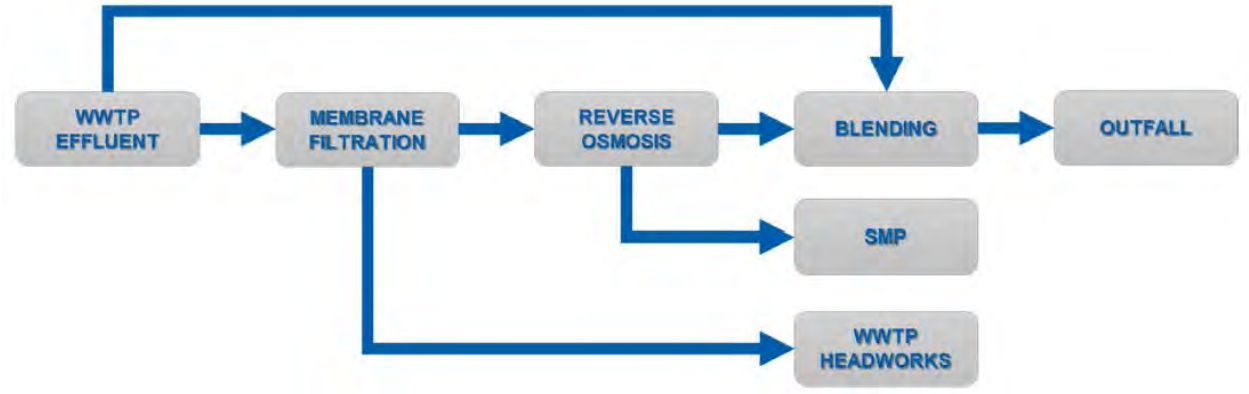


Figure 4-2 Simplified Chloride Removal Process Schematic

Table 4-2 presents capital and annual O&M costs associated with each of the two scenarios. This table shows that in order to comply with the 150 mg/L objective, it would cost the WRF about $18M to $19.3M in capital costs and over $2M in annual O&M costs. This cost only includes MF/RO and excludes related costs such as those associated with brine disposal. Also, as noted in Section 4.1.2, additional infrastructure and land would be needed for this facility which is also not included in the cost estimate.

O&M costs were developed based on experience with other MF/RO projects in Southern California and based on assumptions for power, chemicals, cartridge filters, membranes, water quality sampling and analysis, miscellaneous maintenance, and labor.

Table 4-2 Planning Level Capital Cost Estimates for the MF-UF/RO Treatment

Cost Component	164 mg/L	180 mg/L
Total Construction Costs	$15,310,000	$16,500,000
Engineering and Contract Administration	$2,603,000	$2,805,000
Total Project Cost	**$17,913,000**	**$19,305,000**
Annual O&M Cost ($/yr)	**$2,066,194**	**$2,136,839**

4.1.4.2 Economic Analysis of Compliance with Proposed Objectives

Until recently, Tapia WRF effluent had never exceeded the 190 mg/L objective. However, towards the end and immediately following the most recent drought, there have been some exceedances of this objective. However, beneficial uses have not been affected by these exceedances since they are below the criteria protective of aquatic life (i.e., 230 mg/L). No additional costs are anticipated to continue to meet an effluent limit based on the objective of 190 mg/L.

The Pure Water Project is estimated to cost $120 million (2018 dollars). This cost includes treatment of 6 MGD of wastewater along with the construction of a delivery system and brine disposal. In addition, increases in costs for importing State Water and/or to pay for alternatives to meet the stringent discharge requirements to Malibu Creek may also occur.

If the WRF effluent is required to meet an effluent limit based on the objective of 150 mg/L, the additional capital costs of up to $19M and annual operating costs of $2M for the additional RO sytem (not including brine disposal, additional land and infrastructure) may impact the viability of the Pure Water Project.

4.1.5 An Analysis of Compliance and Consistency with all Federal, State, and Regional Plans and Policies.

The proposed water quality objective complies with all relevant federal, state, and regional plans, and policies. The proposed water quality objectives are consistent with State and Federal antidegradation policies as discussed below in Section 4.3 Antidegradation Policy. In addition, the elements specified in the Basin Plan that should be addressed for site-specific objectives have been discussed and analyzed in this section and the requirements of Section 13241 of the California Water Code are discussed in Section 4.2.

4.2 CALIFORNIA WATER CODE SECTION 13241 REQUIREMENTS

Water Code Section 13241 requires the Regional Board to consider the following when establishing a water quality objective:

1. The past, present, and probable future beneficial uses of water.
2. The environmental characteristics of the hydrographic unit under consideration, including the quality of water available thereto.
3. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area.
4. Economic considerations.
5. The need for developing housing within the region.
6. The need to develop and use recycled water.

4.2.1 Past, Present, and Probable Future Beneficial Uses of Water

Existing and potential beneficial uses downstream of the Tapia WRF discharge are discussed above in Sections 2 and 4.1 and the proposed SSO of 190 mg/L is protective of these uses. As also noted in those sections, the agricultural beneficial use, for which a lower chloride level would be warranted, is not an existing or potential use in this watershed.

4.2.2 Environmental Characteristics

The watershed environment for Reach 6 of the Los Angeles River is characterized below based on previous studies. Further discussion concerning the degradation of water quality appears in **Section 4.3**, Antidegradation Analysis.

4.2.2.1 Setting and Physiography

The Los Angeles River begins where Calabasas Creek confluences with Bell Creek near Owensmouth Avenue in Canoga Park and flows for approximately 51 miles before it discharges to the Pacific Ocean in Long Beach. The upper reaches of the river convey Municipal Separate Storm Sewer System (MS4) discharges and flood flows from the San Fernando Valley. The river's watershed is one of the largest in the Los Angeles Region with the area of approximately 824 square miles from which, about 324 square miles are covered by forest or open space land. These include the area near the headwaters which originate in the Santa Monica, Santa Susana, and San Gabriel Mountains. The remaining watershed is intensely urbanized and the river itself has been lined with concrete along most of its length due to major flood events at the beginning of the 20th century. There are about 205 miles of engineered channels within the Los Angeles River Watershed system.

Major tributaries to Reach 6 of the LA River include: Bell Creek, Aliso Canyon Wash, and Arroyo Calabasas, which is formed by the confluence of Dry Canyon Creek and McCoy Creek.Three soft- or stone-bottom stretches exist within the concreted channels, including approximately one mile upstream of the Sepulveda Basin, which is a large flood control basin in the southern San Fernando Valley and includes the Los Angeles River channel from the Sepulveda Dam upstream to above Balboa Boulevard. There is a 2,150-acre open space upstream of the Sepulveda Dam that collects flood waters during major storms. The area is periodically inundated; therefore, it remains in a semi-natural condition and supports a variety of low-intensity uses as well as supplying habitat. Downstream of the Sepulveda Basin, flows are dominated by tertiary-treated effluent from three municipal wastewater treatment plants: Donald C. Tillman Water Reclamation Plant, Los Angeles-Glendale Water Reclamation Plant, and the City of Burbank Water Reclamation Plant.

Reach 6, which extends from River Mile 51, Canoga Park, to River Mile 45, upstream of Van Nuys, has a small contribution to the Los Angeles River flows **(Figure 4-3).** Rainfall patterns in the the Los Angeles River exhibit both inter-annual and intra-annual variability with mean annual rainfall depths varying between 13 inches in the lower reaches and 39 inches in the mountains. The wettest months of the year occur between October and April, as is typical of Mediterranean climates **(Figure 4-4)**.

Surface flow levels within Reach 6 of the Los Angeles River also correspond to seasonal precipitation within the region. Increased surface flows in this reach exist typically during winter and spring months followed by a relatively long summer and fall season of lower flows.

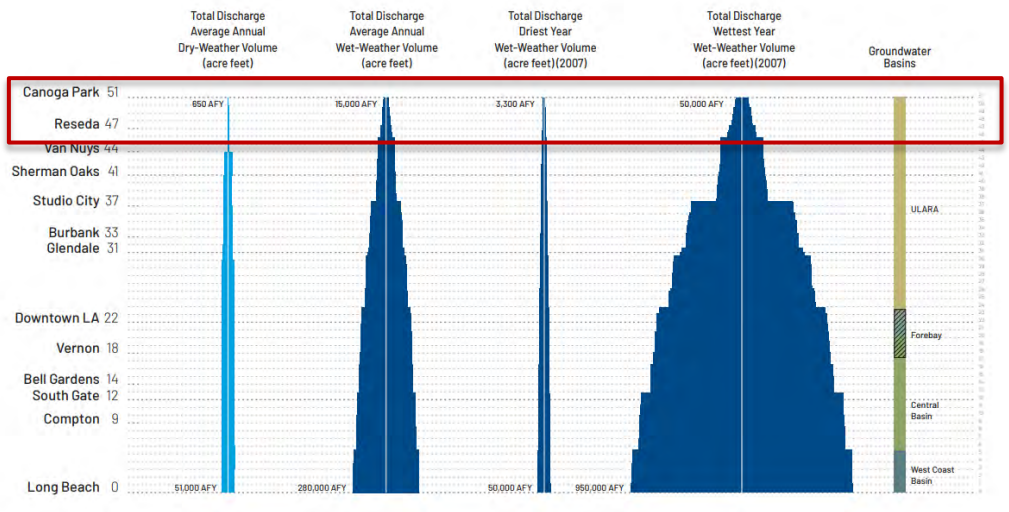


Figure 4-3 Flows along the Los Angeles River[16]

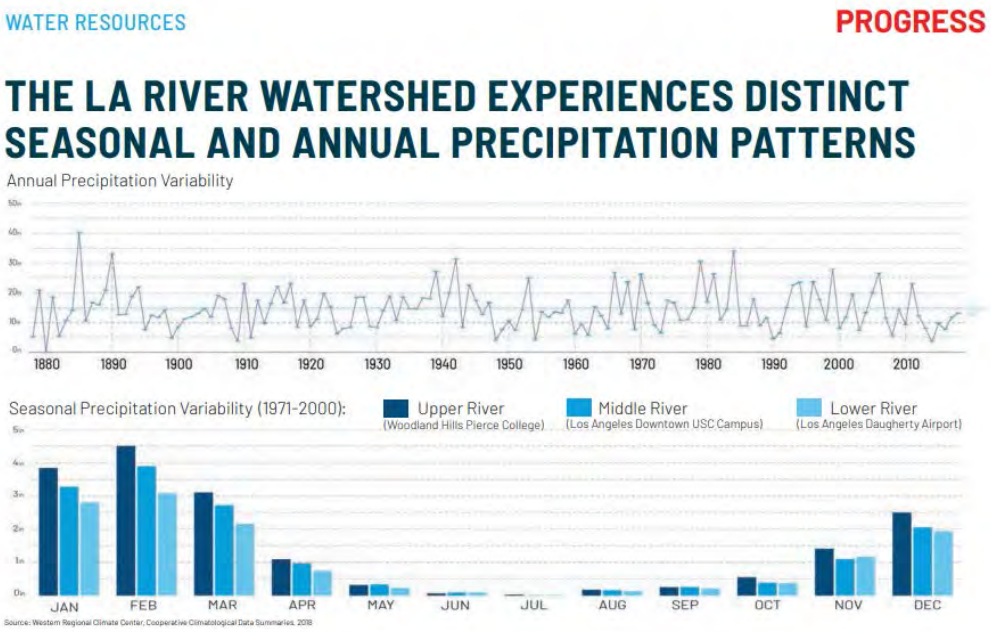


Figure 4-4 Annual and Seasonal Precipitation Variability in the LA River Watershed[17]

[16] Geosyntec and OLIN 2018, Los Angeles River Master Plan Update, Tasks 3.1 and 3.2, Water Resources: Flood Risk Management, Water Quality, and Water Supply, Progress Memorandum, December 4, 2018.

[17] Western Regional Climate Center, Cooperative Climatological Data Summaries, 2018

Historic vegetation formations within Reach 6 of the LA River watershed is mainly coastal sagebrush. No designated critical habitat areas currently exists directly along the LA River corridor. However, 132 rare and threatened species exist near the river[18]. Four of these species potentially exist in Reach 6 of the LA River Watershed[19]. These species along with their Federal, State, and CDFW status are listed in **Table 4-3.** None of species are aquatic life that would likely be impacted by the river chloride concentrations.

Table 4-3 Rare and Threatened Species Potentially Present in Reach 6 of the LA River Watershed

Scientific Name	Common Name	Federal Status	State Status	CDFW Status
Ardea alba	Great egret	None	None	None
Egretta thula	Snowy egret	None	None	None
Aspidoscelis tigris stejnegeri	Coastal whiptail	None	None	Species of Special Concern
Thamnophis hammondii	Two-striped gartersnake	None	None	Species of Special Concern

All fish species that occur or potentially occur in the Sepulveda Basin area that could be in Reach 6 are introduced species, including: western mosquitofish, Mozambique tilapia, and goldfish.[18] None of these has been listed as rare or threatened species in the LA River Watershed. Unimpeded path from the ocean to the headwaters, along with areas in which to rest and spawn, has been the main barrier to the steelhead trout's recolonization of the River, making temperature or water quality less important factors.

4.2.2.2 Quality of Water Available

The 150 mg/L surface WQOs in Reach 6 of the LA River is more stringent than the effluent limitation of 190 mg/L that has applied to the Tapia WRF over its entire operating history. As noted above in Secton 3.2.1, historic chloride levels in Reach 6 of the Los Angeles River during the operation of the Tapia WRF have ranged from 35 – 219 mg/L.

As discussed in Section 1.2.1 of this report and as discussed in detail in the Chloride Source Investigation Report, the water supply is a significant source of chloride contributions to the WRF discharge accounting for approximately 46% of the influent chloride. The water supply is imported water from the State Water Project and chloride levels are influenced by factors outside LVMWD's control include drought as discussed in **Section 3.1** of this report. This source is uncontrollable and has a significant impact on chloride levels discharged to the Los Angeles River.

[18] Geosyntec and OLIN 2018, Los Angeles River Master Plan Update, Task 3.5, Existing Ecosystem and Habitat Conditions, Progress Memorandum, November 19, 2018.

[19] Los Angeles River Master Plan, 1996.

4.2.2.3 Water Quality Conditions that could Reasonably be Achieved

The proposed SSO of 190 mg/L is the applicable chloride objective in other Reaches of the LA River (i.e., Reaches 1-4) and appears to representative of the existing condition in this reach of the river based on a review of available information. Chloride concentrations in the LA River were evaluated and compared to the applicable objectives in the Upper Los Angeles River Enhanced Watershed Management Program.[20] The results of the EWMP analysis for chloride are summarized in **Table 4-4** for samples collected between 2002 and 2013. In general, chloride levels exceed 150 mg/L periodically in all reaches of the LA river (except for Reach 2) and generally are below 190 mg/L. The exception is occasional exceedances of 190 mg/L in Reach 6. Chloride levels have not exceeded the aquatic life criterion of 230 mg/L in Reach 6 or elsewhere in the LA River.

Table 4-4 Chloride Data Summary for the LA River (EWMP for the Upper Los Angele River Watershed)

Reach	Chloride Objective	Date Range	Min	Ave	Max	Number of samples
1	190	10/2002-07/2013	6.3	NA	161	99
2	190	03/2006-06/2010	23.6	NA	145	46
3, above LAG	190	02/2002-11/2013	35.9	NA	169.5	72
3, below LAG	190	02/2002-11/2013	29.5	NA	164	97
4	190	02/2002-06/2011	30.7	NA	166	114
5	150	05/2007-11/2013	90.5	138	186	81
6	150	02/2002-06/2010	35.8	145	219	49

As shown in **Table 4-4**, chloride levels in Reach 6 are higher than other reaches and existing water quality would not be significantly impacted by changing the objective to the proposed SSO.

The Chloride Evaluation of Options Report assessed chloride reduction strategies for Tapia. **Table 1-3** in **Section 1.2** of this report lists these potential strategies or approaches to reduce chloride loads from each source. While water supply accounts for almost half the total chloride load, the majority of this load (92%) is not completely controllable due to limitations to controlling chloride load from the imported water. Factors affecting chloride levels in the water supply are discussed further in Section 3.1 of this report. Significant reductions may also not be possible from water softener removal programs, since in this region, water is relatively soft and only 5% of households are estimated to have water softeners. Chloride generated from sodium hypochlorite use is technically a controllable in-plant source through conversion to non-chlorine disinfection, such as ultra-violet (UV) disinfection. However, UV disinfection is a very expensive practice and is not considered to be economically feasible. Among other controllable sources, commercial and industrial use as well as Las Virgenes Reservoir sources may be

[20] CH2M, Paradigm Environmental, and Black & Veatch 2016, Enhanced Watershed Management Program (EWMP) for the Upper Los Angeles River Watershed, Prepared for for the Upper Los Angeles River Watershed Management Group, January 2016.

controllable, but only comprise a small portion of the total chloride load. It is not expected that a significant reduction can be achieved without substantial time and expense. In addition, because the effluent chloride concentrations are similar or less than the receiving water chloride concentrations, it is unlikely that these improvements would have an impact on the receiving water. Therefore, it is likely that the existing condition is the best water quality that can reasonably be achieved.

4.2.2.4 Baseline Economic Considerations

Baseline economic conditions are summarized above in **Section 4.1.4.2**, Economic Analysis of Compliance with the Proposed Objectives. To address the potential for exceedance of an SSO of 190 mg/L similar to those seen towards the end and immediately following the most recent drought, some source reduction activities may be considered. In addition, the Pure Water Project, which will be operating as of 2030, will change the operations of the WRF and, to some extent, the nature of the discharge to the LA River. Resources that would be expended on treatment to reach 150 mg/L may impact the viability of the Pure Water Project which is expected to have multiple benefits to the community.

4.2.2.5 The Need to Develop Housing

The proposed water quality objectives would not restrict the development of housing near the reaches of the Los Angeles River affected by the proposed SSO because they do not result in discharge requirements that affect housing or any economic costs related to housing development. Additionally, the proposed SSO will support water recycling in Reach 6 of the Los Angeles River and development of the Pure Water Project, which will provide water resources to support housing that may be lost with other compliance options.

4.2.2.6 The Need to Develop and Use Recycled Water

The proposed water quality objectives will support the expansion of recycled water uses in the watershed consistent with California's stated goal of increasing the use of recycled water to help meet the state's growing demand for potable water. Water demand in the area will likely continue to increase due to population growth and urbanization, and additional sources of water including recycled water will be necessary to meet projected demand and promote water resiliency. Given the demonstrated need to expand recycling in the area to meet the region's future water requirements, the proposed SSO is needed to ensure the required compliance mechanisms allow for recycling to take place. Upon operation of the Pure Water Project which is described in more detail in **Section 4.1.4.1**, which will make use of an underutilized local resource, the water that would otherwise be discharged into the creek will then become a viable, affordable, and reliable source for potable, locally-produced water, providing long-term cost benefits. This project will reduce reliance on imported water as a cost-competitive alternative that will stabilize water rates and safeguard the local economy.

4.2.2.7 Summary

The proposed SSO will be fully protective of beneficial uses in Reach 6 of the LA River and will not have adverse impacts on aquatic life and wildlife in the watershed. In addition, the proposed SSO will support water recycling and water resiliency by allowing LVMWD to focus resources on the Pure Water Project which is expected to have multiple benefits to the community.

4.3 ANTIDEGRADATION ANALYSIS

The antidegradation analysis described in this section follows Federal and State Antidegradation Policy and evaluates whether changes in water quality resulting from adoption of the proposed SSO are consistent with maximum benefit to the people of the State. Antidegradation policies adopted at both the Federal and State levels are intended to protect and maintain existing water quality. The proposed SSO has the potential to degrade water quality and, in order to comply with Federal and State antidegradation policies, an antidegradation analysis must be completed. This analysis must show:

1. The strategy is necessary to accommodate important economic or social development;
2. Any reduction in water quality will be consistent with maximum benefit to people of the State;
3. Reduction in water quality will not unreasonably affect actual or potential beneficial uses; and
4. Water quality will not fall below water quality objectives set to protect beneficial uses as prescribed in the Basin Plan.

The antidegradation analysis presented is comprised of two main components: (1) an analysis showing the projected water quality impacts resulting from adoption of the proposed SSO will still be protective of the beneficial uses and (2) a socio-economic impacts analysis to establish the balance between the proposed action and the public interest. The section is organized as follows:

- Summary of Federal and State Antidegradation Policies
- Summary of Alternatives Being Analyzed
- Evaluation of Protection of Beneficial Uses
- Water Quality Impact Analysis
- Assessment of Socio-Economic Considerations
- Evaluation of the Consistency of Water Quality Reductions with the Maximum Benefit to the People of the State
- Evaluation of Consistency with Antidegradation Policies

4.3.1 Federal and State Antidegradation Policies

States are required to develop and adopt an antidegradation policy and identify the methods for implementing the policy (40 CFR 131.12). At a minimum, antidegradation policies must be designed to:

- Maintain and protect existing instream water uses and the water quality necessary to protect the existing uses. (40 CFR 131.12(a)(1)). Uses are “existing” if they were actually attained in the water body on or after November 28, 1975, whether or not included in a water quality standard. (40 CFR 131.3(e).)
- Maintain high quality waters unless the State finds after satisfaction of intergovernmental and public participation provisions of the states continuous planning process that allowing lowering water quality is necessary to accommodate important economic and social development. High quality waters are waters cleaner than necessary to support recreation and the propagation of fish, shellfish, and wildlife. (See 40 CFR 131.12(a)(2))

- Maintain and protect water quality in waters the state has designated as Outstanding National Resource Waters (ONRWs) with no allowance of permanent or long term degradation[21]. (*Ibid*. at § 131.12(a)(3); See also Fed. Reg. 51402 (Nov. 8, 1983)).

The State' s Antidegradation Policy is contained in State Board Resolution 68-16, Statement of Policy with Respect to Maintaining High Quality Water in California. Resolution 68-16 resolves the following:

- Waters that have quality that is better than that established in effective policies shall be maintained unless (by demonstration to the State) any change (a) will be consistent with the maximum benefit of the people, (b) will not unreasonably affect present and anticipated beneficial uses, and (c) will not result in water quality less than that prescribed in the policies.
- Activities or proposals that discharge or may discharge waste must meet waste discharge requirements that result in the best practicable treatment or control as needed to (1) preclude a pollution or nuisance and (b) assure the highest water quality consistent with the maximum benefit of the people will be maintained.

The SWRCB issued guidance to all Regional Boards regarding the implementation of antidegradation policies in NPDES permits (SWRCB Administrative Procedures Update (APU) No. 90-04). APU 90-004 provides the Regional Boards with guidance on the analysis that may be necessary to determine compliance with the antidegradation policies. Consistent with APU 90-004, the antidegradation analysis presented in this section evaluates whether changes in water quality resulting from the proposed SSOs and averaging periods are consistent with maximum benefit to the people of the State and will not unreasonably affect uses.

The Los Angeles River is not designated an outstanding natural resource water; therefore, the receiving water, Reach 6 of the LA River, is not subject to 40 CFR 131.12.a.3, but it is subject to other sections of the federal antidegradation policy, including 40 CFR 131.12.a.1 and 2. The application to other portions of the policy is determined on a constituent-by-constituent basis. For a water body where water quality is not better than needed to meet beneficial uses, either because it does not meet or it just meets applicable water quality objectives or criteria to protect beneficial uses, water quality necessary to support beneficial uses must be achieved and maintained. For waters with water quality that is better than necessary to support beneficial uses, a proposed change in water quality may not lower water quality unless such lowering is necessary to accommodate important economic or social development.

4.3.2 Summary of Alternatives Being Analyzed

The guidance for implementation of the antidegradation policy described in APU 90-004 is primarily focused on analysis of new or modified discharges to a waterbody rather than on adjustment of water quality objectives. However, per the guidance, consistency with the

[21] To date, no water bodies in the Los Angeles River watershed has been designated as an ONRW.

antidegradation policy should be considered during Basin Planning actions, including the adjustment of water quality standards.

The proposed action is a modification of the chloride water quality objectives in Reach 6 of the Los Angeles River from 150 mg/L to 190 mg/L as a monthly average. The alternative to the proposed SSO is to maintain the chloride objective at 150 mg/L measured as a monthly average. Previous sections of this report provide the technical and scientific justification for the modification of the objectives and demonstrate that the proposed SSO is protective of the existing and potential beneficial uses in the reach where the SSO applies. However, per APU 90-004:

> *"If the State and Regional Boards are aware that a change in water quality standards or implementation measures would permit specific projects, the applicability of the federal antidegradation policy to the changes in water quality caused by those projects should be considered."*

Consistent with APU 90-004, the antidegradation analysis focuses on comparing the expected water quality after adoption of the proposed SSO with baseline water quality. Evaluating the differences between the two treatment scenarios necessary to comply with the existing water quality objectives and the proposed SSO, which are Scenario 1 and Scenario 2, respectively, will allow determination of whether the proposed objective change is consistent with the state and federal antidegradation policies. Following are descriptions of the two scenarios evaluated.

Discharge Scenario 1 is comprised of the project elements that would be constructed and operated by the Joint Powers Authority to comply with the water quality objective of 150 mg/L as a monthly average. This scenario includes installing sufficient microfiltration or ultrafiltration and reverse osmosis (MF-UF/RO) to treat a portion of the effluent that is to be discharged to Reach 6 to ensure that the full volume discharged to the River meets the 150 mg/L objective at all times. As noted previously, this scenario also requires brine disposal, additional land and additional infrastructure.

Discharge Scenario 2 is based on the current operation of the Tapia WRF. While operations are expected to change with respect to frequency and volume of flow discharged to the LA River once the Pure Water Project begins operation, the treatment process will remain the same to produce tertiary treated water.

4.3.3 Evaluation of Protection of Beneficial Uses

Beneficial uses in the Los Angeles River and its tributaries are discussed in detail in Sections 2.6 and 4.1.1 of this report. As noted in these sections, chloride standards have been established for two of the designated beneficial uses, WARM and MUN. With respect to the WARM beneficial use, USEPA has recommended aquatic life criteria of 230 mg/L as a four-day average and 860 mg/L as a one-hour average. As presented in **Table 4-4,** the highest chloride concentration recorded in Reach 6 of the Los Angeles River from February 2002 to June 2010 has been 219 mg/L, which is protective of the aquatic life based on the USEPA aquatic life chloride criteria. During this period, Water Discharge Requirements for Tapia WRF included final effluent limitations for chloride of 190 mg/L for discharges to the Los Angeles River.

The chloride level considered protective of the MUN beneficial use is 250 mg/L, based on the Title 22 MCLs, which is higher than the aquatic life criteria.

In summary, changes in chloride discharge concentrations associated with the proposed SSO will not adversely affect any of the existing or future anticipated beneficial uses of Reach 6 of the Los Angeles River, or impair the integrity of this river as a whole. The proposed surface water chloride objective is consistent with Resolution 68-16 because it is fully protective of current and foreseeable future uses of water for beneficial uses of these waters. The proposed surface water SSO is below the USEPA acute and chronic aquatic life criteria for chloride. Therefore, it would be protective of the most chloride-sensitive aquatic organisms for which data are available as well as threatened and endangered species. As discussed in more detail below, anticipated incremental increases in chloride concentrations resulting under Discharge Scenario 2 as compared to Discharge Scenario 1 would still meet water quality objectives necessary to protect all designated beneficial uses in Reach 6 of the Los Angeles River and downstream.

4.3.4 Water Quality Impact Analysis

The two discharge scenarios are compared with a baseline to determine how water quality in Reach 6 of the Los Angeles River changes as the result of implementing these scenarios. Limited receiving water quality data is available for Reach 6 of the Los Angeles River. Therefore, the baseline water quality was determined for an average condition and for conditions where the chloride concentrations are at the higher end of the observed data based on available water quality data as follows:

1. Chloride data collected in Reach 6 of the LA River as summarized in the EWMP for the Upper LA River Watershed as shown above **Table 4-4**. The average chloride concentration for data collected between 2002-2013 was 145 mg/L. The chloride concentrations during this period ranged from 35.8-219 mg/L with 43% of the measured values exceeding the objective of 150 mg/L.
2. Chloride data collected by LVMWD at the downstream receiving water location (i.e., RSW0LA002D, Arroyo Calabasas) from April 2007 to November 2016. The average chloride concentration is 160 mg/L.
3. A measurement from SWAMP Perennial Stream Surveys collected in Reach 6 of the LA River (SWAMP Station Code: 412PS0052), just downstream of De Soto Ave on May 20, 2008, which is equal to 172 mg/L.

Considering that a significant portion of the available data exceeded 150 mg/L, both the average value of the EWMP data set (145 mg/L) and the higher observed 2008 value of 172 mg/L were used in the evaluation.

Using a mass balance, chloride concentrations in the river were estimated considering discharge to the LA River based on the two scenarios described above. The following data were used for this mass balance:

- Average Tapia effluent flow when discharging to the LA River using data from 2004 to 2017, which is equal to 0.76 MGD (1.17 cfs). The flow to the LA River ranged from 0.14-2.4 MGD during this period. For comparison, a discharge flow of 5 MGD (i.e., maximum flow to the LA River once the Pure Water Project is in operation) was also considered.
- Long-term average of Los Angeles River daily flow at USGS guage 11092450 (Los Angeles River at Sepulveda Dam) from Oct 1, 2002 to August 20, 2019, which is equal to 76 MGD. In addition, because the chloride data was primarily collected in dry weather,

the average flow during dry weather (i.e., when the river flow is less than 500 cfs) of 48 MGD was also evaluated. Because DC Tillman also discharges to this portion of the LA River, their average discharge above Sepulveda Dam of 23 MGD was subtracted from the wet weather and dry weather flows to be conservative. Therefore, LA River flows of 53 and 25 MGD were used in this evaluation.

- Tapia effluent concentrations were set equal to 150 mg/L to account for Scenario 1, and to 164 mg/L, the average effluent concentration from June to December 2017, and at 190 mg/L, the proposed SSO, to account for Scenario 2.

Chloride concentrations in the river estimated from the mass balance for the range of conditions described above are presented in **Table 4-5.** Even at the higher estimated effluent flow and chloride concentrations, there is no significant difference between the baseline condition with no effluent discharge, the existing condition and treatment of the effluent to meet 150 mg/L. Using the higher ambient chloride concentration of 172 mg/L both scenarios will result in a river water quality that would exceed the existing water quality objective of 150 mg/L, but would comply with the proposed water quality objective of 190 mg/L. If the upstream, baseline concentration is 145 mg/L, the highest resulting downstream river concentration was 148.2 mg/L (i.e., effluent flow of 5 MGD and 164 mg/L and receiving water flow of 25 MGD). This represents a change of 2.2%. In the case where the baseline condition is 172 mg/L, the effluent at 164 mg/L results in slight decrease (-0.8%) in chloride concentration (i.e., 170.7 mg/L vs 172 mg/L). Similarly, the difference between the resulting river concentrations for Scenario 1 vs. Scenario 2 are less than 2%. Therefore, negligible improvement in the river's water quality with respect to chloride would result from the implementation of Scenario 1.

Table 4-5 also shows the projected impact on LA river concentrations if the effluent chloride levels are equal to the proposed objective of 190 mg/L. In that case, for the average river chloride concentration of 145 mg/L, the effluent discharge would increase the chloride concentration by no more than 5.1% (i.e., 148.2 mg/L for a river flow of 25 MGD and effluent flow of 5 MGD). At the higher river concentration of 172 mg/L, an effluent discharge at 190 mg/L would increase the chloride concentration to no more than 175 mg/L or a 1.7% increase.

Table 4-5 Chloride Concentrations in the LA River Resulting from Tapia WRF Discharge for Different Effluent Chloride Concentrations.

Receiving water flow (MGD)	Effluent flow (MGD)	Baseline River Concentration = 145 mg/L			Baseline River Concentration = 172 mg/L		
		Discharge Scenario 1	Discharge Scenario 2		Discharge Scenario 1	Discharge Scenario 2	
		150 mg/L	164 mg/L	190 mg/L	150 mg/L	164 mg/L	190 mg/L
53	0.76	145.1	145.27	145.63	171.69	171.89	172.25
	5	145.4	146.64	148.88	170.1	171.31	173.55
25	0.76	145.1	145.56	146.32	171.35	171.77	172.53
	5	145.8	148.17	152.5	168.3	170.67	175.0

4.3.5 Assessment of Socio-Economic Considerations

The public benefit derived from the proposed site-specific objectives and the associated treatment projects is an important consideration in the antidegradation analysis. In accordance

with APU 90-004 guidance for a 'complete' antidegradation analysis, the following factors are considered in determining whether the proposed changes to the water quality objectives and the associated projects are necessary to accommodate economic or social development and is consistent with maximum public benefit:

- A consideration of alternative control measures that might reduce, eliminate, or compensate for the water quality impacts of the proposed projects;
- An evaluation of each alternative control measure for costs, impacts on water quality, and compliance with applicable laws, regulations, and policies;
- An assessment of the socio-economic impacts of each alternative; and
- A balancing of the proposed projects and the alternatives based on environmental and socio-economic considerations.

As discussed in **Section 4.3.2**, there are two alternative discharge scenarios being evaluated in this antidegradation analysis. Both scenarios are protective of beneficial uses, however Scenario 1 will attain existing water quality objectives, while Scenario 2 will attain proposed site specific objectives. This section provides an assessment of the costs and socio-economic impacts for each scenario in order to determine if the proposed changes to the water quality objectives are consistent with maximum public benefit.

An economic analysis of the proposed SSO was conducted using the Interim Economic Guidance for Water Quality Standards[22] and in accordance with APU 90-004. The Interim Economic Guidance for Water Quality Standards (Economic Guidance), provides a three step process for the evaluation:

1. Develop project costs and calculate the annualized cost of pollution control.
2. Determine if the requirements would interfere with development.
3. Determine if economic or social development would be important.

For step 1, the projected costs associated with the infrastructure construction and operation required to meet the water quality objectives of the two different scenarios were developed and are outlined below.

As shown above in **Table 4-2**, Scenario 1 imposes a large cost/impact to the community and, as shown in **Table 4-5**, there is no measurable environmental benefit. As summarized in **Table 4-6,** this scenario will impose over $3M per year in equivalent annual costs, which is the annualized average of the sum of the amortized capital construction cost (including 3.5% interest rate for 30 years) plus the annual operation and maintenance cost. With approximately 19,900 households in the service area, this would correspond to an additional annual cost of $152-160 per household.[23] On the other hand, Scenario 2 will not result in any additional cost to the community.

[22] U.S. EPA. 1995. *Interim Economic Guidance for Water Quality Standards Workbook*. U.S.EPA Office of Water, EPA-823-B-95-002. March 1995.

[23] Kennedy Jenks Consultants. 2015 Urban Water Management Plan Final. Prepared for Las Virgenes Municipal Water District. August 17, 2016.

Table 4-6 Estimated Costs of Scenario 1 and Scenario 2

	Scenario 1		Scenario 2
	164 mg/L	180 mg/L	
MF/RO Capital Cost	$17,913,000	$19,305,000	$0
MF/RO Annual O&M	$2,066,194	$2,136,839	$0
Equivalent Annual Cost (Capital and O&M)	**$3,040,148**	**$3,186,478**	**$0**

The cost savings under Scenario 2 compared to Scenario 1 will result in lower monthly sewer rates as well as lower annual increases in sewer rates. The annual costs of each alternative, and their associated monthly sewer rate increases, can be translated into impacts to individual households due to the sewer rate increases and the impacts on the community for key economic indicators. At the individual household level, lower sewer rates will correspond to more available disposable personal income (DPI). More DPI translates into more resources available to spend on essential goods and services such as food, lodging, and healthcare.

For Step 2, the Economic Guidance suggests the development of a number of indicators of community economic health to assess whether the costs would interfere with development. A screening metric is included which is the Average Total Pollution Control Cost per Household divided by the median income. According to the 2010 Census, the median household income in Las Virgenes service area is $117,615.[24] While the increase in utilities rates per household for Scenario 1 is less than 1% of the median annual income, there is no increase at all associated with Scenario 2. In addition, the estimated costs for Scenario 1 are conservative because they do not include costs associated with brine disposal, land acquisition and additional infrastructure.

Additionally, the proposed SSO will result in additional resources to support the Pure Water Project and for the future to address other unforeseen water quality issues, including future TMDLs, future constituent of emerging concern requirements, and other stressors brought about by climate change.

4.3.6 Evaluation of the Consistency of Water Quality Reductions with the Maximum Benefit to the People of the State

As explained in Section 4.1.3, the chloride effluent limits have historically been 190 mg/L prior to 2017. Order No. R4-2017-0124 revised the chloride effluent limitation for Tapia WRF discharge to the LA River to be 150 mg/L. Since then, however, a TSO (Order No. R4-2017-0125) has set an interim limit of 190 mg/L to allow the Tapia WRF time to achieve consistent compliance. Therefore, to date, the 190 mg/L limit has been in effect and the 150 mg/L limit has historically never been implemented.

[24] MHI for Las Virgenes Unified School District. https://www.point2homes.com/US/Neighborhood/CA/Los-Angeles-County/Las-Virgenes-Unified-School-District-Demographics.html

Improvements to water quality resulting from implementation of the 150 mg/L effluent limit will be almost immeasurable. In addition, the implementation of the existing water quality objective and resulting effluent limit of 150 mg/L will require a large capital investment to install a MF-UF/RO system along with annual O&M costs. These costs will need to be spread among all residential customers. By controlling the cost to the community, the implementation of the proposed SSO as compared to the existing water quality objectives will accommodate important economic or social development and will be consistent with the maximum benefit to the people of the State. Specifically, it will allow LVMWD to focus its resources on the development of the Pure Water Project which is expected to have multiple beniefits to the community including improving water resiliency in the region.

Additionally, the 150 mg/L effluent limitation prevents Tapia from accepting diversions of dry weather urban runoff into the treatment plant due to the chloride concentrations in the runoff. Under scenario 2, Tapia would be able to accept urban runoff diversions. These diversions would increase available recycled water supplies and improve the receiving water quality in the Malibu Creek watershed by reducing bacteria and other pollutants in the runoff.

There will also be reduced environmental impacts resulting from applying the SSO by eliminating the need to construct additional facilities including brine disposal and RO facilities to achieve the additional chloride removal. Maintaining the existing treatment process (i.e., implementing Scenario 2) would result in reduced energy use and greenhouse gas emissions compared to Scenario 1. This will support reduction goals for greenhouse gases outlined in AB California Global Warming Solutions Act (AB 32). Implementation of water quality improvement projects could potentially have adverse impacts to the environment arising from the installation, operation, and maintenance of the RO treatment system and brine disposal as well as other continuing activities such as traffic, noise, air pollution, and land disturbance. Additionally, the AB 32 seeks to reduce greenhouse gas emissions and any reduction in new sources will support attainment of the goal.

4.3.7 Evaluation of Consistency with Antidegradation Policies

Evaluation of consistency of the proposed SSO with the antidegradation policy has been performed by comparing the impacts of projects necessary to meet a water quality objective of 150 mg/L to projects necessary to meet the proposed SSO. The adoption of the proposed SSO would be consistent with the Resolution 68-16, as well as the Federal Antidegradation Policy. When implemented, combined with the development of the Pure Water Project, the revised water quality objectives will be protective of all beneficial uses that apply to the affected waters. This assessment is based on the following findings:

- The implementation of the proposed SSO will accommodate important economic or social development and will be consistent with the maximum benefit to the people of the State.
- While the proposed SSO allows for an increase in chloride loading and higher instream concentrations above existing water quality objectives, the increased concentration is negligible and will not adversely affect existing or potential beneficial uses of Reach 6 of the Los Angeles River and will be protective of beneficial uses.

- The additional chloride loading and higher allowable instream concentrations resulting from the proposed SSO will be offset by important economic and social development gained through the development of the Pure Water Project. These benefits include:
  a. Reduced costs and associated impacts from higher sewer rates.
  b. Reduced energy use and greenhouse gas emissions, which will support reduction goals for greenhouse gases outlined in AB32.
  c. Reduced environmental impacts associated with the construction of additional RO capacity and the additional pump station and pipelines.

This analysis shows that the proposed SSO will protect Reach 6 of the Los Angeles River beneficial uses at a lower cost than implementing what is required to meet the current objective. The savings will reduce the burden on local communities and allow for that cost savings to provide benefit in other parts of the local economy by reducing projected increases in service rates and new connection fees. The reduced costs will make more money available in the future to support implementation of other water quality improvement projects in the community. As described in this analysis, the proposed SSO will support the continued need for cost-effective wastewater service in Las Virgenes. The costs of complying with the current objective to achieve the incremental reduction in chloride concentrations that would result from the additional treatment elements is not commensurate to the benefits that would be achieved by adopting the proposed SSO. As a result of the findings of this analysis, the proposed SSO is consistent with the purpose and intent of the federal and state antidegradation policies.

5 Final Recommendation

Compliance with the existing water quality objective would require Tapia WRF to meet the final effluent limit of 150 mg/L, expressed as a monthly average. The analysis presented in the previous reports and summarized in Section 1.2 of this report indicate that the controllable sources are minimal and the reductions that could be achieved are either not adequate to reliably meet this objective or are not economically or technically feasible. Furthermore, the economic analysis for compliance with the 150 mg/L limit included in **Section 4.1.4** of this report suggests that complying with this objective would require a capital investment of approximately $18M to $19.3M and over $2M in annual costs associated with ongoing operation and maintenance excluding the brine disposal which would have additional environmental and socio-economic concequences.

LVMWD is, therefore, proposing to amend the Basin Plan to include site-specific objective of 190 mg/L based on the analysis presented in this report and precedent in Order 97-02. The proposed objective is based on a baseline water supply chloride concentration of 105 mg/L, which is adequate to accommodate fluctuations in supply conditions, and a loading factor of 85 mg/L, which also considers water conservation effects on chloride concentrations and is consistent with Order 97-02. This loading factor is proposed based on the difference between monthly chloride concentrations in Tapia's effluent and water supply from 2005 to 2016. Water supply chloride levels during this period averaged 77.2 mg/L with standard deviation of 9.4, maximum of 104 mg/L, and the 90th percentile of 89 mg/L. The analysis in **Section 3** justifies the 190 mg/L chloride objective and shows that this objective is fully protective of beneficial uses. Additionally, the analysis in **Section 4.3** shows that this objective will not result in significant

degradation in the Los Angeles River. Using conservative assumptions for river flow (i.e., 25 MGD, dry weather flow) and concentration (average concentration of 145 mg/L), effluent discharge at 5 MGD (maximum flow when Pure Water Project is operating) and effluent concentration of 164 mg/L result in no more than a 5.1% change in chloride concentrations in the river compared to the baseline condition. In addition, there is almost no difference in the river chloride concentrations resulting from Discharge Scenario 1 of treating the effluent to achieve 150 mg/L of chloride compared to Discharge Scenario 2 of maintaining current treatment processes. Therefore, the additional cost that would be required is not warranted and provides no benefit. In addition, the proposed SSO provides for discharge of flows that may not meet the standards set for the Pure Water Project and for flows if recycle water demand is reduced. Finally, if LVMWD were required to expend funds on Discharge Scenario 1, it could delay or reduce the reach of the Pure Water Project, a project which is anticipated to provide numerous benefits to the community.

The proposed approach is to align effluent limitations for the Tapia WRF with the Basin Plan objectives and effluent limitations for other POTWs discharging to the Los Angeles River to reflect the existing and potential beneficial uses in the watershed.

As described in this report, this site-specific water quality objective conforms to State Resolution 68-16 and Federal Regulations covering antidegradation (40 CFR 131.12). It does not unreasonably affect beneficial uses or result in water quality lower than prescribed in applicable state or federal polices, is necessary to accommodate important social or economic development, and has maximum benefits to the people of the State.

Memorandum

LARRY WALKER ASSOCIATES

DATE: October 7, 2019

TO: Brett Dingman, LVMWD

COPY TO:

Betsy Elzufon
1480 Drew Ave, Suite 100
Davis, CA 95616
530.753.6400 x226
530.753.7030 fax
betsye@LWA.com

SUBJECT: **Tapia WRF TSO Support Scope and Budget Review**

LWA has been working with the Las Virgenes Municipal Water District (LVMWD) to meet the requirements of Time Schedule Order R4-2017-0125(TSO) to evaluate strategies for complying with its chloride effluent limitation. The evaluation to date has determined that there are no viable source control strategies to reduce chloride levels to meet the final effluent limit of 150 mg/L and that a regulatory strategy of revising the chloride water quality objective in the Basin Plan is the best path to compliance.

LWA's scope of work was based on completing the 4 reports required in the TSO's compliance schedule including the Chloride Source Investigation, Evaluation of Options, Identification of Options and Recommendations Reports. To date, the first 3 reports have been submitted to the Regional Board and LWA and LVMWD staff met with Regional Board staff in April 2019 to review the work completed and discuss the approach to justifying a Basin Plan Amendment to modify the chloride water quality objective. During that meeting, Regional Board staff provided input on what would be needed to justify the Basin Plan Amendment. Based on that meeting LWA proceeded with the final report, the Recommendations Report.

Based on the Regional Board staff's input, LWA included the full justification needed for the Basin Plan Amendment including an economic analysis and an antidegradation analysis in the Recommendations Report. However, in the original scope of work for this project it was stated that "any regulatory analyses required by the Los Angeles Water Board to gain approval of the recommended regulatory options are not included" in the budget.

The tasks, budget and expenditures through August 2019 are shown below.

Task	Budget	Total spent through August 2019
Task 1 - Review Existing Information	$18,650	$7,527
Task 2 - Investigate Chloride Sources in JPA Effluent	$14,530	$12,145
Task 3 - Evaluation of Chloride Sources and Reduction Options	$11,730	$16,324
Task 4 - Identification of Source Reduction Options	$10,800	$15,844
Subtotal for Tasks 1-4	**$55,710**	**$51,840**
Task 5 - Recommendation	$7,590	$ 31,214*
Task 6- Regional Board Meeting Attendance	$16,780	$ 6,555
Task 7 - Project Management	$11,770	$ 4,369
Total Cost	**$91,850**	**$93,978**

*Includes ~$8200 not yet invoiced to LVMWD

The level of effort required to complete Tasks 1-4 and Task 6 was consistent with the estimated budget. However, the budget for Task 5 was based on preparing a brief Recommendation summarizing the previous work and proposing that a Basin Plan Amendment be considered. As noted above, the content of the Recommendations Report was expanded based on the outcome of the meeting with Regional Board staff.

The estimated remaining effort to complete and submit the Recommendation Report is approximately 32 hours for Project staff, 40 hours for Betsy Elzufon and 20 hours for Ashli Desai for a total of $24,000. In addition, it is anticipated that there would be additional meetings with the Regional Board and possible revisions to the Report. For 2 meetings with 2 people from LWA attending, it is estimated that cost would be 8 hours for Ashli Desai and 16 hours for Betsy Elzufon for a cost of $8000 including travel and approximately $8,000 to address revisions based on Regional Board comments. This would correspond to a an additional cost of $40,000. Added to the $93,978 spent through August 2019, this would result in a total cost of $133,978. This total includes time spent by LWA staff in September.

This budget of $133,978 covers the completion of the Recommendations report and approval of the report by the Regional as the Technical Report needed for the Basin Plan Amendment. It assumes that the Regional Board does not require extensive new analyses to be conducted. Once this report is approved, the remainder of the process to get the Basin Plan Amendment for the Site Specific Objective would be scoped separately based on input from the Regional Board regarding the support they would need from LVMWD during the amendment process.

November 4, 2019 JPA Board Meeting

TO: Board of Directors

FROM: Finance & Administration

Subject : Pure Water Demonstration Project and Garden: License Agreement for JPA Use of Building No. 1

SUMMARY:

The JPA is proceeding with construction of the Pure Water Demonstration Project and Garden, utilizing the area in and around Building No. 1, which is owned exclusively by LVMWD. As a result, the attached License Agreement is proposed to establish basic terms and conditions for the JPA's use of the LVMWD-only facility.

RECOMMENDATION(S):

Approve the proposed License Agreement with Las Virgenes Municipal Water District to allow the JPA to use the area in and around Building No. 1 for the Pure Water Demonstration Project and Garden.

FISCAL IMPACT:

No

ITEM BUDGETED:

No

FINANCIAL IMPACT:

There is no significant financial impact associated with this action.

DISCUSSION:

The JPA is proceeding with construction of the Pure Water Demonstration Project and Garden, utilizing the area in and around Building No. 1, which is owned exclusively by LVMWD. The demonstration project will utilize approximately 5,245 square feet of Building No. 1, and the demonstration garden will occupy approximately 12,468 square feet of the landscaped area surrounding the building, as denoted on Exhibit A to the proposed License Agreement. Since the building and surrounding area is owned solely by LVMWD, a License Agreement is necessary to allow the space to be used by the JPA.

The proposed License Agreement grants a non-exclusive license to the JPA to operate the Pure Water Demonstration Project and Garden in the vacant Building No. 1 and surrounding area. LVMWD has sought to lease out the vacant building in recent years and has been unable to secure a tenant due to the market conditions in the area. This factor, along with its location, make the use of the facility ideal for the Pure Water Demonstration Project and Garden.

Following are the key terms of the proposed License Agreement:

- Provides the JPA with access and use of the identified facility;
- Establishes consideration to LVMWD, in the nominal amount of $1.00 per year, recognizing that the facility is vacant and not currently being utilized;
- Specified a 10-year term with a 60-day termination clause; and
- Requires that the JPA fund the operation and maintenance costs.

The License Agreement was presented to and approved by the LVMWD Board on October 15, 2019.

Prepared by: Donald Patterson, Director of Finance and Administration

ATTACHMENTS:

Proposed License Agreement

LICENSE AGREEMENT

This License Agreement (this "Agreement"), dated as of _____, 2019 (the "Effective Date"), is by and between the Las Virgenes-Triunfo Joint Powers Authority ("Licensee" or the "JPA") and the Las Virgenes Municipal Water District ("Licensor" or "District"). District and JPA are sometimes referred to individually as a "Party" and collectively as the "Parties."

RECITALS

WHEREAS, the JPA wishes to proceed with a pilot project in the form of the Pure Water Demonstration Project ("Demonstration Project"), which is a small-scale version of its planned Advanced Water Treatment Facility ("AWTF"). This Demonstration Project will develop the necessary information to successfully implement the future full-scale AWTF that will produce over 1.6 billion gallons per year of locally-sourced water for indirect potable reuse by means of augmentation to the Las Virgenes Reservoir; and

WHEREAS, the source water for the Demonstration Project and full-scale plants will be supplied by the Tapia Water Reclamation Facility ("Tapia"). Tapia's highly treated recycled water is currently used for irrigation or discharged into Malibu Creek. Further treatment of Tapia's recycled water through an AWTF creates a local water supply, relieving some of the dependence on imported water; and

WHEREAS, the Demonstration Project will provide the opportunity to test and evaluate advanced purification technologies, including reverse osmosis and ultraviolet disinfection, which will aid in the design of the full-scale AWTF. The Demonstration Project will also offer a hands-on training ground for Water and Wastewater Operators alike, providing them with experience needed to become Certified Advanced Water Treatment Operators, which is a requirement to operate an AWTF; and

WHEREAS, District owns the real property in Calabasas, California identified in the site plan attached hereto as Exhibit "A" (the "Property") on which is located District's Headquarters; and

WHEREAS, the Demonstration Project and its visitor's center will be constructed in a currently unused building (Building 1) across from the District's main offices as shown in Exhibit A. Approximately half of the empty building will be utilized to build out the PURE H2O demonstration equipment and create a visually appealing, interactive, and educational space for public outreach. In addition to the Demonstration Project, a demonstration garden is planned as an attractive feature surrounding the building with native landscaping and water fountains utilizing the produced purified water; and

WHEREAS, District wishes to license to JPA, upon approval from the JPA, a portion of the Property for the Demonstration Project and accompanying demonstration garden (the "Premises"), as designated in Exhibit A; and

WHEREAS, JPA desires that District grant a license to the Premises to JPA as set forth herein.

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants and agreements herein contained, and intending to be legally bound hereby, JPA and District hereby agree as follows:

TERMS

1. License. District hereby grants a non-exclusive license to JPA in the Premises, as identified in Exhibit A, and JPA hereby accepts the license from District in the Premises, in accordance with the terms and conditions hereinafter set forth, for the purpose of JPA's construction, installation, operation, and maintenance of the Demonstration Project and demonstration garden (the "License"). JPA shall not use the Premises for any other purpose without the express written consent of District, which consent may be withheld in District's sole and absolute discretion. The District may use and grant to third parties the right to use the Premises so long as such use is not inconsistent with and does not interfere with JPA's use of the Premises for the Demonstration Project or its access to it.

2. Access Rights. District hereby grants to JPA the right of access on, over, and through the Property as necessary or convenient to gain access to the Premises.

3. Consideration. JPA shall pay District one U.S. dollar ($1.00) on the Effective Date as consideration for this Agreement.

4. Demonstration Project Construction, Installation, Operation, and Maintenance.

(a) District hereby consents to the design, construction, installation, operation, maintenance, and repair of the Demonstration Project and accompanying demonstration garden on the Premises.

(b) Throughout the Term, District covenants that JPA shall enjoy quiet and peaceful use, enjoyment, and possession of the rights granted under this Agreement.

5. Term. The term of this Agreement shall commence on the Effective Date and terminate on January 1, 2029 (the "Term"). After termination of this Agreement, District grants JPA a license to enter the Premises for ninety (90) days to remove the Demonstration Project. Notwithstanding the foregoing, either Party may terminate this Agreement at any time upon sixty (60) days written notice to the other Party.

6. Cooperation. District shall assist JPA in obtaining any necessary agreements, permits, approvals, including any zoning, land use, environmental, building, and other permits required to construct, install, operate, and maintain the Demonstration Project.

7. Maintenance. JPA shall, at all times at JPA's sole cost and expense, maintain that portion of the Premises where the Demonstration Project is located.

8. Hazardous Substances. Neither Party shall introduce or use any Hazardous Substances on, in or under the Premises or Property in violation of any applicable law. If a Party becomes aware of any Hazardous Substances on, in, or under the Premises or Property, it shall promptly notify the other Party of the type and location of such Hazardous Substances in writing. Each Party agrees to indemnify, defend, and hold harmless the other Party and its Affiliates and their employees and agents from and against any and all administrative and judicial actions and rulings, claims, causes of action, demands, and liability, including, but not limited to, damages, costs, expenses, assessments, penalties, fines, losses, judgments, and reasonable attorney fees that any Party may suffer or incur due to the existence of any Hazardous Substances on the Property or the migration of any Hazardous Substance to other properties or the release of any Hazardous Substance into the environment ("Environmental Claims"), that relate to or arise from such Party's activities on the Property or Premises, except to the extent directly attributable to the negligent acts or omissions or willful misconduct of the other Party. District shall further indemnify,

defend, and hold harmless JPA from and against any and all Environmental Claims due to the presence of any Hazardous Substances in, on, or under the Premises as of the Effective Date. The indemnifications in this Section 9 specifically include, without limitation, costs incurred in connection with any investigation of site conditions or any cleanup, remedial, removal, or restoration work required by any governmental authority. District shall be responsible for and shall promptly conduct any investigation and remediation as required by any applicable Environmental Law or other law relating to all spills or other releases of any Hazardous Substances to the extent not caused by JPA, that have occurred, or which may occur on the Property. This Section 9 shall survive the termination or expiration of this Agreement.

9. Assignment. Neither Party shall have the right to assign any of its rights, duties, or obligations under this Agreement without the prior written consent of the other Party. This Agreement shall be binding on and inure to the benefit of the successors and permitted assigns.

10. Amendments. This Agreement may be amended only in writing signed by the Parties.

11. Notices. Notice will be deemed as given upon personal delivery, receipt of e-mail, receipt of fax confirmation, or five days after deposit in U.S. Mail, first-class postage, prepaid, and addressed as follows:

Las Virgenes Municipal Water District:
4232 Las Virgenes Rd
Calabasas, CA 91302

JPA:
4232 Las Virgenes Rd
Calabasas, CA 91302

12. Waiver. The waiver by either Party of any breach of any term, condition, or provision herein contained shall not be deemed to be a waiver of such term, condition, or provision, or any subsequent breach of the same, or any other term, condition, or provision contained herein.

13. Choice of Law. This Agreement shall be governed by and construed in accordance with the domestic laws of the State of California without reference to any choice of law principles.

14. Binding Effect. This Agreement and its rights, privileges, duties, and obligations shall inure to the benefit of and be binding upon each of the Parties hereto, together with their respective successors and permitted assigns.

15. Counterparts. This Agreement may be executed in counterparts, which shall together constitute one and the same agreement. Facsimile or .pdf signatures shall have the same effect as original signatures and each Party consents to the admission in evidence of a facsimile or photocopy of this Agreement in any court or arbitration proceedings between the Parties.

16. Further Assurances. Upon the receipt of a written request from the other Party, each Party shall execute such additional documents, instruments, and assurances and take such additional actions as are reasonably necessary to carry out the terms and intent hereof. Neither Party shall unreasonably withhold, condition, or delay its compliance with any reasonable request made pursuant to this Agreement.

17. Compliance With Laws. JPA shall not use the Premises or any part thereof or suffer or permit JPA's agents or contractors to do anything in or about the Premises in conflict with any applicable law, statute, zoning restriction, ordinance, or governmental law, code, rule, or regulation affecting the condition, use, or occupancy of the Premises. JPA shall not commit any public or private nuisance or any other act or practice which would materially disturb the quiet enjoyment of any occupant of nearby properties.

18. Indemnification. Parties shall hold harmless, defend at its own expense, and indemnify each Party, its officers, employees, and agents against any and all liability, claims, losses, damages, or expenses, including reasonable attorneys' fees, to the extent arising from all acts or omissions to act in relation to the License; excluding, however, such liability, claims, losses, damages, or expenses arising from another Party's active negligence or willful acts. This Indemnification Section of the Agreement shall survive the termination of this Agreement.

IN WITNESS WHEREOF intending to be legally bound hereby, the Parties are signing this Agreement as of the dates opposite their respective signatures.

Dated: _____, 2019

Las Virgenes Municipal Water District

_____

By:

Its: Board President

Dated: _____, 2019

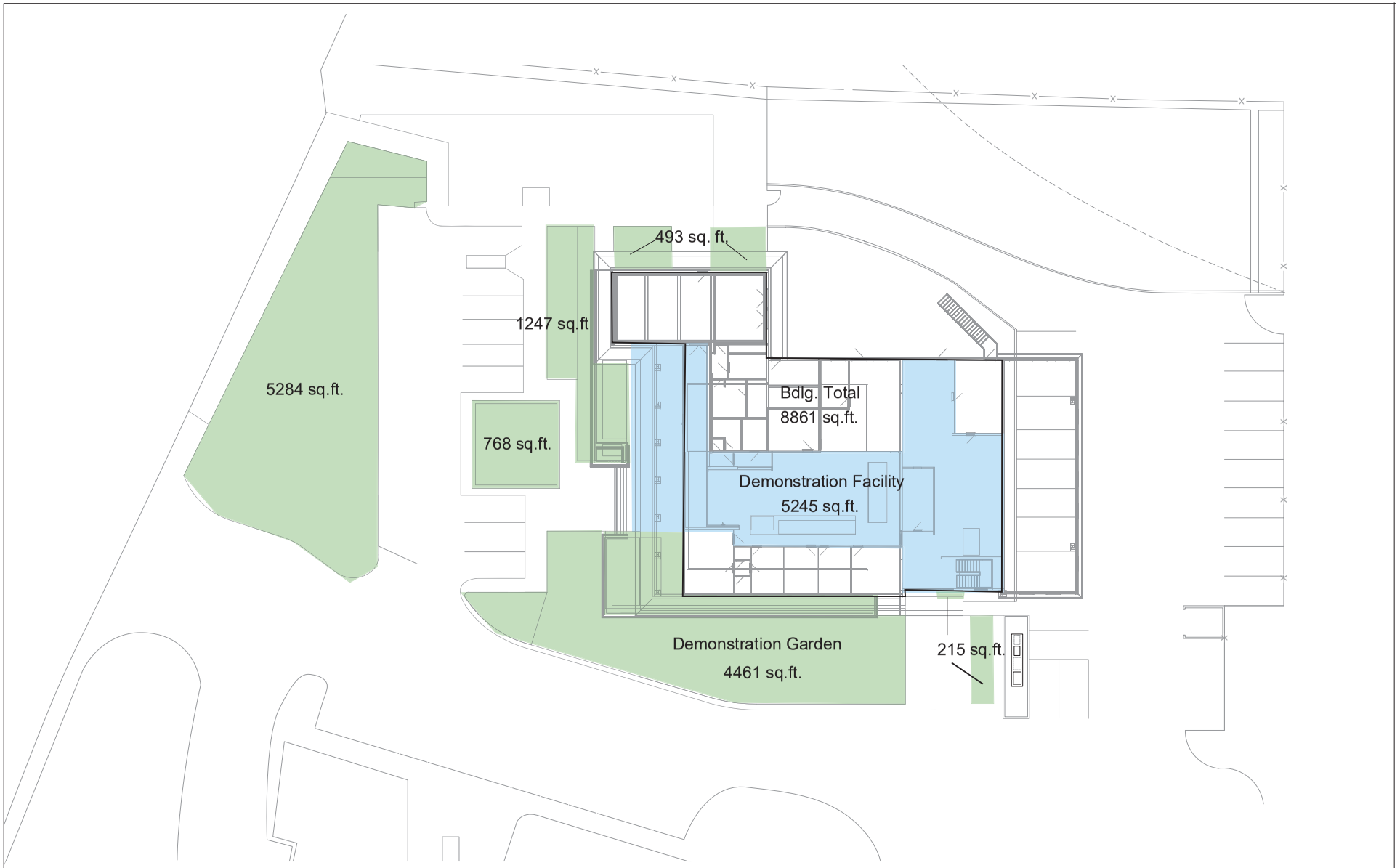
Las Virgenes-Triunfo Joint Powers Authority

_____

By:

Its: Board President

EXHIBIT A



SITE PLAN

0 10 20
1/16"=1'-0"

LEGEND

- DEMONSTRATION FACILITY : 5245 sq.ft.
- DEMONSTRATION GARDEN : 12468 sq.ft.

LAS VIRGENES - TRIUNFO JPA
PURE WATER DEMONSTRATION PROJECT

DEMONSTRATION GARDEN AND FACILITY
SITE PLAN

BEST BEST & KRIEGER LLP
ATTORNEYS AT LAW

Memorandum

To: Las Virgenes – Triunfo JPA
From: Syrus Devers, Best Best & Krieger
Date: October 29, 2019
Re: Monthly State Political Report

Legislative Report

The Legislature is slowly coming back to life after the unofficial post end-of-session hiatus. The main activity through November will be informational hearings. None of the hearings currently set relate directly to water, but the connection between wildfires and water districts is the subject of frequent conversation in Sacramento. The three main themes are liability of water districts if loss of water pressure hinders firefighting efforts, use of emergency backup generators during planned and unplanned power outages, and the cost of insurance in areas threatened by wildfires. Las Virgenes and BB&K are working closely with CMUA on a legislative proposal on air pollution control regulations that govern the use of emergency backup generators. ACWA is considering a separate proposal on the same topic.

Administrative Report

Water affordability will remain the focus of significant regulatory efforts in direct and indirect means through the end of the year. At the forefront is the Office of Environmental Health Hazard Assessment's (OEHHA) initial draft of their mapping tool for determining water affordability. Water districts are concerned about the public's perception of water quality and rates if the criteria being used doesn't account for differing water costs throughout the state, and different income levels and property values when evaluating whether or not water is affordable. The analysis also touches on water quality that raises a host of issues. For example, if the number of times a district exceeded MCL's for water quality over a set number of years is a factor, a district with three violations five years ago, and none since due to corrective action, will score worse than a district with two recent violations. All of this underscores what has been said a million times but still isn't heard—if it involves water, it's never simple.

Significant attention is turning to the regulatory efforts that threaten to trap water districts between conflicting goals. The Human Right to Water and prohibitions on water shutoffs, to give two examples, seek to make water more affordable, but contaminant control regulations cut in the opposite direction. One example is PFOS/PFAS regulations. If SWRCB follows through on public comments and lowers the response level for PFOS/PFAS to anything near the notification levels, significant sources of groundwater will become unavailable for drinking water use which will dramatically increase the cost of water. Some districts could literally see water costs doubling in order to purchase more imported water. If demand for imported water goes up significantly, the impacts will ripple through the water industry.

The SWCB is also developing an economic feasibility analysis tool to use when setting MCLs. The current effort involves MCLs for Chrome-6, but the SWRCB staff has indicated that the tool is being developed for use in setting any MCL. If so, how that tool works could have dramatic fiscal implications for both municipal entities and special districts. BB&K is currently organizing meetings with SWRCB members, key staff, and legislators to highlight these concerns.

BEST BEST & KRIEGER LLP
ATTORNEYS AT LAW

To: Las Virgenes – Triunfo JPA Board of Directors
From: John Freshman and Ana Schwab
Date: October 11, 2019
RE: Federal Report

Federal Appropriations

The President signed a stopgap spending measure which funds the government through November 21st. It seems likely that another continuing resolution will be passed through the end of December to give legislators time to negotiate the more controversial spending bills.

On September 25th, the Senate Appropriations Subcommittee passed a $35.89 billion appropriations bill for Interior-Environment. The Senate appropriated $9.01 billion for the Environmental Protection Agency (EPA), a $161 million increase from last year's fiscal bill. The House version appropriates $9.53 billion, about a $500 million difference from the Senate version.

Congress is in recess until October 15th, when both chambers will return in session. Senate Appropriations Chairman Richard Shelby (R-AL) and Vice Chairman Patrick Leahy (D-VT) are pushing for Majority Leader Mitch McConnell (R-KY) to bring the approved 10 of the 12 spending bills to the floor for votes upon return; eight of those ten— Commerce-Justice-Science, Interior-Environment, Legislative Branch and State and Foreign Operations—were passed unanimously by 31-0 votes.

After the Senate votes on their spending bill measures, they will have to negotiate with the House for a set of allocations for all 12 subcommittees. Allocations are currently being discussed between staffers for Shelby, Leahy, and House Appropriations Chairwoman Nita Lowey (D-NY). A bipartisan path will be needed in order for the Chambers to garnish support on appropriations. The Defense, Labor-HHS-Education, Homeland Security and Military Construction-VA spending measures are among the controversial spending bills. House Democrats do not want to include funding for the border wall, which will potentially be a future issue in negotiations in the upcoming weeks.

PFAS

U.S. District Court for the Southern District of Ohio Judge Edmund Sargus rejected a request by 3M Co., DuPont Co. and other companies' plea to toss a class-action lawsuit seeking monetary funds to study the human health impacts of substances known as PFAS.

In Congress, thirteen bills addressing PFAS passed the House Energy and Commerce Subcommittee on the Environment and Climate Change by voice vote. Reps. Debbie Dingell (D-MI) and Fred Upton (R-MI) are pushing for H.R. 535, which would require the EPA to designate PFAS as a hazardous substance under the Superfund law. This bill would require the Defense Department to clean up military bases contaminated with PFAS.

Some of the bills have bipartisan support, while others are heeded with more caution by Republican lawmakers. Rep. Greg Walden (R-OR) said, "My understanding is that is the work under the law that the EPA is conducting right now with their scientists is to go through and determine from a scientific standpoint which ones should be covered [and] which ones shouldn't be."

EPA Administrator Wheeler is not supportive of the legislation. "By putting the label ahead of the science, this bill will be nearly impossible to implement for many of the PFAS compounds," Wheeler said.

The EPA is determining whether the agency should designate PFOA and PFOS under Superfund, but the agency has not decided how to proceed with a rulemaking.

Endangered Species Act

A coalition of cities and states led by California, Massachusetts and Maryland sued the Interior and Commerce departments over a new set of rule changes to the Endangered Species Act (ESA). They filed their complaint in the U.S. District Court of the Northern District of California. The coalition contends that the new rules violated the ESA and the Administrative Procedure Act and National Environmental Policy Act. Other groups, such as the Center for Biological Diversity, Defenders of Wildlife, filed similar suits in the same federal court.

Meanwhile in Washington, House Democrats and Republicans hold conflicting views on the changes to ESA. Democratic members want to reverse the new Interior Department regulations., which they believe weakens ESA. Republican members would like to modify several parts of the ESA and codify the Trump administration's new rules. It is unclear what legislative path the divided House will follow.

Water Infrastructure Improvements for the Nation (WIIN) Act

The U.S. Environmental Protection Agency (EPA) has announced the availability of nearly $43 million in grants for Small and Disadvantaged Communities to improve and protect their drinking water under the Water Infrastructure Improvements for the Nation (WIIN) Act. These grants will support clean drinking water projects in areas that otherwise would not have the resources to finance them, promoting the environmental and public health of communities in need across the nation.

Who can apply?

States, tribes and territories can receive assistance under this grant program. EPA will award grants noncompetitively to states and territories and provide direct support to tribes for projects or activities that emphasize drinking water improvements in underserved communities. To qualify for this funding a community must be identified by the state as being disadvantaged under the affordability criteria established by the SDWA or may become a disadvantaged community as a result of carrying out a project or activity. A project in a small community is eligible for assistance if the community served has a population of less than 10,000 individuals and lacks the capacity to finance a project to comply with the SDWA.

EPA is accepting grant applications from states and territories to receive assistance. Tribes may contact EPA Regional Offices learn more about the tribal allotment of this grant and the regional processes.

For more information, visit: https://www.epa.gov/safewater/grants.

Desalination and Water Purification Research Program

The Bureau of Reclamation has released a funding opportunity for the Desalination and Water Purification Research Program. The goal of the DWPR Program is to increase water supplies by reducing the cost, energy consumption and environmental impacts of treating impaired and otherwise unusable waters.

Funding is available, subject to appropriations, in two areas: laboratory and pilot-scale projects.

- Laboratory scale projects are typically bench scale studies involving small flow rates. They are used to determine the viability of a novel process, new material or process modification. Federal funding is limited to no more than $250,000 and must be completed within two years.
- Pilot-scale projects test a novel process at a sufficiently large scale to determine the technical, practical and economic viability of the process and are generally preceded by

laboratory studies that demonstrate the technology works. Federal funding is limited to no more than $800,000 per proposal and must be completed within three years.

Applicants must provide at least 75% non-federal cost-share with the exception of institutions of higher education, United States-Mexico binational research foundations and inter-university research programs.

To view this funding opportunity, visit www.grants.gov and search for funding opportunity number BOR-DO-20-F004. Applicants for desalination and water purification research project funding must submit their proposals by 4 p.m. MST on Wednesday, Dec. 4, 2019.

To learn more about Reclamation's Desalination and Water Purification Research Program please visit www.usbr.gov/research/dwpr.

84 FR 44976 Endangered Species Act - U.S. Fish and Wildlife Service and NOAA Fisheries Update Effective Date of Section 7 Final Rule under the Endangered Species Act

In order to ensure federal government actions are not likely to jeopardize the continued existence of listed species – or destroy or adversely modify their critical habitat – federal agencies must consult with the U.S. Fish and Wildlife Service and NOAA Fisheries under Section 7 of the ESA. The revisions to the implementing regulations clarify the interagency consultation process and make it more efficient and consistent.

The revisions to the regulations clarify, interpret and implement portions of the ESA concerning interagency cooperation procedures.

The effective date of this final rule that published on August 27, 2019, at 84 FR 44976, is now delayed from September 26, 2019, to October 28, 2019.

For more information on the final rule, please visit: https://www.fws.gov/endangered/improving_ESA/regulation-revisions.html.

84 FR 50032 – Proposed Information Collection Request; Comment Request; Procedures for Implementing the National Environmental Policy Act and Assessing the Environmental Effects Abroad of EPA Actions (Renewal)

The Environmental Protection Agency is planning to submit an information collection request (ICR), “Procedures for Implementing the National Environmental Policy Act and Assessing the Environmental Effects Abroad of EPA Actions” (EPA ICR No. 2243.08, OMB Control No. 2020-0033) to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act. Before doing so, the EPA is soliciting public

comments on specific aspects of the proposed information collection as described below. This is a proposed extension of the ICR, which is currently approved through January 31, 2020. An Agency may not conduct, or sponsor and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number.

Submit your comments, referencing Docket ID No. EPA-HQ-OA-2019-0296, online using www.regulations.gov (our preferred method) or by mail to: EPA Docket Center, Environmental Protection Agency, Mail Code 28221T, 1200 Pennsylvania Ave. NW, Washington, DC 20460.

84 FR 53437- Agency Information Collection Activities; Proposed Collection; Comment Request; RCRA Subtitle C Reporting Instructions and Forms

The Environmental Protection Agency (EPA) is planning to submit the information collection request (ICR), "RCRA Subtitle C Reporting Instructions and Forms" (EPA ICR No. 0976.19, MB Control No. 2050-0024) to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act (PRA). Before doing so, the EPA is soliciting public comments on specific aspects of the proposed information collection as described below. This is a proposed extension of the ICR, which is currently approved through May 30, 2020. An Agency may not conduct or sponsor and a person is not required to respond to a collection of information unless it displays a currently valid OMB control number.

Submit your comments, referencing by Docket ID No. EPA-HQ-OLEM-2019-0558, online using www.regulations.gov (our preferred method), by email to rcra-docket@epa.gov, or by mail to: EPA Docket Center, Environmental Protection Agency, Mail Code 28221T, 1200 Pennsylvania Ave. NW, Washington, DC 20460.

LAS VIRGENES TRIUNFO - HIGH PRIORITY LEGISLATION IN THE 116TH CONGRESS
THROUGH OCTOBER 9, 2019

LEGISLATION	SUMMARY	STATUS	POSITION
H.R. 34 Energy and Water Research Integration Act of 2019	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 Rep. Eddie Bernice Johnson (D-TX) – January 3, 2019 Passed/agreed to in the House – July 23, 2019. Introduced in the Senate	
S. 47 Natural Resources Management Act	This bill sets forth provisions regarding various programs, projects, activities, and studies for the management and conservation of natural resources on federal lands. • 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. In addition, the bill reauthorizes the National Cooperative Geologic Mapping Program.	Introduced by Sen. Lisa Murkowski (R-AK) – January 8, 2019 Signed into law on March 12, 2019	

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	
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	
H.R. 667 Regulatory Certainty for Navigable Waters Act	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	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R. 658 National Infrastructure Development Bank Act of 2019	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	
H.R. 807 Water and Agriculture Tax Reform Act of 2019	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	
H.R. 843 Reform EPA Act	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	
H.R. 855 STRONG Act	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	
S. 308 Santa Ana River Wash Plan Land Exchange Act	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	
S. 361 Water and Agriculture Tax Reform Act of 2019	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	
H.R. 1067 Santa Ana River Wash Plan Land Exchange Act	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	

LEGISLATION	SUMMARY	STATUS	POSITION
S. 376 Defense of Environment and Property Act of 2019	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	
H.R. 1137 To amend the Water Resources Development Act of 1986 to repeal the authority relating to reprogramming during national emergencies.	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	
H.R. 1162 Water Recycling Investment and Improvement Act	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 Subcommittee on Water, Oceans, and Wildlife hearing - June 13, 2019	*Support*
H.R. 1334 Outdoor Recreation Legacy Partnership Grant Program Acts	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
H.R. 1331 Local Water Protection Act	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".	Introduced by Rep. Annie Craig (D-MN) – February 26, 2019 Passed/agreed to in House - April 8, 2019. Introduced in the Senate.	
H.R. 1429 Drinking Water Infrastructure for Job Creation Act	Making supplemental appropriations, of $7,500,000,000, for fiscal year 2019 for the Drinking Water State Revolving Funds, and for other purposes.	Introduced by Rep. Maxine Waters (D-CA) – February 28,2019	
S. 611 Water Affordability, Transparency, Equity, and Reliability Act of 2019	To establish a trust fund, of $34,850,000,000, to provide for adequate funding for water and sewer infrastructure, and for other purposes.	Introduced by Sen. Bernie Sanders (I-VT) – February 28, 2019	
H.R. 1417 Water Affordability, Transparency, Equity, and Reliability Act of 2019	To establish a trust fund, of $34,850,000,000, to provide for adequate funding for water and sewer infrastructure, and for other purposes.	Introduced by Rep. Brenda Lawrence (D-MI) – March 1, 2019	
H.R. 1497 Water Quality Protection and Job Creation Act of 2019	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.".	Introduced by Rep. Pete DeFazio (D-OR) – March 6, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R. 1621 Water Supply Permitting Coordination Act	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	
H.R. 1764 To amend the Federal Water Pollution Control Act with respect to permitting terms, and for other purposes.	To extend the NPDES permit period from 5 years to 10 years.	Introduced by Rep. John Garamendi (D-CA) – March 14, 2019	*Support (with condition of needing Napolitano's support on the bill as well)*
H.R. 2030 Colorado River Drought Contingency Plan Authorization Act	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 Signed into law on April 16, 2019	
S. 1057 Colorado River Drought Contingency Plan Authorization Act	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	
S. 1087 Water Quality Certification Improvement Act of 2019	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	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	Introduced by Rep. Judy Chu (D-CA) – April 10, 2019 Subcommittee on Natural Parks, Forests, and Public Lands hearing held - July 10, 2019	
S. 1109 San Gabriel Mountains Foothills and Rivers Protection Act	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.	Introduced by Sen. Kamala Harris (D-CA) – April 10, 2019	
H.R. 2205 Water Quality Certification Improvement Act of 2019	To amend the Federal Water Pollution Control Act to make changes with respect to water quality certification, and for other purposes.	Introduced by Rep. David McKinley (R-WV) – April 11, 2019	
H.R. 2287 Federal Regulatory Certainty for Water Act	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. 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. 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. The aggregation of wetlands or waters may not be used to determine whether the wetlands or waters are navigable waters.	Introduced by Rep. Mac Thornberry (R-TX) – April 11, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R. 2313 Water Conservation Rebate Tax Parity Act	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.	Introduced by Rep. Jared Huffman (D-CA) – April 12, 2019	
H. Res. 324 Recognizing the importance of the United States-Israel economic relationship and encouraging new areas of cooperation	(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; (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; (3) encourages the President to regularize and expand existing forums of economic dialogue with Israel and foster both public and private sector participation; and (4) expresses support for the President to explore new agreements with Israel, including in the fields of energy, water, agriculture, medicine, neurotechnology, and cybersecurity.	Introduced by Rep. Ted Lieu (D-CA) – April 18, 2019	
H.R. 2377 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 publish a maximum contaminant level goal and promulgate a national primary drinking water regulation for total per- and polyfluoroalkyl substances, and for other purposes.	Introduced by Rep. Brendan Boyle (D-PA) – April 29, 2019	
S. 1251 Safe Drinking Water Assistance Act of 2019	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.	Introduced by Sen. Jeanne Shaheen (D-NH) – April 30, 2019	
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 Ordered to be reported with an amendment favorably.	

LEGISLATION	SUMMARY	STATUS	POSITION
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 Subcommittee on Water, Oceans, and Wildlife hearing held - June 13, 2019	
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	

LEGISLATION	SUMMARY	STATUS	POSITION
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	*Watching*
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	
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	

LEGISLATION	SUMMARY	STATUS	POSITION
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	
H.R. 2776 Stop Sewage Overflow Act	To make certain municipalities eligible for grants under the Federal Water Pollution Control Act. Grant cost shares would be applicable as follows: • 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.	Introduced by Rep. Lori Traham (D-MA) – May 16, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R. 2871 Aquifer Recharge Flexibility Act	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.	Introduced by Rep. Russ Fulcher (R-ID) – May 21, 2019	
S. 1604 Local Water Protection Act	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.	Introduced by Sen. Amy Klobuchar (D-MN) - May 22, 2019	
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.	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.	Introduced by Sen. Cory Booker (D-NJ) – May 23, 2019 Became Public Law No: 116-63 – October 4, 2019	*Watching*
S. Res. 213 A resolution designating the week of May 19 through May 25, 2019 as "National Public Works Week."	This resolution designates the week of May 19-May 25, 2019, as National Public Works Week.	Introduced by Sen. Jim Inhofe (R-OK) – May 23, 2019 Passed the Senate – May 23, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
S. 1811 A bill to make technical corrections to the America's Water Infrastructure Act of 2018	To make technical corrections to the America's Water Infrastructure Act of 2018. Corrections include: • 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.	Introduced by Sen. John Barrasso (R-WY) Passed the Senate – July 10, 2019	
S. 1857 Federal Energy and Water Management Performance Act of 2019	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.	Introduced by Sen. Lisa Murkowski (R-AK) – June 13, 2019 Passed out of Committee on Energy and Natural Resources – July 16, 2019	
H.R. 3254 PIPE Act	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.	Introduced by Rep. Antonio Delgado (D-NY)	
S. 1932 Drought Resiliency and Water Supply Infrastructure Act	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.	Introduced by Sen. Cory Gardner (RCO) – June 20, 2019 Subcommittee hearing held in the Senate – July 18, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R. 3423 National Green Bank Act of 2019	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.	Introduced by Rep. Jim Himes (D-CT) – June 21, 2019	
H.R. 3521 Wastewater Infrastructure Workforce Investment Act	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.	Introduced Rep. Greg Stanton (D-AZ) – June 26, 2019	
H.R. 3510 Water Resources Research Amendments Act	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.	Introduced by Rep. Josh Harder (D-CA) – June 26, 2019	
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 Subcommittee on Water and Power hearing– July 18, 2019 Ordered to be reported with an amendment in the nature of a substitute favorably – September 25, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
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	*Watching*
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 Subcommittee on Waters, Oceans, and Wildlife hearing held July 25, 2019.	
H.R.3779 Resilience Revolving Loan Fund Act of 2019	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.	Introduced by Rep. Angie Craig (D-MN) – July 16, 2019 Ordered to be Reported (Amended) by Voice Vote – September 19, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R. 3844 Farmer Fairness Act	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.	Introduced by Rep. Ro Khanna (D-CA) – July 18, 2019	
S.2187 National Flood Insurance Program Reauthorization and Reform Act of 2019	To reauthorize the National Flood Insurance Program, and for other purposes.	Introduced by Sen. Robert Menendez (D-NJ) – July 18, 2019	
S. 2164 Water Resources Research Amendments Act	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.	Introduced by Sen. Ben Cardin (D-MD) – July 18, 2019	
S.2239 A bill to codify an Executive order preparing the United States for the impacts of climate change, and for other purposes	To codify an Executive order preparing the United States for the impacts of climate change, and for other purposes.	Introduced by Sen. Amy Klobuchar (D-MN) – July 23, 2019	
H.R. 3944 To amend the Water Resources Reform and Development Act of 2014 to modify the procedure for communicating certain emergency risks, and for other purposes.	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	
H.R.3949 Safe Drinking Water in Playgrounds and Parks Act	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	

LEGISLATION	SUMMARY	STATUS	POSITION
H.R.4050 ZERO WASTE Act	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	
H.R.4033 Water Justice Act	To provide supplemental appropriations for safe and secure water, and for other purposes.	Introduced by Rep. Daniel Kildee (D-MI) – July 25, 2019	
H.R.4006 CLEANER Act of 2019	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	
H.R.4007 Focused Reduction of Effluence and Stormwater runoff through Hydrofracking Environmental Regulation Act of 2019	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	
S. 2302 America's Transportation Infrastructure Act of 2019	To amend title 23, United States Code, to authorize funds for Federal-aid highways and highway safety construction programs, and for other purposes.	Introduced by Sen. John Barrasso (R-WY) – July 29, 2019 Placed on Senate Legislative Calendar under General Orders. Calendar No. 170	
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	

LEGISLATION	SUMMARY	STATUS	POSITION
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	
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	
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	

LEGISLATION	SUMMARY	STATUS	POSITION
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	
H.R.4321 GET THE LEAD OUT Act of 2019	To eliminate lead-based pipe and tap hazards in housing, and for other purposes.	Introduced by Rep. Tim Ryan (D-OH) – September 12, 2019	
H.R.4341 Critically Endangered Animals Conservation Act of 2019	To assist in the conservation of critically endangered species in foreign countries, and for other purposes.	Introduced by Rep. Jarred Huffman (D-CA) – September 12, 2019	
H.R.4347 PREPARE Act of 2019	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.	Introduced by Rep. Matt Cartwright (D-PA) – September 17, 2019	

LEGISLATION	SUMMARY	STATUS	POSITION
S.2491 Protect America's Wildlife and Fish in Need of 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 Sen. Tom Udall (D-NM) – September 17, 2019	
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 under General Orders. Calendar No. 210	
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	
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	
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	
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	
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	

ITEM 10B

INFORMATION ONLY

November 4, 2019 JPA Board Meeting

TO: JPA Board of Directors

FROM: Finance & Administration

Subject : Woolsey Fire Damage Reimbursement Update

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. LVMWD and the JPA experienced significant damage at various facilities as a result of the fire. Since the event, staff has been working with the California Governor's Office of Emergency Services (CalOES), Federal Emergency Management Agency (FEMA) and the JPA's insurance provider on reimbursement for the damages. This report provides an update on the status of reimbursement as it pertains to JPA-owned facilities.

FISCAL IMPACT:

No

ITEM BUDGETED:

No

FINANCIAL IMPACT:

DISCUSSION:

CalOES/FEMA:

On December 5, 2018, staff submitted a Request for Public Assistance to the California Governor's Office of Emergency Services (CalOES) to be considered for reimbursement through federal public assistance from the Federal Emergency Management Agency (FEMA). Since then, staff has been pursuing FEMA funding and working very closely with designated CalOES representatives.

The JPA submitted one project for potential reimbursement of repairs to the Rancho Las Virgenes Composting Facility, in the amount of $1,093,576, which is still under review by

CalOES and FEMA.

Insurance Claim:

On November 10, 2018, the JPA submitted a claim to its property insurance provider, Argo Group USA. Since that time, staff has been working with the insurance provider to settle the claim. To process the claim, Argo Group USA requires a detailed estimate from the JPA to have its adjustor confirm and agree on the cost and scope of the damages. LVMWD, as Administering Agent of the JPA, contracted with M6 Consultants to develop estimates and a Preliminary Design Report (PDR). These documents were provided to the insurance provider on August 30, 2019. The completion of the PDR provided sufficient information for the JPA to submit an executed Proof of Loss Statement, detailing damages incurred and believed to be covered by property insurance. The current insurance claim for JPA projects, in the amount of $2,232,852.61, is detailed below.

Description	Category	Amount
Rancho Las Virgenes Composting Facility	Building & Equipment	$1,635,203.58
Sludge Hauling	Equipment	$597,649.03
TOTAL		**$2,232,852.61**

With the Proof of Loss documents submitted, Argo Group USA is reviewing the PDR and estimates and continues to work with staff to verify the damages. Once an agreement is reached on an estimate, Argo Group USA will issue payment to LVMWD on behalf of the JPA. Subsequent and disputed costs will continue to be negotiated between the parties. Amounts not covered by insurance will be sought from FEMA.

Prepared by: Angela Saccareccia, Finance Manager

ITEM 10C

INFORMATION ONLY

November 4, 2019 JPA Board Meeting

TO: JPA Board of Directors

FROM: Engineering and External Affairs

Subject : Pure Water Demonstration Project: Agreement with Astound Group for Visitor Experience Elements

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SUMMARY:

On October 7, 2019, JPA Chair Janna Orkney inquired about the cost of the signage planned for the Pure Water Demonstration Garden. Staff did not have the cost breakdown at the time, so Chair Orkney requested that the information be provided as a future agenda item. Attached is a copy of the executed agreement with the Astound Group, as approved by the JPA Board on April 29, 2019, which includes a breakdown of costs for various elements of the visitor experience including garden signs.

Staff received input from the JPA Board on July 1, 2019, on the conceptual plan for the Pure Water Demonstration Garden. Comments from the Board included, but were not limited to providing QR codes on the garden signs that would direct visitors to web pages for detailed information on each type of garden and utilizing recycled materials for the signs. These specific ideas were evaluated by staff and incorporated into the final design for the garden signs.

FISCAL IMPACT:

No

ITEM BUDGETED:

No

Prepared by: Joe McDermott, Director of Engineering and External Affairs

ATTACHMENTS:

Agreement - Astound Group

AGREEMENT FOR SERVICES

This Agreement is entered into this 22 day of April, 2019 by and between the LAS VIRGENES MUNICIPAL WATER DISTRICT ("DISTRICT"), and ASTOUND GROUP ("CONTRACTOR"). Hereinafter, DISTRICT and CONTRACTOR are referred to collectively as "Parties."

1. **Scope of Work.** This agreement sets forth the terms under which CONTRACTOR shall, in good workmanlike and professional manner, perform the services described in Exhibit "A" for DISTRICT.

2. **Term.**

☒This agreement shall commence on the date above written, and shall continue until completion of the services described above.

☐The term of this Agreement shall be for a period of approximately [days, weeks, months, years,] commencing on [date] and concluding [date].

3. **Labor and Equipment.** CONTRACTOR will furnish labor, equipment, and materials necessary to perform the work, except equipment and materials to be provided by DISTRICT, as set forth in Exhibit "B".

CONTRACTOR may use the equipment or materials provided by DISTRICT necessary for the performance of the work and should the equipment or materials be lost, damaged, or destroyed, CONTRACTOR will reimburse DISTRICT with equipment and materials of equal value, and for costs and expenses incident to the replacement.

4. **Time of Work.** CONTRACTOR will perform CONTRACTOR'S duties described in the Agreement during the hours of 7:30 am to 5:00 pm, Monday through Friday and not including legal holidays for on-site work activity unless otherwise approved by DISTRICT. In any event, CONTRACTOR will perform CONTRACTOR'S duties in a manner to avoid inconvenience to the users of the DISTRICT'S premises and to avoid interference with DISTRICT'S operations.

5. **Compensation and Reimbursement.** DISTRICT shall compensate and reimburse CONTRACTOR, including all reimbursable expenses, as provided in Exhibit "C" entitled "Fee Schedule" attached hereto and made a part hereof. CONTRACTOR shall submit invoices no more frequently than monthly and no less than every quarter. Payment shall be made by the District within 30 days of receipt of an accurate invoice.

6. **Termination.**

(a) The DISTRICT may terminate or cancel this Agreement, in whole or in part, without liability to the DISTRICT, if CONTRACTOR fails to perform in accordance with the requirements of Section 1 – Scope of Work of this Agreement, or in the event of a substantial breach of any of the other terms or conditions hereof..

(b) Either party may terminate this agreement on thirty (30) days' written notice for any reason. If this contract is terminated by District without cause, District shall pay

Contractor for work performed prior to the date the notice of termination is received by contractor. If the contract is terminated by Contractor without cause, Contractor shall reimburse Agency for additional costs to be incurred by Agency in obtaining the work from another consultant.

7. No Subcontracts or Assignments. Neither any part nor all of this Agreement may be assigned or subcontracted, except as otherwise specifically provided herein, or to which DISTRICT, in its sole discretion, consents to in advance thereof in writing. Any assignment or subcontracting in violation of this provision shall be void.

8. Maintenance of Records. CONTRACTOR shall maintain all books, documents, papers, employee time sheets, accounting records, and other evidence pertaining to fees and costs incurred for each assignment and shall make such materials available at its office at all reasonable times for three (3) years from the date of the close of each individual assignment under this Agreement, for inspection by DISTRICT and copies thereof shall be furnished, if requested.

9. Independent Contractor. At all times during the term of this Agreement, CONTRACTOR shall be an independent contractor and shall not be an employee of the DISTRICT. DISTRICT shall have the right to control CONTRACTOR only insofar as the results of CONTRACTOR'S services rendered pursuant to this Agreement; however, DISTRICT shall not have the right to control the means by which CONTRACTOR accomplishes such services. Except as DISTRICT may specify in writing, CONTRACTOR shall have no authority, expressed or implied, to act on behalf of DISTRICT in any capacity whatsoever as an agent. CONTRACTOR shall have no authority, expressed or implied, pursuant to this Agreement to bind DISTRICT to any obligation whatsoever.

10. Compliance with Applicable Law.

(a) CONTRACTOR agrees to comply with all federal, state, county, and local laws, ordinances, and regulations applicable to the work to be done under this contract.

(b) CONTRACTOR and sub-consultants will not pay less than the prevailing rates of wages. A determination of the general prevailing rates of per diem wages and holiday and overtime work where the work is to be performed is on file at the DISTRICT's offices. Should the prevailing wage rules apply to any of the work described in Exhibit A, CONTRACTOR will post one copy of the prevailing rates of wages at the job site. CONTRACTOR shall comply with all prevailing wage requirements under the California Labor Code and CONTRACTOR shall forfeit as penalty to the DISTRICT a sum of not more than $200.00 for each calendar day, or portion thereof, for each worker paid less than the prevailing rates. This penalty shall be in addition to any shortfall in wages paid.

11. Eligibility for Employment in the United States. CONTRACTOR shall complete and keep on file, as appropriate, the Immigration and Naturalization Service Employment Eligibility Form (I-9). This form shall be used by CONTRACTOR to verify that persons employed by CONTRACTOR are eligible to work in the United States.

12. Licenses, Permits, Etc. CONTRACTOR represents and declares to DISTRICT that it has all licenses, permits, qualifications, and approvals of whatever nature that are legally required to practice its profession. CONTRACTOR represents and warrants to DISTRICT that CONTRACTOR shall, at its sole cost and expense, keep in effect at all times during the term of this Agreement, any license, permit, or approval which is legally required for CONTRACTOR to practice its profession.

13. Time of the Essence. Time is of the essence as to each and every provision of this Agreement.

14. Insurance.

(a) Policies: CONTRACTOR shall obtain and maintain during the entire term of this Agreement the following insurance policies from companies authorized to issue insurance in the State of California:

(1) Comprehensive General Liability, including premises-operations, products/completed, broad form property damage, bodily injury, and blanket contractual liability with the following coverages:

General Liability	$1,000,000 per person per occurrence $2,000,000 annual aggregate combined $1,000,000 property damage or bodily injury per occurrence Cross-liability exclusions prohibited

(2) Automobile Liability, including owned, hired, and non-owned vehicles with the following coverages:

Auto Liability	$1,000,000 combined single limit

(3) Workers' Compensation insurance in amounts in accordance with statutory requirements.

(b) CONTRACTOR shall provide DISTRICT with certificates of insurance reflecting the insurance coverages described in the paragraphs above, upon request.

(c) The insurance policies required above shall contain or be endorsed to contain all of the following specific provisions:

(1) Commercial general liability and automobile liability:

(i) Agency and its Board members, officers, employees, agents and volunteers shall be added as additional insureds.

(ii) Consultant's insurance shall be primary insurance as respects the Agency, its Board members, officers, employees, agents, and volunteers and any insurance or self-insurance maintained by Agency shall be in excess of Consultant's insurance and shall not contribute to it.

(iii) Any failure to comply with the claim reporting provisions

of the policies or any breach of a policy warranty shall not affect coverage under the policy provided to Agency, its Board members, officers, employees, agents and volunteers.

(iv) The policies shall contain a waiver of transfer rights of recovery ("waiver of subrogation") against Agency, its Board members, officers, employees, agents, and volunteers, for any claims arising out of the work of Consultant.

(v) The policies may provide coverage that contains deductible or self-insured retentions. Such deductible and/or self-insured retentions shall not be applicable with respect to the coverage provided to Agency under such policies. Consultant shall be solely responsible for deductible and/or self-insured retention and Agency, at its option, may require Consultant to secure the payment of such deductible or self-insured retentions by a surety bond or an irrevocable and unconditional letter of credit. The insurance policies that contain deductibles or self-insured retentions in excess of $25,000 per occurrence shall not be acceptable without the prior approval of Agency.

(vi) Prior to start of work under this Agreement, Consultant shall file with Agency evidence of insurance as required above from an insurer or insurers certifying to the required coverage. The coverage shall be evidenced on a certificate of insurance signed by an authorized representative of the insurer(s). Should the required coverage be furnished under more than one policy of insurance, Consultant may submit as many certificates of insurance as needed to provide the required amounts.

(2) Each policy required by this section shall contain a policy cancellation clause that provides the policy shall not be cancelled or otherwise terminated by the insurer or the Consultant, or reduced in coverage or in limits, except after thirty (30) days written notice by certified mail, return receipt requested, has been given to the Agency, Attention: Director of Finance & Administration.

(d) Insurance required by this Agreement shall be placed with insurers licensed by the State of California to transact insurance business of the types required herein. Each insurer shall have a current Best Insurance Guide rating of not less than A: VII unless prior approval is secured from the Agency as to the use of such insurer.

(e) Consultant shall include all subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverages for subcontractors shall be subject to all of the requirements stated herein. Consultant shall maintain evidence of compliance with the insurance requirements by the subcontractors at the job site and make them available for review by Agency.

15. Notices. All notices, billings, and payments which are required or permitted to be made hereunder shall be in writing and shall be sent by personal delivery, first-class mail, return receipt requested, overnight or express mail service, or facsimile. Notices shall be deemed to have been received: upon delivery if personally delivered; seventy-two (72) hours after deposit in the U.S. Mail; or on the day of transmission via facsimile, unless sent after business hours, and in that event, on the next business day. Notices may be sent to the following addresses. The parties may deliver notice of change of address or delivery information in the manner outlined in this paragraph 15.

DISTRICT: Las Virgenes Municipal Water District
4232 Las Virgenes Road

Calabasas, CA 91302
Attn: Joe McDermott

CONTRACTOR: Astound Group
Tack Roberts, Director
245 Main St., Suite 301
Racine, WI 53403

16. Arbitration and Waiver of Jury Trial. If a dispute arises between the Parties it shall be resolved by arbitration conducted by the American Arbitration Association in accordance with the Commercial Arbitration Rules of the American Arbitration Association, as then in effect. Such arbitration shall be conducted at a location within Los Angeles County, California agreeable to both Parties before three (3) arbitrators who shall be selected by mutual agreement of the Parties. If agreement is not reached on the selection of arbitrators within fifteen days, then each of the Parties shall select an arbitrator and the two (2) arbitrators so selected shall select a third. The provisions of the Commercial Arbitration Rules of the American Arbitration Association shall apply and govern such arbitration except that the prevailing party shall be entitled to recover from the other party its attorney's fees and costs actually incurred in such amount as may be determined by the arbitrators.

17. Ownership of Data, Reports, and Documents. CONTRACTOR shall deliver to DISTRICT notes of surveys made, all reports of tests made, studies, reports, plans, a copy of electronic and digital files, and other materials and documents which shall be the property of the DISTRICT. CONTRACTOR is released from responsibility to third parties for the use by DISTRICT of data, reports, and documents on other projects. CONTRACTOR may retain copies of such documents for its own use. The DISTRICT may use or reuse the materials prepared by CONTRACTOR without additional compensation to CONTRACTOR.

18. Invalidity of Part Shall Not Invalidate the Whole. The invalidity or partial invalidity of any portion of this Agreement will not affect the validity of any other provision. In the event that any provision of this Agreement is held to be invalid, the remaining provisions shall be deemed to be in full force and effect as if they had been executed by both Parties subsequent to the expungement or judicial modification of the invalid provision.

19. Integration. This Agreement states the entire agreement of the Parties with respect to the subject matter hereof. This Agreement supersedes all prior discussions and understandings with respect to the subject matter hereof. There are no representations, warranties, promises, or covenants as to the subject matter hereof except as expressly set forth herein. This Agreement may not be modified or altered except in writing, signed by both parties.

20. Indemnity. CONTRACTOR shall hold harmless, defend at its own expense, and indemnify DISTRICT, its officers, employees, and agents against any and all liability, claims, losses, damages, or expenses, including reasonable attorneys' fees, arising from all acts or omissions to act of CONTRACTOR or its officers, agents, or employees in rendering services under this agreement, excluding, however, such liability, claims, losses, damages, or expenses

arising solely from DISTRICT'S active negligence or willful acts. This indemnity section of the Agreement shall survive the termination of this Agreement and/or the completion of the terms set forth in the Agreement.

21. Attorneys' Fees. If an action at law or in equity is brought to enforce any provision of this Agreement, the prevailing party shall be entitled, in addition to such other relief as may be granted to an award in the same or a subsequent proceeding, to reasonable attorneys' fees and costs.

22. Governing Law. This Agreement shall be interpreted and construed under, and the rights of the parties will be governed by, the laws of the State of California.

IN WITNESS WHEREOF, the parties hereto have duly executed this Agreement on the date first above written.

LAS VIRGENES MUNICIPAL WATER DISTRICT

David W. Pedersen
General Manager

ASTOUND GROUP

By: _____
Printed Name: KEVIN MORGAN
Title: COO/CFO

ASTOUND

address:	5675 E. Ann Road Las Vegas, Nevada 89115, USA	quote valid until:	May 15, 2019
		version #:	2A
		job #:	1722099
phone:	(702) 462-9718		
fax:	(905) 465-2910	account director:	Tack Roberts
		email:	troberts@astoundgroup.com
client:	Las Virgenes Municipal Water District	phone:	(702) 666-1345
address:	4232 Las Virgenes Road, Calabasas, California 91302-1994, UNITED STATES	mobile:	847-815-6219
		event manager:	Rick Giesbrecht
		email:	rick@astoundgroup.com
contact:	Joe McDermott	phone:	(905) 465-0474
email:	jmcdermott@lvmwd.com	mobile:	
phone:	(818) 251-2130		

LVMWD Visitor Center 2019
LVMWD
Calabassas, ,
30-Aug-2019

PURCHASE PROPERTIES

Wayfinding Signage-Area 2 — $7,500
- (4) 4 sided powder coated aluminum sheet Box (sleeve)
- Approx. 24" X 5" X 36" tall
- Includes Aluminum frame to accept sleeve, concrete for base, wood frame to pour concrete, and hardware
- Custom Printed Acrylic captured in Graphics Area

Garden Signage-Area 2 Lerge 5 sided sign — $12,141
- (5) Sided powder coated aluminum sign stand with aluminum sheet to mount graphics on each side
- Approx. 48" X 48" X 72" tall
- Includes concrete for base, wood frame to pour concrete, and hardware to mount
- Custom Printed Acrylic captured in Graphics Area

Garden Signage-Area 2 Smaller Signs — $20,274
- (15) Powder coated aluminum sign stands
- Approx. 24" X 24" X 24" tall
- Includes legs for mounting
- Custom Printed Acrylic captured in Graphics.

Process Building Dimensional Letters with Large Drop — $16,029
- (34) UL Rated Can lit letters
- 9-9.5" Tall letters
- 50" X 70" Drop

Process Building Dimensional Letters Tagline — $10,566
- (26) UL Rated Can lit letters
- 12 3/8" tall letters 300" Total length

Process Building Area 3 Station Identifier — $5,444
- (2) double sided laminated millworks panels with area for 42" flush mount Monitor
- Approx. 48" X 4" X 108" tall
- Includes monitor and Mini-PC
- Includes allowance for content

- Sintra and Vinyl graphics captured in Graphics Area	
Process Building Area 6, 7, and 8 Reader Rail Kiosk - (3) laminated millworks kiosks with (3) doors each and wire management internally - Approx. 60" X 24" X 40" tall - Includes 20" touchscreen, mimi PC, and 42" slave monitor - Includes allowance for content - Vinyl graphics captured in Graphics Area	$30,349
Process Building Area 9 Content - Purchase of Mini PC and 42" display with content - Vinyl copy option captured in Graphics Area	$2,388
Crating	$589
SUBTOTAL | PURCHASE PROPERTIES:	$105,281

GRAPHICS PURCHASE

Please have all graphics files to ASTOUND by August 10, 2019. Additional charges may apply after this date.

Admin Building-Area 1 Graphics - Area 1 (2) Custom printed SEG Fabric Panels 48" X 60" - Includes F-track	$999
Wayfinding-Area 2 Vinyl Graphics - (8) 36" X 36" printed Vinyl Copy (booth sides of sign)	$1,480
Garden Area 2 Graphics - (5) Graphics printed on 48" X 72" X 1/4" thick acrylic	$3,193
Garden Area 2 Graphics Continued - (15) Graphics printed on 24" X 24" X 1/4" thick acrylic	$1,703
Process Building-Area 3 Graphics - (3) Graphics printed on 18" X 9" X 1/4" thick acrylic	$283
Process Building-Area 3 Graphics - (1) Direct print on 12" X 16" X 1/4" Sintra - (1) Direct print on 48" X 14" X 1/4" Sintra	$131
Process Building-Area 4 Graphics - (1) 251" X 108" Printed SEG - Includes f-track	$3,974
Process Building-Area 5 Graphics - 16' X 8' custom printed unpasted vinyl wallcovering	$2,034
Process Building-Area 6, 7, and 8 Graphics - (3) 60" X 24" X 1/4" custom printed acrylic - (6) 12" X 12" X 1/4" printed acrylic overlays	$1,064
Process Building-Area 10a Graphics - (1) 72" X 48" X 1/4" printed Dibond	$600

Process Building-Area 10b Graphics - (1) 48" X 30" X 1/4" printed Dibond		$273
	SUBTOTAL | GRAPHICS PURCHASE**:	$15,732
ASTOUND SERVICES		
Project Management		
Design and Detailing		
Pull, Prep & Warehousing		
Transportation to / from venue (ASTOUND properties only) - (1) trailer from LV to LA		
ASTOUNO Supervision for I/D (Including Travel Expenses) (5) Days for Astound Supervisor including travel		
	SUBTOTAL | ASTOUND SERVICES:	$16,636
ESTIMATED SITE SERVICES		
Installation and Dismantle Labor (ASTOUNO Properties Only) - (4) days Install - (4) men 8 ST hours per day		$19,448
Electrical Labour & Electrical Order (ASTOUNO Properties Only) - (2) men 8 ST hours install lit letters		$2,300
	SUBTOTAL | ESTIMATED SITE SERVICES***:	$21,748
	TOTAL (USD):	$159,397

Schedule of Phases

Phase 1 - Detailing - Allow 30 days upon approval of propsal to complete and deliver detail drawings for constructed elements

Phase 2 - Production - Allow 60 days upon approval of detail drawings to complete prefab and construction of all above elements

Phase 3 - Shipping and Installation - Allow 21 days for delivery. Load in and assemby of all elements

TOTAL | LVMWD Pure Water Center Production and Install (USD):	$159,397

ASTOUND Group Quote Validation:

Signature: _____

Quote Valid Until: May 15, 2019

Client Approval:

Signature: _____

Name: _____

Date: _____

EXHIBIT A

SCOPE OF SERVICES

CONTRACTOR shall perform the following specific services on the premises described in Section 1:

Detailed design, fabrication, purchase and installation of signage, graphics, and related items for the Pure Water Project Las Virgenes - Triunfo; Demonstration Facility Visitor Experience.

Specific items to be provided and Schedule of Phases under this Agreement are listed on Proposal dated 4/17/2019, attached hereto.

The actual dates for on-site installation activity (Phase 3) shall be mutually agreed upon by both Parties at least 30 calendar days in advance of the work. To ensure that the Demonstration Facility Visitor Experience is complete and ready for tours by the public, Contractor shall plan to have all services under this Agreement completed by no later than November 15, 2019 unless an extension is granted in writing by the District.

EXHIBIT B

MATERIALS AND EQUIPMENT

DISTRICT shall provide the following equipment and material to be stored on the premises described in Section 1, for the use of CONTRACTOR in performance of CONTRACTOR'S duties under the Agreement:

120v, 15 amp electrical power from available outlets

Potable water for clean-up

EXHIBIT C

FEE SCHEDULE

I. Services

Costs to be paid by District for specific items provided under this Agreement are listed on Proposal dated 4/17/2019, attached hereto.

District shall compensate Contractor, contingent on satisfactory performance of the work. The aggregate payments under this Agreement shall not exceed $159,397.00 (Total Cost) plus applicable sales tax.

Progress payments shall be made upon the approval of invoices submitted by Contractor and upon completion of each phase as follows:

Phase 1- Detailing: 30% of Total Cost
Phase 2 - Production: 30% of Total Cost
Phase 3- Shipping and Installation: 40% of Total Cost

II. Reimbursable Expenses

All reimbursable expenses are included in the Total Cost