



**LAS VIRGENES MUNICIPAL WATER DISTRICT**  
**4232 Las Virgenes Road**  
**Calabasas, CA 91302**

**AGENDA**  
**LVMWD BOARD OF DIRECTORS - REGULAR MEETING**  
**TUESDAY, SEPTEMBER 3, 2024 – 9:00 AM**

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**PUBLIC PARTICIPATION:** The public may join this meeting virtually or attend in person in the Board Room. Teleconference participants will be muted until recognized at the appropriate time by the Board President. To join via teleconference, please use the following Webinar ID: <https://us06web.zoom.us/j/82171400517>

To join by telephone, please dial (669) 900-6833 or (346) 248-7799 and enter Webinar ID:  
821 7140 0517

For members of the public wishing to address the Board during Public Comment or during a specific agenda item, please press "Raise Hand" if you are joining via computer; or press \*9 if you are joining via phone; or inform the Executive Assistant/Clerk of the Board if attending in person.

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

**ACCESSIBILITY:** If requested, the agenda and backup materials will be made available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and the federal rules and regulations adopted in the implementation thereof. Any person who requires a disability-related modification or accommodation, to attend or participate in this meeting, including auxiliary aids or services, may request such reasonable modification or accommodation by contacting the Executive Assistant/Clerk of the Board by telephone at (818) 251-2123 or via email to [jguzman@lvmwd.com](mailto:jguzman@lvmwd.com) at least 48 hours prior to the meeting.

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

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 District 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 District 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.

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## **PLEDGE OF ALLEGIANCE**

1. **CALL TO ORDER AND ROLL CALL**
2. **APPROVAL OF AGENDA**
3. **PUBLIC COMMENTS**

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

4. **CONSENT CALENDAR**

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

*to comment on an item, that item will be removed from the Consent Calendar for separate action.*

4.A **List of Demands: September 03, 2024 (Pg. 6)**

Receive and file.

4.B **Minutes: Special Meeting of August 19, 2024 (Pg. 61)**

Approve.

4.C **On-Call SCADA System Support and Professional Services (Pg. 68)**

Authorize the General Manager to execute an agreement with The RoviSys Company, in the amount of \$100,000, for on-call SCADA system support and professional services.

4.D **Water Main Break at 5745 Parkmor Road: Continuation of Emergency Declaration (Pg. 70)**

Approve the continuation of an emergency declaration due to a 12-inch water main break at 5745 Parkmor Road in the City of Calabasas.

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

5.A **MWD Representative Report (Pg. 74)**

5.B **Overview of MWD Water System (Pg. 85)**

5.C **Public Affairs and Communications Update**

6. **TREASURER**

7. **ENGINEERING AND FACILITIES**

7.A **Service Agreement for Leak Detection: Award (Pg. 110)**

Authorize the General Manager to execute an agreement with Utilis, Inc., in the amount of \$70,000, for satellite-based leak detection and analysis of the potable water system.

7.B **Water Supply Reliability and Diversification Study: Award (Pg. 130)**

Accept the proposal from Kennedy/Jenks Consultants, Inc., and authorize the General Manager to execute a professional services agreement, in the amount of \$499,871, for the Water Supply Reliability and Diversification Study.

8. **EXTERNAL AFFAIRS**

8.A **LVUSD Science Team Water-Related Curriculum for 4th and 5th Grade Education Program: Grant Agreement (Pg. 214)**

Authorize the General Manager to execute a two-year agreement with Las Virgenes Unified School District, in the amount of \$214,000 with separate annual payments of \$107,000, for the Science Team Water-Related Curriculum for 4th and 5th Grade Education Program.

9. **INFORMATION ITEMS**

9.A **GFOA Certificate of Achievement for Excellence in Financial Reporting (Pg. 222)**

9.B **Fiscal Year 2023-24 Capacity Fee Report (Pg. 225)**

9.C **Fiscal Year 2024-25 Budget in Brief (Pg. 227)**

10. **NON-ACTION ITEMS**

A. *Organization Reports*

B. *Director's Reports on Outside Meetings*

C. *General Manager's Reports*

(a) *General Business*

(b) *Follow-up Items*

D. *Director's Comments*

11. **FUTURE AGENDA ITEMS**

12. **PUBLIC COMMENTS**

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13. **CLOSED SESSION**

13.A **Conference with District Counsel - Anticipated Litigation (Government Code Section 54956.9(d)(2)): One Item**

Tort claim by Mary Charitan

13.B **Conference with Legal Counsel - Existing Litigation (Government Code Section 54956.9): One Case**

Tim Hazelwood and City of Westlake Village v. Las Virgenes Municipal Water District

13.C **Conference with Labor Negotiators (Government Code Section 54957.6)**

Agency Designated Representatives: David W. Pedersen, General Manager; and Donald Patterson, Director of Finance and Administration

Employee Organizations: Supervisor, Professional, and Confidential Employees Association Unit; Management Employees Association Unit; and General and Office Units represented by the Service Employees International Union Local 721

14. **OPEN SESSION AND 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 MUNICIPAL WATER DISTRICT

To: ANDY CORADESCHI, TREASURER

Payments for Board Meeting of : September 3, 2024

Deputy Treasurer has verified that all checks and wire transfers were issued in conformance with LVMWD Administrative Code Section 2-6.203.

Wells Fargo Bank A/C No. 4806-994448

Check Nos. 110431-110529; ACH/ACI Nos . 249-255, 258-266 were issued in the total amount of: \$ 1,003,601.45

**Payments through direct disbursements as follows:**

8/13/2024 Direct Disbursement payment number 25026: \$ 2,017.62

**Payments through wire transfers as follows:**

8/6/2024 Wire #246 - Tesla Inc. Tesla Model Y Purchase \$ 51,463.85

8/6/2024 Wire #247 - KBRA - Indicative Rating Fee \$ 45,000.00

8/6/2024 Wire #248 - Booky Oren Global Water Technologies K2I Quarterly Subscription Fee \$ 17,500.00

\$ 113,963.85

**Total Payments** \$ 1,119,582.92

(Reference is hereby to these demands on file in the District's Check Register and by this reference the same is incorporated herein and made a part hereof.)

**CHECK/ACH/ACI LISTING FOR BOARD MEETING  
9/3/2024**

Company Name	Company No.	Check No. 110431-110485; 249-253 08/06/24 Amount	Check No. 110486-110528; 254-255; 258-266 08/13/24 Amount	Check No. 110529 08/13/24 Amount	Total
Potable Water Operations	101	50,569.53	40,415.41	250.00	91,234.94
Recycled Water Operations	102				-
Sanitation Operations	130	301.00	8,899.97		9,200.97
Potable Water Construction	201				-
Water Conservation Construction	203				-
Sanitation Construction	230				-
Potable Water Replacement	301	11,841.00	400.00		12,241.00
Recycled Water Replacement	302				-
Sanitation Replacement	330				-
Internal Service	701	68,328.33	102,210.00		170,538.33
JPA Operations	751	239,550.90	113,071.56		352,622.46
JPA Construction	752				-
JPA Replacement	754	30,375.00	337,388.75		367,763.75
	<b>Total Printed</b>	<b>400,965.76</b>	<b>602,385.69</b>	<b>250.00</b>	<b>1,003,601.45</b>
<b>Voided Checks/payment stopped:</b>					
					-
					-
					-
					-
					-
					-
					-
	<b>Total Voids</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
	<b>Net Total</b>	<b>400,965.76</b>	<b>602,385.69</b>	<b>250.00</b>	<b>1,003,601.45</b>

**DIRECT DISBURSEMENTS LISTING FOR BOARD MEETING  
9/3/2024**

		Direct Disb. No. 25026 08/13/24	
Company Name	Company No.	Amount	Total
Potable Water Operations	101	2,017.62	2,017.62
Recycled Water Operations	102		-
Sanitation Operations	130		-
Potable Water Construction	201		-
Water Conservation Construction	203		-
Sanitation Construction	230		-
Potable Water Replacement	301		-
Recycled Water Replacement	302		-
Sanitation Replacement	330		-
Internal Service	701		-
JPA Operations	751		-
JPA Construction	752		-
JPA Replacement	754		-
	<b>Total Printed</b>	<b>2,017.62</b>	<b>2,017.62</b>
<b>Voided Direct Disbursements:</b>			
		-	-
		-	-
	<b>Total Voids</b>	<b>-</b>	<b>-</b>
	<b>Totals</b>	<b>2,017.62</b>	<b>2,017.62</b>

**WIRE LISTING FOR BOARD MEETING  
9/3/2024**

Company Name	Company No.	Wire No. 246 08/06/24 Amount	Wire No. 247 08/06/24 Amount	Wire No. 248 08/06/24 Amount	Total
Potable Water Operations	101				-
Recycled Water Operations	102				-
Sanitation Operations	130				-
Potable Water Construction	201				-
Water Conservation Construction	203				-
Sanitation Construction	230				-
Potable Water Replacement	301	51,463.85			51,463.85
Recycled Water Replacement	302				-
Sanitation Replacement	330				-
Internal Service	701			17,500.00	17,500.00
JPA Operations	751				-
JPA Construction	752				-
JPA Replacement	754		45,000.00		45,000.00
	<b>Total Printed</b>	<b>51,463.85</b>	<b>45,000.00</b>	<b>17,500.00</b>	<b>113,963.85</b>
<b>Voided Wires:</b>		-	-	-	-
	<b>Total Voids</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
	<b>Totals</b>	<b>51,463.85</b>	<b>45,000.00</b>	<b>17,500.00</b>	<b>113,963.85</b>

## A/P CASH DISBURSEMENTS JOURNAL

CASH ACCOUNT: 999      100100      Cash-General  
 CHECK NO    CHK DATE    TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
249	08/06/2024	EFT	2654 FAMCON PIPE	S100131933.001	07/22/2024	2250013	080624	4,849.21
			Invoice: S100131933.001					
				4,849.21	701	132000		
			FAMCON PIPE	S100131874.001	07/22/2024	2250010	080624	1,869.94
			Invoice: S100131874.001					
				1,869.94	701	132000		
							CHECK	249 TOTAL:
								6,719.15
250	08/06/2024	EFT	18983 POWERFLO PRODUCTS, INC.	63232-24	07/17/2024	2240163	080624	18,754.76
			Invoice: 63232-24					
				18,754.76	751700	551000		
							CHECK	250 TOTAL:
								18,754.76
251	08/06/2024	EFT	19685 W. LITTEN INC.	24028	07/15/2024		080624	6,996.80
			Invoice: 24028					
				6,996.80	751810	678800		
							CHECK	251 TOTAL:
								6,996.80
252	08/06/2024	PRTD	2814 MCMaster-CARR SUPPLY CO	30066255	07/15/2024		080624	113.85
			Invoice: 30066255					
				113.85	101600	541000		
			MCMaster-CARR SUPPLY CO	30172827	07/16/2024		080624	122.36
			Invoice: 30172827					
				122.36	101100	551000		
			MCMaster-CARR SUPPLY CO	29855120	07/10/2024		080624	55.98
			Invoice: 29855120					
				55.98	751820	551000		
							CHECK	252 TOTAL:
								292.19
253	08/06/2024	PRTD	7770 AUTOMATIONDIRECT.COM	16700160	07/10/2024		080624	14.51
			Invoice: 16700160					
				14.51	101100	551000		
			AUTOMATIONDIRECT.COM	16699743	07/09/2024		080624	75.56
			Invoice: 16699743					
				75.56	101100	551000		
							CHECK	253 TOTAL:
								90.07

## A/P CASH DISBURSEMENTS JOURNAL

CASH ACCOUNT: 999      100100      Cash-General  
 CHECK NO    CHK DATE    TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET	
110431	08/06/2024	PRTD	20389 AIRGAS SPECIALTY PRODUCTS	9151955875	07/19/2024		080624	7,170.73	
Invoice: 9151955875				7,170.73	751810	541013	31,000 LBS AMMONIUM HYDROXIDE Aqua Ammonia		
							CHECK	110431 TOTAL:	7,170.73
110432	08/06/2024	PRTD	30461 ALTERNATIVE HOSE INC.	6088037	07/10/2024	2250000	080624	1,109.10	
Invoice: 6088037				1,109.10	701	132000	SS FITTINGS Storeroom & Truck Inventory		
							CHECK	110432 TOTAL:	1,109.10
110433	08/06/2024	PRTD	30729 AMAZON CAPITAL SERVICES, INC.	1L4V-GG9L-TXT9	07/15/2024		080624	15.88	
Invoice: 1L4V-GG9L-TXT9				15.88	701230	620000	ENVELOPES Forms, Supplies And Postage		
Invoice: 1XL3-LKXW-RQ7Y				23.64	751750	551000	PLANT LABELS Supplies/Material	23.64	
Invoice: 17N6-FRKR-Q44K				37.10	101600	541000	DUSTER HEAD BRUSH, INSULATION CAPS Supplies/Material	37.10	
Invoice: 1NTY-Q71C-1MPY				8.75	701223	620000	GIFT WRAPPING CELLOPHANE ROLL Forms, Supplies And Postage	8.75	
Invoice: 1C9K-FXNG-R9F7				42.87	751820	541000	RLV SUPPLIES Supplies/Material	42.87	
Invoice: 1NTY-Q71C-7TMM				94.08	101900	572500	HYDRATION POWDER Genl Supplies/Small Tools	94.08	
							CHECK	110433 TOTAL:	222.32
110434	08/06/2024	PRTD	30525 AMINDER RANDHAWA	084021/072524	07/25/2024		080624	898.82	
Invoice: 084021/072524				898.82	101	230500	REFUND DEPOSIT ACCT# 0010002416-084021 Deposit Refd Clearing-Billing		
							CHECK	110434 TOTAL:	898.82
110435	08/06/2024	PRTD	2869 AT&T	21506905/072024	07/20/2024		080624	54.29	
Invoice: 21506905/072024				54.29	101106	540520	SVCS 07/20/24-08/19/24 ACT#818 341-2150 690 5 Telephone		

## A/P CASH DISBURSEMENTS JOURNAL

CASH ACCOUNT: 999      100100      Cash-General  
 CHECK NO    CHK DATE    TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
<b>INVOICE DTL DESC</b>								
							CHECK 110435 TOTAL:	54.29
110436	08/06/2024	PRTD	30607 AWARDCO, INC	SO51320	07/12/2024		080624	2,000.00
			Invoice: SO51320					
				2,000.00	701430	681500	REDEMPTION ACCOUNT-DEPOSIT Empl Recognition Functions	
							CHECK 110436 TOTAL:	2,000.00
110437	08/06/2024	PRTD	30874 BANNER BANK	MBC 24-52-03RA	06/25/2024		080624	30,375.00
			Invoice: MBC 24-52-03RA					
				30,375.00	754	201000	ESCROW NO.2281 RETENTION FOR PROGRESS PAYMENT #4 Contract Retainage	
							CHECK 110437 TOTAL:	30,375.00
110438	08/06/2024	PRTD	20698 BATTERIES PLUS	P74495222	07/22/2024		080624	133.60
			Invoice: P74495222					
				133.60	701001	551000	BATTERIES Supplies/Material	
							CHECK 110438 TOTAL:	133.60
110439	08/06/2024	PRTD	21426 BRIGHTVIEW LANDSCAPE SERVICES, IN	8932583	06/30/2024		080624	14,245.75
			Invoice: 8932583					
				3,271.37	701001	551500	LANDSCAPE SRVCS JUNE 2024	
				1,837.13	751820	551800	Outside Services	
				3,843.60	751810	551800	Building Maintenance	
				4,191.15	101600	551800	Building Maintenance	
				336.50	101200	551500	Outside Services	
				301.00	130100	551500	Outside Services	
				390.00	751200	541500	Outside Services	
				75.00	751200	541500	Outside Services	
							CHECK 110439 TOTAL:	14,245.75
110440	08/06/2024	PRTD	2487 CALABASAS CHAMBER OF COMMERCE	7272483	07/24/2024		080624	1,000.00
			Invoice: 7272483					
				1,000.00	701230	660400	2024 MAYORAL EVENT 8/22/24 Public Education Programs	
							CHECK 110440 TOTAL:	1,000.00
110441	08/06/2024	PRTD	5405 CALOLYMPIC SAFETY	408169	07/18/2024	2250007	080624	939.07
			Invoice: 408169					
				49.95	101900	572500	PERSONAL PROTECTIVE EQUIPMENT	
				889.12	701	132000	Genl Supplies/Small Tools Storeroom & Truck Inventory	



## A/P CASH DISBURSEMENTS JOURNAL

CASH ACCOUNT: 999      100100      Cash-General  
 CHECK NO    CHK DATE    TYPE VENDOR NAME

INVOICE	INV DATE	PO	CHECK RUN	NET
INVOICE DTL DESC				
			CHECK    110441 TOTAL:	939.07
110442 08/06/2024 PRD 30824 CENTER FOR INTERNET SECURITY, INC Invoice: INV-240719-0060471	INV-240719-0060471	07/18/2024 2250014	080624 CIS MDR SUBSCRIPTION 7/18/24-7/17/25 System Support and Maintenance	2,400.00
2,400.00 701420    621500			CHECK    110442 TOTAL:	2,400.00
110443 08/06/2024 PRD 30676 CITY OF HIDDEN HILLS Invoice: 026430/072524	026430/072524	07/25/2024	080624 REFUND DEPOSIT ACCT# 0010002626-026430 Deposit Refd Clearing-Billing	764.92
764.92 101        230500			CHECK    110443 TOTAL:	764.92
110444 08/06/2024 PRD 30901 COMMONWEALTH LLC Invoice: 065904/072624	065904/072624	07/26/2024	080624 REFUND ON CLOSED ACCT#0000230430-065904 Deposit Refd Clearing-Billing	71.28
71.28 101        230500			CHECK    110444 TOTAL:	71.28
110445 08/06/2024 PRD 30905 CREEKSIDE SHOPS LLC Invoice: 077389/072524	077389/072524	07/25/2024	080624 OVERPAYMENT ON ACCT#0000580730-077389 Deposit Refd Clearing-Billing	727.71
727.71 101        230500			CHECK    110445 TOTAL:	727.71
110446 08/06/2024 PRD 30903 DAVID GREENBERG Invoice: 075838/072524	075838/072524	07/25/2024	080624 OVERPAYMENT ON ACCT#0000710402-075838 Deposit Refd Clearing-Billing	349.60
349.60 101        230500			CHECK    110446 TOTAL:	349.60
110447 08/06/2024 PRD 30902 DAVID KEMPTON Invoice: 046241/072624	046241/072624	07/26/2024	080624 REFUND ON CLOSED ACCT#0000560631-046241 Deposit Refd Clearing-Billing	127.75
127.75 101        230500			CHECK    110447 TOTAL:	127.75
110448 08/06/2024 PRD 11330 DIAL SECURITY Invoice: 475931	475931	08/01/2024	080624 AUGUST 2024 MONTHLY SVCS	1,258.22
15.90 751820    551800			Building Maintenance	
37.10 751820    551800			Building Maintenance	
37.10 751830    551500			Outside Services	
37.10 101600    551800			Building Maintenance	
132.50 101600    551800			Building Maintenance	

A/P CASH DISBURSEMENTS JOURNAL

CASH ACCOUNT: 999 100100 Cash-General  
 CHECK NO CHK DATE TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
				INVOICE DTL DESC				
				74.41 701001 551500				
				81.41 701001 551500				
				376.30 701001 551500				
				120.84 701002 551500				
				58.30 751750 551500				
				287.26 751810 551800				
							CHECK 110448 TOTAL:	1,258.22
110449	08/06/2024	PRTD	30900 DIANE FROME	085527/072624	07/26/2024		080624	165.59
			Invoice: 085527/072624				REFUND ON CLOSED ACCT#0001130640-085527	
				165.59 101 230500			Deposit Refd Clearing-Billing	
							CHECK 110449 TOTAL:	165.59
110450	08/06/2024	PRTD	7257 DIRECTV, INC.	012036139X240723	07/23/2024		080624	16.00
			Invoice: 012036139X240723				TV ACCESS FEE 07/22-08/21/24	
				16.00 701002 551500			Outside Services	
							CHECK 110450 TOTAL:	16.00
110451	08/06/2024	PRTD	30739 DUCK LIM	026462/072524	07/25/2024		080624	496.21
			Invoice: 026462/072524				OVERPAYMENT ACCT# 0003020830-026462	
				496.21 101 230500			Deposit Refd Clearing-Billing	
							CHECK 110451 TOTAL:	496.21
110452	08/06/2024	PRTD	8612 DURHAM SCHOOL SERVICES	92046506	07/25/2024		080624	556.83
			Invoice: 92046506				WATER DISTRICT TOUR 7/20/24	
				556.83 751840 660400			Public Education Programs	
							CHECK 110452 TOTAL:	556.83
110453	08/06/2024	PRTD	2638 ENVIRONMENTAL RESOURCE ASSOCIATES	082935	07/15/2024	2240175	080624	4,691.30
			Invoice: 082935				ANNUAL TESTING TO MAINTAIN ELAP CERT.	
				4,691.30 701341 552000			Permits and Fees	
							CHECK 110453 TOTAL:	4,691.30
110454	08/06/2024	PRTD	2655 FERGUSON ENTERPRISES	0027410-3	07/22/2024	2240167	080624	4,489.50
			Invoice: 0027410-3				AIR VACS	
				4,489.50 701 132000			Storeroom & Truck Inventory	
							CHECK 110454 TOTAL:	4,489.50

**A/P CASH DISBURSEMENTS JOURNAL**

CASH ACCOUNT: 999      100100      Cash-General  
 CHECK NO    CHK DATE    TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
110455	08/06/2024	PRTD	2701 GRAINGER	9170976378	07/02/2024		080624	25.12
				25.12 701001 551000	V-BELT, FLY TRAP Supplies/Material			
			GRAINGER	9171701585	07/03/2024		080624	8.55
				8.55 701001 551000	FLY TRAP Supplies/Material			
			GRAINGER	9171879217	07/03/2024		080624	171.39
				171.39 701226 572500	TDS METER Genl Supplies/Small Tools			
			GRAINGER	9169377992	07/01/2024		080624	138.22
				138.22 701326 572500	VACUUM Genl Supplies/Small Tools			
			GRAINGER	9167916650	06/28/2024		080624	2,676.23
				2,676.23 701001 551000	PUMP Supplies/Material			
			GRAINGER	9174401993	07/08/2024		080624	9.53
				9.53 101900 572500	BATTERIES Genl Supplies/Small Tools			
			GRAINGER	9177953552	07/10/2024		080624	404.11
				404.11 101900 572500	TAPE MEASURE, RUST PAINT SPRAY Genl Supplies/Small Tools			
			GRAINGER	9177560233	07/10/2024		080624	256.72
				256.72 101900 572500	SEALANT & TAPE Genl Supplies/Small Tools			
			GRAINGER	9171879191	07/03/2024		080624	147.28
				147.28 101900 572500	SHOVEL Genl Supplies/Small Tools			
			GRAINGER	9187992129	07/19/2024		080624	50.16
				50.16 101900 572500	PAINT TRAY Genl Supplies/Small Tools			
					CHECK		110455 TOTAL:	3,887.31
110456	08/06/2024	PRTD	2711 HEAL THE BAY	24719724-0001	07/23/2024		080624	5,000.00
				5,000.00 701122 710500	SPONSORSHIP ONE WATER DAY 8/16/24 Dues, Subsc & Memberships			
					CHECK		110456 TOTAL:	5,000.00

A/P CASH DISBURSEMENTS JOURNAL

CASH ACCOUNT: 999 100100 Cash-General  
 CHECK NO CHK DATE TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
110457	08/06/2024	PRTD	30854 HEATHER BRACA	083686/072524	07/25/2024		080624	721.25
			Invoice: 083686/072524					
				721.25 101 230500			OVERPAYMENT ACCT# 0003010875-083686 Deposit Refd Clearing-Billing	
							CHECK 110457 TOTAL:	721.25
110458	08/06/2024	PRTD	10102 INFOSEND INC.	267048	07/13/2024		080624	5,577.99
			Invoice: 267048					
				5,577.99 701221 622000			7/2-7/10/24 BILL PAYMENT MAILING Outside Services	
							CHECK 110458 TOTAL:	5,577.99
110459	08/06/2024	PRTD	2611 LA DWP	8512601000/072524	07/25/2024		080624	45.39
			Invoice: 8512601000/072524					
				45.39 101700 540510			RECTIFIER 6/25/24-7/25/24 Energy	
							CHECK 110459 TOTAL:	45.39
110460	08/06/2024	PRTD	2793 LISTER RENTS INC	168790.1.2	06/17/2024		080624	265.45
			Invoice: 168790.1.2					
				265.45 101700 551000			CONCRETE MIXER RENTAL & SLURRY Supplies/Material	
							CHECK 110460 TOTAL:	265.45
110461	08/06/2024	PRTD	14322 MILES CHEMICAL COMPANY, INC	721187	07/19/2024		080624	1,313.73
			Invoice: 721187					
				1,313.73 751750 541000			53 GAL SODIUM HYPO & 750 LBS SULFURIC ACID Supplies	
							CHECK 110461 TOTAL:	1,313.73
110462	08/06/2024	PRTD	30408 MORRISON RANCH ESTATES HOA	083717/072324	07/23/2024		080624	1,009.70
			Invoice: 083717/072324					
				1,009.70 101 230500			REFUND DEPOSIT ACCT# 0010002536-083717 Deposit Refd Clearing-Billing	
							CHECK 110462 TOTAL:	1,009.70
110463	08/06/2024	PRTD	30003 NV5, INC	401014	07/31/2024		080624	11,841.00
			Invoice: 401014					
				11,841.00 301440 900000			WATERLINE PROJECT JUNE 2024 Capital Asset Expenses	
							CHECK 110463 TOTAL:	11,841.00

A/P CASH DISBURSEMENTS JOURNAL

CASH ACCOUNT: 999 100100 Cash-General  
 CHECK NO CHK DATE TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
<b>INVOICE DTL DESC</b>								
110464	08/06/2024	PRTD	2302 ODP BUSINESS SOLUTIONS LLC	374725751001	07/19/2024		080624	24.81
	Invoice: 374725751001			24.81 701410 620000	NAME SIGN			
					Forms, Supplies And Postage			
			ODP BUSINESS SOLUTIONS LLC	374726248001	07/19/2024		080624	51.45
	Invoice: 374726248001			51.45 701410 620000	PAPER			
					Forms, Supplies And Postage			
					CHECK		110464 TOTAL:	76.26
110465	08/06/2024	PRTD	30458 PIONEER AMERICAS, LLC (OLIN CORP)	900441539	07/18/2024		080624	10,529.76
	Invoice: 900441539			10,529.76 751810 541014	4,902 GAL SODIUM HYPOCHLORITE			
					Sodium Hypochlorite			
			PIONEER AMERICAS, LLC (OLIN CORP)	900441257	07/17/2024		080624	10,375.09
	Invoice: 900441257			10,375.09 101600 541014	4,830 GAL SODIUM HYPOCHLORITE			
					Sodium Hypochlorite			
			PIONEER AMERICAS, LLC (OLIN CORP)	900440768	07/16/2024		080624	10,542.65
	Invoice: 900440768			10,542.65 751810 541014	4,908 GAL SODIUM HYPOCHLORITE			
					Sodium Hypochlorite			
					CHECK		110465 TOTAL:	31,447.50
110466	08/06/2024	PRTD	30896 THE ARTCRAFT GROUP, INC	2042010	07/17/2024		080624	4,902.38
	Invoice: 2042010			4,902.38 701430 681500	EMPLOYEE APPRECIATION GIFTS			
					Empl Recognition Functions			
					CHECK		110466 TOTAL:	4,902.38
110467	08/06/2024	PRTD	30580 PULTE HOME COMPANY LLC	087540/072524	07/25/2024		080624	338.95
	Invoice: 087540/072524			338.95 101 230500	OVERPAYMENT ACCT# 0010001626-087540			
					Deposit Refd Clearing-Billing			
			PULTE HOME COMPANY LLC	087540/072524A	07/25/2024		080624	189.64
	Invoice: 087540/072524A			189.64 101 230500	OVERPAYMENT ACCT# 0010002021-087540			
					Deposit Refd Clearing-Billing			
			PULTE HOME COMPANY LLC	087540/072524B	07/25/2024		080624	673.75
	Invoice: 087540/072524B			673.75 101 230500	OVERPAYMENT ACCT# 0010001691-087540			
					Deposit Refd Clearing-Billing			
			PULTE HOME COMPANY LLC	088298/072524	07/25/2024		080624	488.08
	Invoice: 088298/072524			488.08 101 230500	OVERPAYMENT ACCT# 0010001036-088298			
					Deposit Refd Clearing-Billing			

## A/P CASH DISBURSEMENTS JOURNAL

CASH ACCOUNT: 999      100100      Cash-General  
 CHECK NO    CHK DATE    TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
<b>INVOICE DTL DESC</b>								
							CHECK 110467 TOTAL:	1,690.42
110468	08/06/2024	PRTD	17334 PUMP ENGINEERING COMPANY	68128	07/17/2024	2240131	080624	11,918.08
			Invoice: 68128					
				11,918.08	751810	551000	AIR COMPRESSOR Supplies/Material	
							CHECK 110468 TOTAL:	11,918.08
110469	08/06/2024	PRTD	2585 PURETEC	2190230	07/15/2024		080624	89.64
			Invoice: 2190230					
				89.64	101600	541000	8" MIXED BED TANK Supplies/Material	
							CHECK 110469 TOTAL:	89.64
110470	08/06/2024	PRTD	17295 QUADIENT	INV17417387	07/18/2024		080624	169.56
			Invoice: INV17417387					
				169.56	701410	620000	INK CARTRIDGE Forms, Supplies And Postage	
							CHECK 110470 TOTAL:	169.56
110471	08/06/2024	PRTD	30621 RINGCENTRAL, INC.	CD_000868006	07/18/2024		080624	3,931.50
			Invoice: CD_000868006					
				3,931.50	701420	621500	MONTHLY SUBSCRIPTION 7/17-8/16/24 System Support and Maintenance	
							CHECK 110471 TOTAL:	3,931.50
110472	08/06/2024	PRTD	30894 ROLLINS MIKELL	002291/071824	07/18/2024		080624	159.59
			Invoice: 002291/071824					
				159.59	101	230500	REFUND CLOSED ACCT# 0000270182-002291 Deposit Refd Clearing-Billing	
							CHECK 110472 TOTAL:	159.59
110473	08/06/2024	PRTD	4586 ROYAL INDUSTRIAL SOLUTIONS	9009-1048700	07/25/2024		080624	-365.55
			Invoice: 9009-1048700					
				-365.55	101100	551000	CREDIT MEMO FOR INV# 9009-1048564 Supplies/Material	
			ROYAL INDUSTRIAL SOLUTIONS	9009-1048926	07/16/2024		080624	765.14
			Invoice: 9009-1048926					
				765.14	101600	551000	240V CB Supplies/Material	
			ROYAL INDUSTRIAL SOLUTIONS	9009-1048842	07/16/2024		080624	276.42
			Invoice: 9009-1048842					
				276.42	101100	551000	ELECTRICAL SUPPLIES Supplies/Material	

A/P CASH DISBURSEMENTS JOURNAL

CASH ACCOUNT: 999 100100 Cash-General  
 CHECK NO CHK DATE TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
INVOICE DTL DESC								
							CHECK 110473 TOTAL:	676.01
110474	08/06/2024	PRTD	20779 SAND MATERIALS & AGGREGATE SALES, 89263	89263	07/03/2024		080624	861.56
			Invoice: 89263	861.56 101700 551000	12.78 TONS CRUSH AGGREGATE, 11.76 FILL SAND			
					Supplies/Material			
			Invoice: 89419	824.31 101700 551000	25.84 TONS FILL SAND		080624	824.31
					Supplies/Material			
			Invoice: 89360	806.18 101700 551000	25.26 TONS FILL SAND		080624	806.18
					Supplies/Material			
CHECK 110474 TOTAL: 2,492.05								
110475	08/06/2024	PRTD	30904 SANDRA LEWIS	011771/072524	07/25/2024		080624	925.75
			Invoice: 011771/072524	925.75 101 230500	OVERPAYMENT ON ACCT#0000780536-011771			
					Deposit Refd Clearing-Billing			
CHECK 110475 TOTAL: 925.75								
110476	08/06/2024	PRTD	2957 SOUTHERN CALIFORNIA EDISON (M-BIL 57161/072424	57161/072424	07/24/2024		080624	17,829.12
			Invoice: 57161/072424	17,829.12 751820 540510	RLV COMPOST PLNT 6/21-6/30/24		253,551 KH	
					Energy			
			Invoice: 57161/072424A	40,306.34 751820 540510	RLV COMPOST PLNT 7/1-7/23/24		253,551 KH	40,306.34
					Energy			
			Invoice: 77683/072624	1,480.10 751750 540510	BLDG 1 EV-PWP 6/21-7/23/24		2,656 KH	1,480.10
					Energy			
			Invoice: 75690/072624	4,003.96 751750 540510	BLDG 1 HM-PWP 06/21/24-07/23/24		11,104 KWH	4,003.96
					Energy			
CHECK 110476 TOTAL: 63,619.52								
110477	08/06/2024	PRTD	30414 SYNAGRO WEST, LLC	49275	07/01/2024		080624	47,958.84
			Invoice: 49275	47,958.84 751820 543000	BIOSOLIDS DISPOSAL JUNE 2024			
					Capital Outlay			
CHECK 110477 TOTAL: 47,958.84								

A/P CASH DISBURSEMENTS JOURNAL

CASH ACCOUNT: 999 100100 Cash-General  
 CHECK NO CHK DATE TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
110478	08/06/2024	PRTD	30159 TRILLIUM HOLDCO LLC	273140	07/17/2024		080624	42,047.43
			Invoice: 273140	42,047.43 751101 540510	ELEC CHARGES SOLAR JUNE 2024 Energy			
					CHECK	110478	TOTAL:	42,047.43
110479	08/06/2024	PRTD	30536 UNIVAR SOLUTIONS INC.	52236319	07/05/2024		080624	9,508.50
			Invoice: 52236319	9,508.50 751810 541011	45,000 LBS SODIUM BISULFITE Sodium Bisulfite			
					CHECK	110479	TOTAL:	9,508.50
110480	08/06/2024	PRTD	2780 VALLEY NEWS GROUP	7-11,18	07/18/2024		080624	90.00
			Invoice: 7-11,18	90.00 701122 650500	LEGAL AD-ESCHEATMENT LIST 7/11 & 7/18/24 Legal Advertising			
					CHECK	110480	TOTAL:	90.00
110481	08/06/2024	PRTD	3022 VAUGHANS INDUSTRIAL REPAIR	030133	06/28/2024		080624	17,533.27
			Invoice: 030133	17,533.27 701321 551500	PUMP REBUILD 6/28/24 Outside Services			
					CHECK	110481	TOTAL:	17,533.27
110482	08/06/2024	PRTD	3035 VWR SCIENTIFIC	8816542206	07/11/2024		080624	172.06
			Invoice: 8816542206	172.06 701341 551000	LAB SUPPLIES Supplies/Material			
			Invoice: 8816521729	69.53 701341 551000	07/10/2024 BUFFER WATER HARDNESS Supplies/Material		080624	69.53
			Invoice: 8816566086	139.33 701341 551000	07/15/2024 BDH BUFFER Supplies/Material		080624	139.33
			Invoice: 8816590853	216.15 701341 551000	07/17/2024 VWR BAG AUTOCLAVE Supplies/Material		080624	216.15
					CHECK	110482	TOTAL:	597.07
110483	08/06/2024	PRTD	3025 WATER & SANITATION SRV./VENTURA C	2814654	07/24/2024		080624	22,390.56
			Invoice: 2814654	22,390.56 101001 510500	PCH WATER 6/18-7/16/24 Purch water-Ventura County			



**A/P CASH DISBURSEMENTS JOURNAL**

CASH ACCOUNT: 999      100100      Cash-General  
 CHECK NO    CHK DATE    TYPE    VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
<b>INVOICE DTL DESC</b>								
							CHECK    110483 TOTAL:	22,390.56
110484	08/06/2024	PRTD	4830 WEST COAST ROTOR	31227A	06/19/2024		080624	1,929.39
			Invoice: 31227A					
				1,929.39	751810	551000	GEAR BALL Supplies/Material	
							CHECK    110484 TOTAL:	1,929.39
110485	08/06/2024	PRTD	30693 WREGIS	WR45810	07/10/2024		080624	34.06
			Invoice: WR45810					
				34.06	701310	710500	WREGIS ANNUAL FEE 09/2024-08/2025 Dues, Subsc & Memberships	
							CHECK    110485 TOTAL:	34.06
				NUMBER OF CHECKS	60		*** CASH ACCOUNT TOTAL ***	400,965.76
				TOTAL PRINTED CHECKS			COUNT	AMOUNT
				TOTAL EFT'S			57	368,495.05
							3	32,470.71
							*** GRAND TOTAL ***	400,965.76

**A/P CASH DISBURSEMENTS JOURNAL**

JOURNAL ENTRIES TO BE CREATED

CLERK: 3296tchau

YEAR	PER	JNL	SRC	ACCOUNT	JNL	DESC	REF 1	REF 2	REF 3	ACCOUNT	DESC	T	OB	DEBIT	CREDIT
			EFF	DATE						LINE	DESC				
2025	2	64													
APP	701-200000		08/06/2024	080624	080624					Accounts Payable				68,328.33	
										AP CASH DISBURSEMENTS JOURNAL					
APP	999-100100		08/06/2024	080624	080624					Cash-General					400,965.76
										AP CASH DISBURSEMENTS JOURNAL					
APP	751-200000		08/06/2024	080624	080624					Accounts Payable				239,550.90	
										AP CASH DISBURSEMENTS JOURNAL					
APP	101-200000		08/06/2024	080624	080624					Accounts Payable				50,569.53	
										AP CASH DISBURSEMENTS JOURNAL					
APP	754-200000		08/06/2024	080624	080624					Accounts Payable				30,375.00	
										AP CASH DISBURSEMENTS JOURNAL					
APP	130-200000		08/06/2024	080624	080624					Accounts Payable				301.00	
										AP CASH DISBURSEMENTS JOURNAL					
APP	301-200000		08/06/2024	080624	080624					Accounts Payable				11,841.00	
										AP CASH DISBURSEMENTS JOURNAL					
										GENERAL LEDGER TOTAL				400,965.76	400,965.76
APP	999-207010		08/06/2024	080624	080624					Due to/Due FromInternal Svcs				68,328.33	
										Cash-General					68,328.33
APP	701-100100		08/06/2024	080624	080624					Due to/Due FromJPA Operations				239,550.90	
										Cash-General					239,550.90
APP	999-207510		08/06/2024	080624	080624					Due to/Due Frm Potable Wtr Ops				50,569.53	
										Cash-General					50,569.53
APP	751-100100		08/06/2024	080624	080624					Due to/Due FromJPA Replacement				30,375.00	
										Cash-General					30,375.00
APP	999-201010		08/06/2024	080624	080624					Due to/Due FrmSanitation Ops				301.00	
										Cash-General					301.00
APP	101-100100		08/06/2024	080624	080624					Due to/Due FrmPotable Wtr Repl				11,841.00	
										Cash-General					11,841.00
APP	999-201300		08/06/2024	080624	080624					Due to/Due FrmPotable Wtr Repl				11,841.00	
										Cash-General					11,841.00
APP	130-100100		08/06/2024	080624	080624					Due to/Due FrmPotable Wtr Repl				11,841.00	
										Cash-General					11,841.00
APP	999-203010		08/06/2024	080624	080624					Due to/Due FrmPotable Wtr Repl				11,841.00	
										Cash-General					11,841.00
APP	301-100100		08/06/2024	080624	080624					Due to/Due FrmPotable Wtr Repl				11,841.00	
										Cash-General					11,841.00
										SYSTEM GENERATED ENTRIES TOTAL				400,965.76	400,965.76
										JOURNAL 2025/02/64	TOTAL			801,931.52	801,931.52

**A/P CASH DISBURSEMENTS JOURNAL**  
**JOURNAL ENTRIES TO BE CREATED**

FUND ACCOUNT	YEAR PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
101 Potable Water Operations 101-100100 101-200000	2025 2	64	08/06/2024	Cash-General		50,569.53
				Accounts Payable	50,569.53	
				FUND TOTAL	50,569.53	50,569.53
130 Sanitation Operations 130-100100 130-200000	2025 2	64	08/06/2024	Cash-General		301.00
				Accounts Payable	301.00	
				FUND TOTAL	301.00	301.00
301 Potable wtr Replacement Fund 301-100100 301-200000	2025 2	64	08/06/2024	Cash-General		11,841.00
				Accounts Payable	11,841.00	
				FUND TOTAL	11,841.00	11,841.00
701 Internal Service Fund 701-100100 701-200000	2025 2	64	08/06/2024	Cash-General		68,328.33
				Accounts Payable	68,328.33	
				FUND TOTAL	68,328.33	68,328.33
751 JPA Operations 751-100100 751-200000	2025 2	64	08/06/2024	Cash-General		239,550.90
				Accounts Payable	239,550.90	
				FUND TOTAL	239,550.90	239,550.90
754 JPA Replacement 754-100100 754-200000	2025 2	64	08/06/2024	Cash-General		30,375.00
				Accounts Payable	30,375.00	
				FUND TOTAL	30,375.00	30,375.00
999 Pooled Cash 999-100100 999-201010 999-201300 999-203010 999-207010 999-207510 999-207540	2025 2	64	08/06/2024	Cash-General		400,965.76
				Due to/Due Frm Potable Wtr Ops	50,569.53	
				Due to/Due Frm Sanitation Ops	301.00	
				Due to/Due Frm Potable wtr Repl	11,841.00	
				Due to/Due From Internal Svs	68,328.33	
				Due to/Due From JPA Operations	239,550.90	
				Due to/Due From JPA Replacement	30,375.00	
				FUND TOTAL	400,965.76	400,965.76

**A/P CASH DISBURSEMENTS JOURNAL**  
 JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FR
101	Potable Water Operations		50,569.53
130	Sanitation Operations		301.00
301	Potable Wtr Replacement Fund		11,841.00
701	Internal Service Fund		68,328.33
751	JPA Operations		239,550.90
754	JPA Replacement		30,375.00
999	Pooled Cash		
TOTAL		400,965.76	400,965.76

\*\* END OF REPORT - Generated by Thieu Chau \*\*

A/P CASH DISBURSEMENTS JOURNAL

CASH ACCOUNT: 999 100100 Cash-General  
 CHECK NO CHK DATE TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
254	08/13/2024	PRTD	2814 MCMaster-CARR SUPPLY CO	30685661	07/25/2024		081324	105.12
				105.12 101600 541000	Supplies/Material			
			Invoice: 30616376	30616376	07/24/2024		081324	76.70
				76.70 751820 551000	DRAIN PLUG, O-RING			
			Invoice: 28831632	28831632	06/18/2024		081324	132.46
				132.46 751820 551000	AIR DRAIN VALVE			
					Supplies/Material			
					CHECK		254 TOTAL:	314.28
255	08/13/2024	PRTD	30387 CINTAS CORPORATION NO. 3	4199060877	07/17/2024		081324	269.68
				109.32 751810 551000	JULY 2024 UNIFORMS/MATS/TOWELS			
				160.36 701999 731600	Supplies/Material			
			Invoice: 4199214934	4199214934	07/18/2024		081324	170.37
				83.66 751820 551000	JULY 2024 UNIFORMS/MATS/TOWELS			
				86.71 701999 731600	Supplies/Material			
			Invoice: 4197533017	4197533017	07/02/2024		081324	269.68
				109.32 751810 551000	JULY 2024 UNIFORMS/MATS/TOWELS			
				160.36 701999 731600	Supplies/Material			
			Invoice: 4197350618	4197350618	07/01/2024		081324	79.81
				15.72 101600 551000	JULY 2024 UNIFORMS/MATS/TOWELS			
				64.09 701999 731600	Supplies/Material			
			Invoice: 4197892205	4197892205	07/05/2024		081324	170.37
				83.66 751820 551000	JULY 2024 UNIFORMS/MATS/TOWELS			
				86.71 701999 731600	Supplies/Material			
			Invoice: 4198505097	4198505097	07/11/2024		081324	170.37
				83.66 751820 551000	JULY 2024 UNIFORMS/MATS/TOWELS			
				86.71 701999 731600	Supplies/Material			
			Invoice: 4198185300	4198185300	07/09/2024		081324	79.81
				15.72 101600 551000	JULY 2024 UNIFORMS/MATS/TOWELS			
				64.09 701999 731600	Supplies/Material			
			Invoice: 4198353337	4198353337	07/10/2024		081324	269.68
					JULY 2024 UNIFORMS/MATS/TOWELS			

## A/P CASH DISBURSEMENTS JOURNAL

CASH ACCOUNT: 999      100100      Cash-General  
 CHECK NO    CHK DATE    TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
				<b>INVOICE DTL DESC</b>				
				109.32 751810 551000				
				160.36 701999 731600				
Invoice: 4198505621			CINTAS CORPORATION NO. 3	4198505621	07/11/2024		081324	684.79
					JULY 2024 UNIFORMS/MATS/TOWELS			
				129.14 701002 551000				
				555.65 701999 731600				
					Supplies/Material			
					Uniforms			
Invoice: 4199925550			CINTAS CORPORATION NO. 3	4199925550	07/25/2024		081324	170.37
					JULY 2024 UNIFORMS/MATS/TOWELS			
				83.66 751820 551000				
				86.71 701999 731600				
					Supplies/Material			
					Uniforms			
Invoice: 4199215498			CINTAS CORPORATION NO. 3	4199215498	07/18/2024		081324	687.51
					JULY 2024 UNIFORMS/MATS/TOWELS			
				129.14 701002 551000				
				558.37 701999 731600				
					Supplies/Material			
					Uniforms			
					CHECK		255 TOTAL:	3,022.44
258 08/13/2024 EFT			2321 ACWA	080124	08/01/2024		081324	5,700.00
Invoice: 080124					STEELHEAD STUDY COST SHARE AMENDMENT 1			
				5,700.00 701122 710500				
					Dues, Subsc & Memberships			
					CHECK		258 TOTAL:	5,700.00
259 08/13/2024 EFT			2565 CONEJO AWARDS	22396	05/22/2024	2240116	081324	3,714.60
Invoice: 22396					LV FANS AND GLASSES			
				3,714.60 701230 660400	Public Education Programs			
					CHECK		259 TOTAL:	3,714.60
260 08/13/2024 EFT			2654 FAMCON PIPE	S100133143.001	07/24/2024		081324	391.46
Invoice: S100133143.001					PAMREX SEWER			
				391.46 130100 551000	Supplies/Material			
					CHECK		260 TOTAL:	391.46
261 08/13/2024 EFT			20856 INTERNATIONAL PRINTING & TYPESETT	23341	07/25/2024		081324	1,051.20
Invoice: 23341					RETRACTABLE BANNERS			
				1,051.20 701230 660400	Public Education Programs			
Invoice: 23357			INTERNATIONAL PRINTING & TYPESETT	23357	07/19/2024		081324	1,051.20
					PINK DOOR HANGERS			
				1,051.20 701220 622000	Outside Services			

## A/P CASH DISBURSEMENTS JOURNAL

CASH ACCOUNT: 999      100100      Cash-General  
 CHECK NO    CHK DATE    TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
					INVOICE DTL DESC			
							CHECK      261 TOTAL:	2,102.40
262	08/13/2024	EFT	21659 ONTARIO REFRIGERATION SERVICE, IN	GW30538	07/12/2024		081324	1,135.00
			Invoice: GW30538		REPLACE VALVE 7/3/24			
				1,135.00 701001 551500	Outside Services			
			Invoice: GW30919	343.43 701002 551500	07/19/2024		081324	343.43
					TROUBLESHOOT AC HQ 7/12/24			
					Outside Services			
			Invoice: GW30778	1,953.00 751810 551500	07/19/2024		081324	1,953.00
					REPAIR AH #3 7/12/24			
					Outside Services			
			Invoice: GW30539	2,326.00 701001 551500	07/12/2024		081324	2,326.00
					RPLC HOT WATER ACUTATOR BLDG 7 7/3/24			
					Outside Services			
							CHECK      262 TOTAL:	5,757.43
263	08/13/2024	EFT	14479 STEPHEN'S VIDEO PRODUCTIONS	7-25-24	07/25/2024		081324	800.00
			Invoice: 7-25-24		VIDEO SRV-LV MTGS JULY 2024			
				800.00 701112 651600	Other Professional Serv			
			Invoice: 7-26-24	700.00 751840 651600	07/26/2024		081324	700.00
					VIDEO SRV-JPA MTGS JULY 2024			
					Other Professional Serv			
			Invoice: 7-27-24	700.00 701112 651600	07/27/2024		081324	700.00
					VIDEO SRV-OCEAN WELL MTGS 7/25/24			
					Other Professional Serv			
							CHECK      263 TOTAL:	2,200.00
264	08/13/2024	EFT	30670 SYRUS DEVERS ADVOCACY LLC	1063	08/01/2024		081324	6,500.00
			Invoice: 1063		CLIENT SVCS JULY 2024			
				6,500.00 751840 651600	Other Professional Serv			
							CHECK      264 TOTAL:	6,500.00
265	08/13/2024	PRTD	30387 CINTAS CORPORATION NO. 3	4199772333	07/24/2024		081324	269.68
			Invoice: 4199772333		JULY 2024 UNIFORMS/MATS/TOWELS			
				109.32 751810 551000	Supplies/Material			
				160.36 701999 731600	Uniforms			
			Invoice: 4199613422	29.47 101600 551000	07/23/2024		081324	93.56
					JULY 2024 UNIFORMS/MATS/TOWELS			
					Supplies/Material			

# Las Virgenes Municipal Water District



## A/P CASH DISBURSEMENTS JOURNAL

CASH ACCOUNT: 999 100100 Cash-General  
 CHECK NO CHK DATE TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
				64.09 701999 731600				
							INVOICE DTL DESC	
							Uniforms	
Invoice: 4198903636			CINTAS CORPORATION NO. 3	4198903636	07/16/2024		081324	79.81
				15.72 101600 551000			JULY 2024 UNIFORMS/MATS/TOWELS	
				64.09 701999 731600			Supplies/Material	
							Uniforms	
							CHECK 265 TOTAL:	443.05
266 08/13/2024 PRTD			30464 VOX CIVIC COMMUNICATIONS	1699	07/17/2024		081324	12,500.00
Invoice: 1699							2024 VENTURA/NORTH LA COUNTY WATER PUBLICATION	
				12,500.00 101900 660400			Public Education Programs	
							CHECK 266 TOTAL:	12,500.00
110486 08/13/2024 PRTD			5367 ADT COMMERCIAL	155619947	07/05/2024		081324	1,110.00
Invoice: 155619947							ANNL FIRE ALARM INSPCTN - BLDG 1 7/3/24	
				1,110.00 751750 551500			Outside Services	
Invoice: 155773408			ADT COMMERCIAL	155773408	07/18/2024		081324	810.00
							REPAIR WON DOOR BLDG 1 7/17/24	
				810.00 701001 551500			Outside Services	
Invoice: 155652491			ADT COMMERCIAL	155652491	07/08/2024		081324	740.00
							ANNUAL FIRE ALARM INSPCTN - TAPIA 7/3/24	
				740.00 751810 551500			Outside Services	
Invoice: 155652490			ADT COMMERCIAL	155652490	07/08/2024		081324	2,500.00
							ANNUAL FIRE ALARM INSPCTN - BLDG 7&8 7/3/24	
				2,500.00 701001 551500			Outside Services	
Invoice: 155619900			ADT COMMERCIAL	155619900	07/05/2024		081324	550.00
							ANNUAL FIRE ALARM INSPCTN - RLV 7/3/24	
				550.00 751820 551500			Outside Services	
Invoice: 155652496			ADT COMMERCIAL	155652496	07/08/2024		081324	740.00
							ANNUAL FIRE ALARM INSPCTN - BLDG 2 7/3/24	
				740.00 701002 551500			Outside Services	
							CHECK 110486 TOTAL:	6,450.00
110487 08/13/2024 PRTD			8560 ADVANCED UTILITY SYSTEMS	HCC05787	07/24/2024		081324	1,075.00
Invoice: HCC05787							REG HARRIS CUSTOMER CONF. AREZOO M.	
				1,075.00 701420 683000			Training & Professional Devel	
							CHECK 110487 TOTAL:	1,075.00



**A/P CASH DISBURSEMENTS JOURNAL**

CASH ACCOUNT: 999      100100      Cash-General  
 CHECK NO    CHK DATE    TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
<b>INVOICE DTL DESC</b>								
110488	08/13/2024	PRTD	30729 AMAZON CAPITAL SERVICES, INC.	1499-XC9D-CT7V	07/19/2024		081324	135.66
			Invoice: 1499-XC9D-CT7V					
				135.66 751820 551000	ADV DRAINAGE SYST COUPLER			
					Supplies/Material			
			Invoice: 13WC-GTLN-6FMV	13WC-GTLN-6FMV	07/22/2024		081324	107.24
				107.24 751820 551000	TRIPOD			
					Supplies/Material			
			Invoice: 1VFK-CF7G-1RNH	1VFK-CF7G-1RNH	07/24/2024		081324	139.49
				139.49 101600 541000	CANOPY			
					Supplies/Material			
						CHECK	110488 TOTAL:	382.39
110489	08/13/2024	PRTD	30711 ANIMAL & INSECT PEST MANAGEMENT I	11984D	07/31/2024		081324	1,346.50
			Invoice: 11984D					
				653.50 701001 551500	JULY 2024 PEST CONTROL SRV			
				158.75 751820 551500	Outside Services			
				101.50 751810 551500	Outside Services			
				57.75 101100 551500	Outside Services			
				39.50 101100 551500	Outside Services			
				335.50 101600 551500	Outside Services			
						CHECK	110489 TOTAL:	1,346.50
110490	08/13/2024	PRTD	30083 AQUATIC GARDENS LLC	14204	07/30/2024		081324	185.00
			Invoice: 14204					
				185.00 701001 551500	POND MAINT JULY 2024			
					Outside Services			
						CHECK	110490 TOTAL:	185.00
110491	08/13/2024	PRTD	5625 ASSOC. OF WATER AGENCIES OF VENTU	06-15800	07/18/2024		081324	180.00
			Invoice: 06-15800					
				150.00 701112 601000	6 REG-WATERWISE BFAST 7/18/24			
				30.00 701121 711000	Directors' Conference Exp			
					Misc Staff Expense			
						CHECK	110491 TOTAL:	180.00
110492	08/13/2024	PRTD	18080 BOOT BARN INC.	INV00269286	06/16/2023		081324	225.00
			Invoice: INV00269286					
				225.00 701322 623000	SAFETY FOOTWARE D. BOCKELMAN			
					Safety Equip			
						CHECK	110492 TOTAL:	225.00

A/P CASH DISBURSEMENTS JOURNAL

CASH ACCOUNT: 999 100100 Cash-General  
 CHECK NO CHK DATE TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
110493	08/13/2024	PRTD	2786 CEDAR VALLEY PLUMBING SUPPLY	238571	07/31/2024		081324	67.44
			Invoice: 238571					
				67.44 701222 572500			TUBBING CUTTER, SWING CUTTER, BARB Genl Supplies/Small Tools	
							CHECK 110493 TOTAL:	67.44
110494	08/13/2024	PRTD	19122 CENTER-LINE CONCRETE CUTTING COMP 20706		07/17/2024		081324	1,195.32
			Invoice: 20706					
				1,195.32 101100 551500			CONCRETE CORING 7/17/24 Outside Services	
							CHECK 110494 TOTAL:	1,195.32
110495	08/13/2024	PRTD	19270 COMMUNICATIONS RELAY, LLC	61007	07/22/2024		081324	1,118.39
			Invoice: 61007					
				1,118.39 701420 540520			CASTRO PEAK RENT AUGUST 2024 Telephone	
							CHECK 110495 TOTAL:	1,118.39
110496	08/13/2024	PRTD	17343 CONEJO/LAS VIRGENES FUTURE FOUNDA	061224	06/12/2024		081324	1,250.00
			Invoice: 061224					
				1,250.00 701122 710500			SENIOR CONGRESS SPONSORSHIP 3/26/25 Dues, Subsc & Memberships	
							CHECK 110496 TOTAL:	1,250.00
110497	08/13/2024	PRTD	30593 DION & SONS, INC	V209406	07/10/2024		081324	787.85
			Invoice: V209406					
				787.85 751810 551000			55 GAL OIL-TAPIA Supplies/Material	
							CHECK 110497 TOTAL:	787.85
110498	08/13/2024	PRTD	18441 EMPLOYEE RELATIONS NETWORK	97525	07/31/2024		081324	102.22
			Invoice: 97525					
				102.22 701430 681000			EE BACKGROUND CHECKS Recruitment Expense	
							CHECK 110498 TOTAL:	102.22
110499	08/13/2024	PRTD	18815 FASTENAL COMPANY	CAGOV6682	07/09/2024		081324	1,030.38
			Invoice: CAGOV6682					
				1,030.38 751820 551000			STOCK BOLT BINS Supplies/Material	
			FASTENAL COMPANY	CAGOV6674	07/09/2024		081324	454.70
			Invoice: CAGOV6674					
				454.70 751810 551000			STOCK BOLT BINS Supplies/Material	
			FASTENAL COMPANY	CAGOV6675	07/09/2024		081324	35.84

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CASH ACCOUNT: 999 100100 Cash-General  
 CHECK NO CHK DATE TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
<b>INVOICE DTL DESC</b>								
Invoice: CAGOV6675				35.84 751810 551000	STOCK BOLT BINS			
					Supplies/Material			
Invoice: CAGOV6676			FASTENAL COMPANY	CAGOV6676	07/09/2024		081324	29.54
				29.54 751810 551000	STOCK BOLT BINS			
					Supplies/Material			
Invoice: CAGOV6677			FASTENAL COMPANY	CAGOV6677	07/09/2024		081324	355.13
				355.13 751810 551000	STOCK BOLT BINS			
					Supplies/Material			
Invoice: CAGOV6680			FASTENAL COMPANY	CAGOV6680	07/09/2024		081324	731.18
				731.18 751820 551000	STOCK BOLT BINS			
					Supplies/Material			
Invoice: CAGOV6678			FASTENAL COMPANY	CAGOV6678	07/09/2024		081324	579.08
				579.08 751810 551000	STOCK BOLT BINS			
					Supplies/Material			
Invoice: CAGOV6679			FASTENAL COMPANY	CAGOV6679	07/09/2024		081324	410.27
				410.27 751820 551000	STOCK BOLT BINS			
					Supplies/Material			
Invoice: CAGOV6681			FASTENAL COMPANY	CAGOV6681	07/09/2024		081324	112.66
				112.66 751820 551000	STOCK BOLT BINS			
					Supplies/Material			
					CHECK		110499 TOTAL:	3,738.78
110500 08/13/2024 PRTD 6770			G.I. INDUSTRIES	2560639-0283-5	08/01/2024		081324	228.25
Invoice: 2560639-0283-5				228.25 101600 551800	DISP WLK AUGUST 2024			
					Building Maintenance			
Invoice: 0049246-0283-4			G.I. INDUSTRIES	0049246-0283-4	08/01/2024		081324	700.00
				700.00 751810 541500	DISP TAPIA GRIT AUGUST 2024			
					Outside Services			
Invoice: 0049234-0283-0			G.I. INDUSTRIES	0049234-0283-0	08/01/2024		081324	861.52
				861.52 751810 551800	DISP TAPIA AUGUST 2024			
					Building Maintenance			
Invoice: 3126303-0283-3			G.I. INDUSTRIES	3126303-0283-3	08/01/2024		081324	111.12
				111.12 751820 551800	DISP RLV FARM AUGUST 2024			
					Building Maintenance			
Invoice: 3126304-0283-1			G.I. INDUSTRIES	3126304-0283-1	08/01/2024		081324	111.12
				111.12 751830 551500	DISP RLV FARM AUGUST 2024			
					Outside Services			
Invoice: 3126305-0283-8			G.I. INDUSTRIES	3126305-0283-8	08/01/2024		081324	920.89
					DISP HQ & SHOP AUGUST 2024			

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CASH ACCOUNT: 999      100100      Cash-General  
 CHECK NO    CHK DATE    TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
				INVOICE DTL DESC				
				303.89 701001 551500				
				617.00 701002 551500				
Invoice: 3126454-0283-4			G.I. INDUSTRIES	3126454-0283-4	08/01/2024		081324	1,044.44
				25 YD ROLLOFF 3700 LV 7/16-7/31/24				
				1,044.44 751820 551800				
Invoice: 3126453-0283-6			G.I. INDUSTRIES	3126453-0283-6	08/01/2024		081324	2,103.19
				25 YD ROLLOFF DISP 7/16-7/31/24				
				2,103.19 701002 551500				
						CHECK	110500 TOTAL:	6,080.53
110501 08/13/2024 PRTD		2701	GRAINGER	9188161880	07/19/2024		081324	40.84
Invoice: 9188161880				40.84 701321 551000	S-HOOK, SCISSORS, SHEARS			
					Supplies/Material			
Invoice: 9183238808			GRAINGER	9183238808	07/16/2024		081324	912.67
				912.67 701341 551000	ANTIFATIGUE MAT, RUNNER			
					Supplies/Material			
Invoice: 9179375200			GRAINGER	9179375200	07/11/2024		081324	1,674.80
				1,674.80 701001 551000	ROOM TEMP SENSOR			
					Supplies/Material			
Invoice: 9184087436			GRAINGER	9184087436	07/17/2024		081324	36.47
				36.47 701321 572500	60" UMBRELLA			
					Genl Supplies/Small Tools			
Invoice: 9183238774			GRAINGER	9183238774	07/16/2024		081324	501.68
				501.68 701322 572500	AIR HAMMER			
					Genl Supplies/Small Tools			
						CHECK	110501 TOTAL:	3,166.46
110502 08/13/2024 PRTD		2705	HACH COMPANY	14084469	06/25/2024		081324	4,082.16
Invoice: 14084469				4,082.16 701341 551000	RGT SET			
					Supplies/Material			
Invoice: 14087951			HACH COMPANY	14087951	06/27/2024		081324	545.32
				545.32 701341 551000	LAB SUPPLIES			
					Supplies/Material			
Invoice: 14097139			HACH COMPANY	14097139	07/08/2024		081324	2,020.29
				2,020.29 101600 541000	WLK SUPPLIES			
					Supplies/Material			
Invoice: 14098353			HACH COMPANY	14098353	07/09/2024		081324	333.97
				333.97 701341 551000	BUFFER SOLN			
					Supplies/Material			

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CASH ACCOUNT: 999      100100      Cash-General  
 CHECK NO    CHK DATE    TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
INVOICE DTL DESC								
							CHECK 110502 TOTAL:	6,981.74
110503	08/13/2024	PRTD	18646 HDR ENGINEERING, INC.	1200621255	05/17/2024		081324	752.50
			Invoice: 1200621255				SPLMNTL WTD DSGN RANCHO 2/25-5/4/24	
			752.50 701	231500			Developer Deposits	
							CHECK 110503 TOTAL:	752.50
110504	08/13/2024	PRTD	10102 INFOSEND INC.	267436	07/26/2024	2240187	081324	10,732.93
			Invoice: 267436				WATER QUALITY REPORT POSTCARDS MAILING	
			10,582.93 101900	660400			Public Education Programs	
			150.00 101900	660400			Public Education Programs	
							CHECK 110504 TOTAL:	10,732.93
110505	08/13/2024	PRTD	17447 KONECRANES INC.	155046941	07/25/2024		081324	3,561.68
			Invoice: 155046941				OVERHEAD CRANE REPAIR TAPIA 7/15/24	
			3,561.68 751810	551500			Outside Services	
							CHECK 110505 TOTAL:	3,561.68
110506	08/13/2024	PRTD	2547 LOS ANGELES COUNTY SANITATION DIS	48892/073124	07/31/2024		081324	772.09
			Invoice: 48892/073124				TAPIA GRIT HAULING JULY 2024	
			772.09 751810	541500			Outside Services	
							CHECK 110506 TOTAL:	772.09
110507	08/13/2024	PRTD	20502 LABWORKS	LW-3972	07/27/2024		081324	10,005.00
			Invoice: LW-3972				LABWORKS ANNUAL RENEWAL 9/1/24-8/31/25	
			10,005.00 701420	621500			System Support and Maintenance	
							CHECK 110507 TOTAL:	10,005.00
110508	08/13/2024	PRTD	2793 LISTER RENTS INC	169027.1.2	07/01/2024		081324	245.08
			Invoice: 169027.1.2				CONCRETE MIXER RENTAL & SLURRY	
			245.08 101700	551000			Supplies/Material	
							CHECK 110508 TOTAL:	245.08
			Invoice: 169151.1.2				07/09/2024	081324
							CONCRETE MIXER RENTAL & SLURRY	313.72
			313.72 101700	551000			Supplies/Material	
							CHECK 110509 TOTAL:	313.72
			Invoice: 169375.1.3				07/25/2024	081324
							CONCRETE MIXER RENTAL & SLURRY	265.45
			265.45 101700	551000			Supplies/Material	

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CASH ACCOUNT: 999      100100      Cash-General  
 CHECK NO    CHK DATE    TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
				<b>INVOICE DTL DESC</b>				
Invoice: 169399.1.2			LISTER RENTS INC	169399.1.2	07/24/2024		081324	313.72
				313.72 101700 551000	CONCRETE MIXER RENTAL & SLURRY Supplies/Material			
					CHECK		110508 TOTAL:	1,137.97
110509	08/13/2024	PRTD	14322 MILES CHEMICAL COMPANY, INC	721866	07/29/2024		081324	827.83
Invoice: 721866				827.83 751750 541000	53 GAL (2) SODIUM HYPOCHLORITE Supplies			
Invoice: 721395			MILES CHEMICAL COMPANY, INC	721395	07/23/2024		081324	-115.00
				-115.00 751750 541000	CR-CONTAINER DEPOSIT Supplies			
					CHECK		110509 TOTAL:	712.83
110510	08/13/2024	PRTD	30743 MLADEN BUNTICH CONSTRUCTION CO.,	10803/PMT#5	07/25/2024		081324	334,875.00
Invoice: 10803/PMT#5				334,875.00 754440 900000	MALIBOU LAKE SPHN RPLCMNT 6/26-7/25/24 Capital Asset Expenses			
					CHECK		110510 TOTAL:	334,875.00
110511	08/13/2024	PRTD	2839 MOTION INDUSTRIES, INC.	CA22-00761353	07/24/2024		081324	4,367.93
Invoice: CA22-00761353				4,367.93 751820 551000	GEARBOX Supplies/Material			
					CHECK		110511 TOTAL:	4,367.93
110512	08/13/2024	PRTD	7781 NATIONAL WATER RESEARCH INSTITUTE 2024-PROGRESS		07/19/2024		081324	2,513.75
Invoice: 2024-PROGRESS				2,513.75 754440 900000	IAP PW PROJ. 6/6-6/30/24 Capital Asset Expenses			
					CHECK		110512 TOTAL:	2,513.75
110513	08/13/2024	PRTD	18575 OAKSTONE GLASS CORPORATION	77792	07/18/2024		081324	3,850.00
Invoice: 77792				3,850.00 701001 551500	RPLC GYM WINDOW GLASS Outside Services			
					CHECK		110513 TOTAL:	3,850.00
110514	08/13/2024	PRTD	30898 ORGCHART, LLC	INV-17365	07/29/2024		081324	1,989.00
Invoice: INV-17365				1,989.00 701420 621500	ORGCHART SUBSCRIPTION 7/26/24-7/25/25 System Support and Maintenance			

A/P CASH DISBURSEMENTS JOURNAL

CASH ACCOUNT: 999 100100 Cash-General  
 CHECK NO CHK DATE TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
INVOICE DTL DESC								
							CHECK 110514 TOTAL:	1,989.00
110515	08/13/2024	PRTD	30336 PIPE TEC, INC.	12414	07/24/2024		081324	3,175.00
			Invoice: 12414	3,175.00	130100	551500	WET WELL CLEANING 7/24/24 Outside Services	
			PIPE TEC, INC.	12415	07/25/2024		081324	4,799.00
			Invoice: 12415	4,799.00	130100	551500	WET WELL CLEANING 7/25/24 Outside Services	
							CHECK 110515 TOTAL:	7,974.00
110516	08/13/2024	PRTD	17334 PUMP ENGINEERING COMPANY	68207	07/29/2024		081324	2,327.75
			Invoice: 68207	2,327.75	701002	551500	PREVENTATIVE MAINT AIR COMP BLDG #7 Outside Services	
							CHECK 110516 TOTAL:	2,327.75
110517	08/13/2024	PRTD	2957 SOUTHERN CALIFORNIA EDISON (M-BIL 45743/073124		07/31/2024		081324	82,722.04
			Invoice: 45743/073124	41,386.02	751127	540510	RW P/S 6/28-7/30/24 364,855 KH Energy	
				41,336.02	751128	540510	Energy	
							CHECK 110517 TOTAL:	82,722.04
110518	08/13/2024	PRTD	2957 SOUTHERN CALIFORNIA EDISON (M-BIL 551722		07/16/2024		081324	400.00
			Invoice: 551722	400.00	301440	900000	DOC#7590566218 ENGR FEE-FAULT DATA FOR ARC FLASH Capital Asset Expenses	
							CHECK 110518 TOTAL:	400.00
110519	08/13/2024	PRTD	2958 SOUTHERN CALIFORNIA GAS CO (M-bil 18121142006/080524		08/05/2024		081324	337.65
			Invoice: 18121142006/080524	337.65	751820	540530	RANCHO 7/2/24-8/1/24 195 THERMS Gas	
			SOUTHERN CALIFORNIA GAS CO (M-bil 01951140001/080524		08/05/2024		081324	116.63
			Invoice: 01951140001/080524	116.63	751810	540530	TAPIA 7/2-8/1/24 64 THERMS Gas	
			SOUTHERN CALIFORNIA GAS CO (M-bil 05721104007/080524		08/05/2024		081324	124.70
			Invoice: 05721104007/080524	124.70	101110	540530	CORNELL 7/2-8/1/24 70 THERMS Gas	
			SOUTHERN CALIFORNIA GAS CO (M-bil 03001136005/080524		08/05/2024		081324	998.75
			Invoice: 03001136005/080524	749.06	701001	540530	HQ & OPS 7/2-8/1/24 780 THERMS Gas	
				249.69	701002	540530	Gas	

A/P CASH DISBURSEMENTS JOURNAL

CASH ACCOUNT: 999 100100 Cash-General  
 CHECK NO CHK DATE TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
INVOICE DTL DESC								
Invoice: 06551212001/080124			SOUTHERN CALIFORNIA GAS CO (M-bil	06551212001/080124	08/01/2024		081324	15.88
				15.88 101109 540530	JBR P/S 6/28-7/30/24 0 THERMS			
					Gas			
Invoice: 14241394924/080824			SOUTHERN CALIFORNIA GAS CO (M-bil	14241394924/080824	08/08/2024		081324	17.34
				17.34 101600 540530	WLK P/S 7/5-8/6/24 1 THERMS			
					Gas			
							CHECK 110519 TOTAL:	1,610.95
110520 08/13/2024 PRTD	17375		SOUTHERN CALIFORNIA WATER COALITI	1923	07/31/2024		081324	5,000.00
Invoice: 1923				5,000.00 701122 710500	ANNUAL PATRON MEMBERSHIP FY24-25			
					Dues, Subsc & Memberships			
							CHECK 110520 TOTAL:	5,000.00
110521 08/13/2024 PRTD	21119		SOUTHERN COMPUTER WAREHOUSE, INC.	INV00815596	07/25/2024	2250016	081324	1,144.33
Invoice: INV00815596				1,144.33 701420 543000	FORTINET SWITCH PROJECT ITEMS			
					Capital Outlay			
Invoice: INV00815597			SOUTHERN COMPUTER WAREHOUSE, INC.	INV00815597	07/25/2024	2250016	081324	14,799.21
				14,799.21 701420 543000	FORTINET SWITCH PROJECT ITEMS			
					Capital Outlay			
							CHECK 110521 TOTAL:	15,943.54
110522 08/13/2024 PRTD	20880		TPX COMMUNICATIONS	180545954-0	07/16/2024		081324	10,237.63
Invoice: 180545954-0				534.51 130100 540520	INTERNET SRV 7/16-8/15/24			
				7,836.35 701420 540520	Telephone			
				138.56 101300 540520	Telephone			
				88.65 751820 540520	Telephone			
				1,639.56 101300 540520	Telephone			
							CHECK 110522 TOTAL:	10,237.63
110523 08/13/2024 PRTD	21252		TYLER TECHNOLOGIES, INC.	045-475117	07/01/2024		081324	10,899.75
Invoice: 045-475117				10,899.75 701420 621500	SAAS FEES 7/1/24-3/31/25			
					System Support and Maintenance			
							CHECK 110523 TOTAL:	10,899.75
110524 08/13/2024 PRTD	2780		VALLEY NEWS GROUP	7-25	07/25/2024		081324	250.00
Invoice: 7-25				250.00 101900 660400	DISPLAY AD-WQR 2023 7/25/24			
					Public Education Programs			



**A/P CASH DISBURSEMENTS JOURNAL**

CASH ACCOUNT: 999      100100      Cash-General  
 CHECK NO    CHK DATE    TYPE VENDOR NAME

INVOICE	INV DATE	PO	CHECK RUN	NET
INVOICE DTL DESC				
	CHECK	110524	TOTAL:	250.00
110525 08/13/2024 PRTD 17065 VANTAGE AIR, INC. Invoice: 64236	64236	07/16/2024	081324	485.00
485.00 701001 551500		MAIT ON HQ ICE MACHINE 7/16/24 Outside Services		
	CHECK	110525	TOTAL:	485.00
110526 08/13/2024 PRTD 30056 VERIZON WIRELESS Invoice: 9970046669	9970046669	07/26/2024	081324	576.15
576.15 701224 540520		WIRELESS SVC 7/27-8/26/24 Telephone		
	CHECK	110526	TOTAL:	576.15
110527 08/13/2024 PRTD 3035 VWR SCIENTIFIC Invoice: 8816612414	8816612414	07/19/2024	081324	985.42
985.42 701341 551000		ELECTRODE Supplies/Material		
Invoice: 8816676883	8816676883	07/26/2024	081324	1,063.88
1,063.88 701341 551000		PETRI DISH, TUBES, GLOVES Supplies/Material		
	CHECK	110527	TOTAL:	2,049.30
110528 08/13/2024 PRTD 3047 WESCO DISTRIBUTION, INC. Invoice: 914081	914081	07/04/2024	081324	912.27
912.27 101100 551000		VEO SUPPLY Supplies/Material		
Invoice: 933559	933559	07/24/2024 2240084	081324	8,748.35
8,748.35 101100 551000		AUTOMATIC TRANSFER SWITCH Supplies/Material		
	CHECK	110528	TOTAL:	9,660.62
NUMBER OF CHECKS    54				*** CASH ACCOUNT TOTAL ***
				602,385.69
		COUNT	AMOUNT	
TOTAL PRINTED CHECKS		47	576,019.80	
TOTAL EFT'S		7	26,365.89	
*** GRAND TOTAL ***				602,385.69

**A/P CASH DISBURSEMENTS JOURNAL**

JOURNAL ENTRIES TO BE CREATED

CLERK: 3296tchau

YEAR	PER	JNL	SRC	ACCOUNT	JNL	DESC	REF 1	REF 2	REF 3	ACCOUNT	DESC	T	OB	DEBIT	CREDIT
			EFF	DATE						LINE	DESC				
2025	2	130													
APP	101-200000		08/13/2024	081324	081324					Accounts Payable				40,415.41	
										AP CASH DISBURSEMENTS JOURNAL					
APP	999-100100		08/13/2024	081324	081324					Cash-General					602,385.69
										AP CASH DISBURSEMENTS JOURNAL					
APP	751-200000		08/13/2024	081324	081324					Accounts Payable				113,071.56	
										AP CASH DISBURSEMENTS JOURNAL					
APP	701-200000		08/13/2024	081324	081324					Accounts Payable				102,210.00	
										AP CASH DISBURSEMENTS JOURNAL					
APP	130-200000		08/13/2024	081324	081324					Accounts Payable				8,899.97	
										AP CASH DISBURSEMENTS JOURNAL					
APP	754-200000		08/13/2024	081324	081324					Accounts Payable				337,388.75	
										AP CASH DISBURSEMENTS JOURNAL					
APP	301-200000		08/13/2024	081324	081324					Accounts Payable				400.00	
										AP CASH DISBURSEMENTS JOURNAL					
										GENERAL LEDGER TOTAL				602,385.69	602,385.69
APP	999-201010		08/13/2024	081324	081324					Due to/Due Frm Potable Wtr Ops				40,415.41	
										Cash-General					40,415.41
APP	101-100100		08/13/2024	081324	081324					Due to/Due FromJPA Operations				113,071.56	
										Cash-General					113,071.56
APP	999-207510		08/13/2024	081324	081324					Due to/Due FromInternal Svs				102,210.00	
										Cash-General					102,210.00
APP	751-100100		08/13/2024	081324	081324					Due to/Due FrmSanitation Ops				8,899.97	
										Cash-General					8,899.97
APP	999-207010		08/13/2024	081324	081324					Due to/Due FromJPA Replacement				337,388.75	
										Cash-General					337,388.75
APP	701-100100		08/13/2024	081324	081324					Due to/Due FrmPotable Wtr Repl				400.00	
										Cash-General					400.00
APP	999-203010		08/13/2024	081324	081324					SYSTEM GENERATED ENTRIES TOTAL				602,385.69	602,385.69
										JOURNAL 2025/02/130 TOTAL				1,204,771.38	1,204,771.38

**A/P CASH DISBURSEMENTS JOURNAL**  
**JOURNAL ENTRIES TO BE CREATED**

FUND ACCOUNT	YEAR PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
101 Potable Water Operations 101-100100 101-200000	2025 2	130	08/13/2024	Cash-General Accounts Payable	40,415.41	40,415.41
FUND TOTAL					40,415.41	40,415.41
130 Sanitation Operations 130-100100 130-200000	2025 2	130	08/13/2024	Cash-General Accounts Payable	8,899.97	8,899.97
FUND TOTAL					8,899.97	8,899.97
301 Potable Wtr Replacement Fund 301-100100 301-200000	2025 2	130	08/13/2024	Cash-General Accounts Payable	400.00	400.00
FUND TOTAL					400.00	400.00
701 Internal Service Fund 701-100100 701-200000	2025 2	130	08/13/2024	Cash-General Accounts Payable	102,210.00	102,210.00
FUND TOTAL					102,210.00	102,210.00
751 JPA Operations 751-100100 751-200000	2025 2	130	08/13/2024	Cash-General Accounts Payable	113,071.56	113,071.56
FUND TOTAL					113,071.56	113,071.56
754 JPA Replacement 754-100100 754-200000	2025 2	130	08/13/2024	Cash-General Accounts Payable	337,388.75	337,388.75
FUND TOTAL					337,388.75	337,388.75
999 Pooled Cash 999-100100 999-201010 999-201300 999-203010 999-207010 999-207510 999-207540	2025 2	130	08/13/2024	Cash-General Due to/Due Frm Potable Wtr Ops Due to/Due Frm Sanitation Ops Due to/Due Frm Potable wtr Repl Due to/Due From Internal Svs Due to/Due From JPA Operations Due to/Due From JPA Replacement	40,415.41 8,899.97 400.00 102,210.00 113,071.56 337,388.75	602,385.69
FUND TOTAL					602,385.69	602,385.69

**A/P CASH DISBURSEMENTS JOURNAL**  
 JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FR
101	Potable Water Operations		40,415.41
130	Sanitation Operations		8,899.97
301	Potable Wtr Replacement Fund		400.00
701	Internal Service Fund		102,210.00
751	JPA Operations		113,071.56
754	JPA Replacement		337,388.75
999	Pooled Cash		
		602,385.69	
TOTAL		602,385.69	602,385.69

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## A/P CASH DISBURSEMENTS JOURNAL

CASH ACCOUNT: 999      100100      Cash-General  
 CHECK NO    CHK DATE    TYPE    VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET	
110529	08/13/2024	PRTD	2780 VALLEY NEWS GROUP	1-18	01/19/2024		013024	250.00	
				INVOICE DTL DESC DISPLAY AD - RESET YOUR IRRIGATION 01/18/24 Public Education Programs					
				250.00	101900	660400			
							CHECK 110529 TOTAL:	250.00	
NUMBER OF CHECKS							1	*** CASH ACCOUNT TOTAL ***	250.00
							COUNT	AMOUNT	
TOTAL PRINTED CHECKS							1	250.00	
							*** GRAND TOTAL ***	250.00	

**A/P CASH DISBURSEMENTS JOURNAL**

JOURNAL ENTRIES TO BE CREATED

CLERK: 3296tchau

YEAR	PER	JNL	SRC	ACCOUNT	JNL	DESC	REF 1	REF 2	REF 3	ACCOUNT	DESC	T	OB	DEBIT	CREDIT
					EFF	DATE				LINE	DESC				
2025	2	135													
APP	101-200000				08/13/2024	013024	013024			Accounts Payable				250.00	
										AP CASH DISBURSEMENTS JOURNAL					
APP	999-100100				08/13/2024	013024	013024			Cash-General					250.00
										AP CASH DISBURSEMENTS JOURNAL					
										GENERAL LEDGER TOTAL				250.00	250.00
APP	999-201010				08/13/2024	013024	013024			Due to/Due Frm Potable Wtr Ops				250.00	
APP	101-100100				08/13/2024	013024	013024			Cash-General					250.00
										SYSTEM GENERATED ENTRIES TOTAL				250.00	250.00
										JOURNAL 2025/02/135	TOTAL			500.00	500.00

## A/P CASH DISBURSEMENTS JOURNAL

JOURNAL ENTRIES TO BE CREATED

FUND	ACCOUNT	YEAR	PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
101	Potable Water Operations 101-100100 101-200000	2025	2	135	08/13/2024	Cash-General		250.00
						Accounts Payable	250.00	
						FUND TOTAL	250.00	250.00
999	Pooled Cash 999-100100 999-201010	2025	2	135	08/13/2024	Cash-General		250.00
						Due to/Due Frm Potable Wtr Ops	250.00	
						FUND TOTAL	250.00	250.00

**A/P CASH DISBURSEMENTS JOURNAL**  
JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FR
101	Potable Water Operations		250.00
999	Pooled Cash	250.00	
	TOTAL	250.00	250.00

\*\* END OF REPORT - Generated by Thieu Chau \*\*



## A/P CASH DISBURSEMENTS JOURNAL

CASH ACCOUNT: 999      100100      Cash-General  
 CHECK NO    CHK DATE    TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
25026	08/13/2024	MANL	30658 WELLS FARGO BANK	JULY 2024	08/08/2024		081324A	2,017.62
			Invoice: JULY 2024					
				2,017.62	101001	862500	WFB CLIENT ANALYSIS FEE JULY 2024 Other Non-Operating Expense	
							CHECK 25026 TOTAL:	2,017.62
				NUMBER OF CHECKS	1		*** CASH ACCOUNT TOTAL ***	2,017.62
				TOTAL MANUAL CHECKS		COUNT	AMOUNT	
						1	2,017.62	
							*** GRAND TOTAL ***	2,017.62

**A/P CASH DISBURSEMENTS JOURNAL**

JOURNAL ENTRIES TO BE CREATED

CLERK: 3296tchau

YEAR	PER	JNL	SRC	ACCOUNT	JNL	DESC	REF 1	REF 2	REF 3	ACCOUNT	DESC	T	OB	DEBIT	CREDIT
				EFF	DATE					LINE	DESC				
2025	2	132													
APP	101-200000			08/13/2024	081324A	081324				Accounts Payable				2,017.62	
										AP CASH DISBURSEMENTS JOURNAL					
APP	999-100100			08/13/2024	081324A	081324				Cash-General					2,017.62
										AP CASH DISBURSEMENTS JOURNAL					
										GENERAL LEDGER TOTAL				2,017.62	2,017.62
APP	999-201010			08/13/2024	081324A	081324				Due to/Due Frm Potable Wtr Ops				2,017.62	
APP	101-100100			08/13/2024	081324A	081324				Cash-General					2,017.62
										SYSTEM GENERATED ENTRIES TOTAL				2,017.62	2,017.62
										JOURNAL 2025/02/132			TOTAL	4,035.24	4,035.24

## A/P CASH DISBURSEMENTS JOURNAL

JOURNAL ENTRIES TO BE CREATED

FUND	ACCOUNT	YEAR	PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
101	Potable Water Operations	2025	2	132	08/13/2024			
	101-100100					Cash-General		2,017.62
	101-200000					Accounts Payable	2,017.62	
						FUND TOTAL	2,017.62	2,017.62
999	Pooled Cash	2025	2	132	08/13/2024			
	999-100100					Cash-General		2,017.62
	999-201010					Due to/Due Frm Potable Wtr Ops	2,017.62	
						FUND TOTAL	2,017.62	2,017.62

**A/P CASH DISBURSEMENTS JOURNAL**  
JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FR
101	Potable Water Operations		2,017.62
999	Pooled Cash	2,017.62	
	TOTAL	2,017.62	2,017.62

\*\* END OF REPORT - Generated by Thieu Chau \*\*

## A/P CASH DISBURSEMENTS JOURNAL

CASH ACCOUNT: 999      100100      Cash-General  
 CHECK NO    CHK DATE    TYPE    VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
246	08/06/2024	WIRE	21137 TESLA, INC. Invoice: RN122316595	RN122316595	07/31/2024		080624A	51,463.85
				51,463.85	301440	900000	Capital Asset Expenses	
							CHECK 246 TOTAL:	51,463.85
				NUMBER OF CHECKS	1	*** CASH ACCOUNT TOTAL ***		51,463.85
				TOTAL WIRE TRANSFERS	COUNT	AMOUNT		
					1	51,463.85		
						*** GRAND TOTAL ***		51,463.85

**A/P CASH DISBURSEMENTS JOURNAL**

JOURNAL ENTRIES TO BE CREATED

CLERK: 3296tchau

YEAR	PER	JNL	SRC	ACCOUNT	JNL	DESC	REF 1	REF 2	REF 3	ACCOUNT	DESC	T	OB	DEBIT	CREDIT
					EFF	DATE				LINE	DESC				
2025	2	65													
APP	301-200000				08/06/2024	080624A	080624			Accounts Payable				51,463.85	
										AP CASH DISBURSEMENTS JOURNAL					
APP	999-100100				08/06/2024	080624A	080624			Cash-General					51,463.85
										AP CASH DISBURSEMENTS JOURNAL					
										GENERAL LEDGER TOTAL				51,463.85	51,463.85
APP	999-203010				08/06/2024	080624A	080624			Due to/Due FrmPotable wtr Rep1				51,463.85	
APP	301-100100				08/06/2024	080624A	080624			Cash-General					51,463.85
										SYSTEM GENERATED ENTRIES TOTAL				51,463.85	51,463.85
										JOURNAL 2025/02/65			TOTAL	102,927.70	102,927.70

## A/P CASH DISBURSEMENTS JOURNAL

JOURNAL ENTRIES TO BE CREATED

FUND	ACCOUNT	YEAR	PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
301	Potable wtr Replacement Fund 301-100100 301-200000	2025	2	65	08/06/2024	Cash-General		51,463.85
						Accounts Payable	51,463.85	
						FUND TOTAL	51,463.85	51,463.85
999	Pooled Cash 999-100100 999-203010	2025	2	65	08/06/2024	Cash-General		51,463.85
						Due to/Due FrmPotable wtr Rep1	51,463.85	
						FUND TOTAL	51,463.85	51,463.85

**A/P CASH DISBURSEMENTS JOURNAL**  
JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FR
301	Potable wtr Replacement Fund		51,463.85
999	Pooled Cash	51,463.85	
TOTAL		51,463.85	51,463.85

\*\* END OF REPORT - Generated by Thieu Chau \*\*



## A/P CASH DISBURSEMENTS JOURNAL

CASH ACCOUNT: 999      100100      Cash-General  
 CHECK NO    CHK DATE    TYPE    VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET	
247	08/06/2024	WIRE	30906 KROLL BOND RATING AGENCY, LLC	IV-NY-20901	01/09/2024		080624B	45,000.00	
Invoice: IV-NY-20901				45,000.00	754440	900000	JPA INDICATIVE RATING FEE Capital Asset Expenses		
							CHECK	247 TOTAL:	45,000.00
NUMBER OF CHECKS					1	*** CASH ACCOUNT TOTAL ***			45,000.00
TOTAL WIRE TRANSFERS						COUNT	AMOUNT		
						1	45,000.00		
*** GRAND TOTAL ***								45,000.00	

**A/P CASH DISBURSEMENTS JOURNAL**

JOURNAL ENTRIES TO BE CREATED

CLERK: 3296tchau

YEAR	PER	JNL	SRC	ACCOUNT	JNL	DESC	REF 1	REF 2	REF 3	ACCOUNT	DESC	T	OB	DEBIT	CREDIT
					EFF	DATE				LINE	DESC				
2025	2	66													
APP	754-200000				08/06/2024	080624B	080624			Accounts Payable				45,000.00	
										AP CASH DISBURSEMENTS JOURNAL					
APP	999-100100				08/06/2024	080624B	080624			Cash-General					45,000.00
										AP CASH DISBURSEMENTS JOURNAL					
										GENERAL LEDGER TOTAL				45,000.00	45,000.00
APP	999-207540				08/06/2024	080624B	080624			Due to/Due FromJPA Replacement				45,000.00	
APP	754-100100				08/06/2024	080624B	080624			Cash-General					45,000.00
										SYSTEM GENERATED ENTRIES TOTAL				45,000.00	45,000.00
										JOURNAL 2025/02/66			TOTAL	90,000.00	90,000.00

**A/P CASH DISBURSEMENTS JOURNAL**  
 JOURNAL ENTRIES TO BE CREATED

FUND	ACCOUNT	YEAR	PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
754	JPA Replacement 754-100100 754-200000	2025	2	66	08/06/2024	Cash-General Accounts Payable		45,000.00
						FUND TOTAL	45,000.00	45,000.00
999	Pooled Cash 999-100100 999-207540	2025	2	66	08/06/2024	Cash-General Due to/Due From JPA Replacement	45,000.00	45,000.00
						FUND TOTAL	45,000.00	45,000.00

## A/P CASH DISBURSEMENTS JOURNAL

JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FR
754	JPA Replacement		45,000.00
999	Pooled Cash	45,000.00	
	TOTAL	45,000.00	45,000.00

\*\* END OF REPORT - Generated by Thieu Chau \*\*

**A/P CASH DISBURSEMENTS JOURNAL**

CASH ACCOUNT: 999      100100      Cash-General  
 CHECK NO    CHK DATE    TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
248	08/06/2024	WIRE	30545 BOOKY OREN GLOBAL WATER TEHCTNOLOG	01/0000307	06/30/2024		080624C	17,500.00
Invoice: 01/0000307				17,500.00	701122	710500		
				K2I PLATFORM Q2 2024 FEE				
				Dues, Subsc & Memberships				
							CHECK 248 TOTAL:	17,500.00
				NUMBER OF CHECKS	1	*** CASH ACCOUNT TOTAL ***		17,500.00
				TOTAL WIRE TRANSFERS	COUNT	AMOUNT		
					1	17,500.00		
						*** GRAND TOTAL ***		17,500.00

**A/P CASH DISBURSEMENTS JOURNAL**

JOURNAL ENTRIES TO BE CREATED

CLERK: 3296tchau

YEAR	PER	JNL	SRC	ACCOUNT	JNL	DESC	REF 1	REF 2	REF 3	ACCOUNT	DESC	T	OB	DEBIT	CREDIT
					EFF	DATE				LINE	DESC				
2025	2	67													
APP	701-200000				08/06/2024	080624C	080624			Accounts Payable				17,500.00	
										AP CASH DISBURSEMENTS JOURNAL					
APP	999-100100				08/06/2024	080624C	080624			Cash-General					17,500.00
										AP CASH DISBURSEMENTS JOURNAL					
										GENERAL LEDGER TOTAL				17,500.00	17,500.00
APP	999-207010				08/06/2024	080624C	080624			Due to/Due FromInternal Svs				17,500.00	
APP	701-100100				08/06/2024	080624C	080624			Cash-General					17,500.00
										SYSTEM GENERATED ENTRIES TOTAL				17,500.00	17,500.00
										JOURNAL 2025/02/67				35,000.00	35,000.00
										TOTAL					

**A/P CASH DISBURSEMENTS JOURNAL**  
 JOURNAL ENTRIES TO BE CREATED

FUND	ACCOUNT	YEAR	PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
701	Internal Service Fund	2025	2	67	08/06/2024			
	701-100100					Cash-General		17,500.00
	701-200000					Accounts Payable	17,500.00	
						FUND TOTAL	17,500.00	17,500.00
999	Pooled Cash	2025	2	67	08/06/2024			
	999-100100					Cash-General		17,500.00
	999-207010					Due to/Due From Internal Svs	17,500.00	
						FUND TOTAL	17,500.00	17,500.00

**A/P CASH DISBURSEMENTS JOURNAL**  
JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FR
701	Internal Service Fund		17,500.00
999	Pooled Cash	17,500.00	
	TOTAL	17,500.00	17,500.00

\*\* END OF REPORT - Generated by Thieu Chau \*\*





**LAS VIRGENES MUNICIPAL WATER DISTRICT**  
4232 Las Virgenes Road, Calabasas CA 91302

**MINUTES**  
**SPECIAL MEETING**

9:00 AM

August 19, 2024

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance to the Flag was led by Jeremy Wolf.

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

The meeting was called to order at **9:00 a.m.** by Board President Lewitt in the Board Room at Las Virgenes Municipal Water District headquarters at 4232 Las Virgenes Road, Calabasas, California 91302. Josie Guzman, Clerk of the Board, conducted the roll call.

Present: Directors Gary Burns, Charles Caspary, Andy Coradeschi, Jay Lewitt, and Len Polan.

Absent: None

Staff Present: David Pedersen, General Manager  
Joe McDermott, Assistant General Manager  
Darrell Johnson, Director of Water Operations  
Brian Richie, Finance Manager  
Josie Guzman, Clerk of the Board  
Keith Lemieux, District Counsel

Staff Present

Via Teleconference: Eric Schlageter, Director of Engineering and Facilities

**2. APPROVAL OF AGENDA**

Director Coradeschi moved to approve the agenda. Motion seconded by Director Polan. Motion carried 5-0 by the following vote:

AYES: Burns, Caspary, Coradeschi, Lewitt, Polan  
NOES: None  
ABSTAIN: None  
ABSENT: None

**3. PUBLIC COMMENTS**

There were no public comments.

Brian Richie introduced new Intern Ashlyn Hammond. The Board welcomed Ms. Hammond to the District.

Mr. Richie also introduced new employee Kyle Vardel, Control Systems Supervisor. The Board welcomed Mr. Vardel to the District.

**4. CONSENT CALENDAR**

**A List of Demands: August 19, 2024: Receive and file**

**B Minutes Regular Meeting of August 6, 2024: Approve**

**C Directors' Per Diem: July 2024: Ratify**

**D Monthly Cash and Investment Report: June 2024**

**Receive and file the Monthly Cash and Investment Report for June 2024.**

**E Water Main Break at 5745 Parkmor Road: Continuation of Emergency Declaration**

**Approve the continuation of an emergency declaration due to a 12-inch water main break at 5745 Parkmor Road in the City of Calabasas.**

Director Caspary moved to approve the Consent Calendar. Motion seconded by Director Coradeschi. Motion carried 5-0 by the following vote:

AYES: Burns, Caspary, Coradeschi, Lewitt, Polan  
NOES: None  
ABSTAIN: None  
ABSENT: None

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

**A Legislative and Regulatory Updates**

Jeremy Wolf, Legislative Program Manager, reported that the Cities of Calabasas and Westlake Village would not be holding City Council elections in November as no one

besides the incumbents had filed nomination papers. He noted that the City of Agoura Hills would hold elections to fill two City Council seats, the City of Hidden Hills would hold an election to fill two City Council seats, and the Las Virgenes Unified School District would hold an election to fill two Trustee seats.

Director Caspary announced that he had chosen not to run for reelection after having served as the District's Division 1 Director for 24 years. He stated that he was looking forward to great achievements by the District.

Mr. Wolf also reported that 830 state bills were placed in the Senate and Assembly suspense file, and 270 bills were blocked partly due to the state budget deficit. He stated that the surviving 500 bills had until August 31st to reach Governor Gavin Newsom's desk. He also stated that bills that were held in suspense included SB 1218 (Newman) Water, Emergency Water Supplies; and SB 1255 (Durazo), Public Water Systems, Needs Analysis, Water Rate Assistance Program. He noted that the District opposed SB 1255 because the language was not well-defined regarding voluntary contributions to subsidize low-income ratepayers. General Manager David Pedersen added that administration of this bill would have been costly, and there was concern with default enrollment of customers as opposed to voluntary enrollment.

Mr. Wolf also reported that the District would continue to monitor SB 366 (Caballero), The California Water Plan, Long-Term Supply Targets; SB 1072 (Padilla) Local Government, Proposition 218, Remedies; and AB 1827 (Papan) Low-Water User Protection Act. He noted that Proposition 4 Climate Resilience Bond would be included on the November 5, 2024 ballot.

## **B Customer Billing Changes**

Joe McDermott, Assistant General Manager, provided introductory remarks regarding proposed changes to customer billing.

Derek Krauss, Customer Service Office Supervisor, provided a PowerPoint presentation regarding billing and meter reading program changes and new billing structure, which would issue customer bills twice per month with a set due date of either the 5th or 20th of each month. He provided an overview of the benefits of the new billing structure, which would become effective February 2025.

The Board provided feedback on the new billing structure.

Ursula Bosson, Customer Service Manager responded to a question regarding the status of redesigning customers' water bill by stating that she and staff were working on preparing a draft bill that would include water usage by units and gallons, QR code, and a color-coded graph. She noted that staff was also working on developing a customer report card that would include customer water usage, tips on lowering water usage, and other messaging. She also responded to questions regarding adding information on toilet replacement rebates and other types of rebate programs.

## 6. TREASURER

Director Coradeschi stated that he reviewed the expenditures.

## 7. ENGINEERING AND FACILITIES

### A Knowledge to Implementation (K2i) Platform Annual Subscription: Renewal

**Authorize the General Manager to execute a subscription agreement with Booky Oren Global Water Technologies, in the amount of \$70,000, for a one-year subscription renewal to its Knowledge to Implementation Platform (K2i).**

General Manager David Pedersen presented the report.

Director Polan moved to approve Item 7A. Motion seconded by Director Burns.

General Manager David Pedersen responded to questions regarding the use of artificial intelligence in the K2i platform, allowing staff the time to view recorded sessions, and accessing transcribed sessions.

Motion carried 5-0 by the following vote:

AYES: Burns, Caspary, Coradeschi, Lewitt, Polan

NOES: None

ABSTAIN: None

ABSENT: None

## 8. NON-ACTION ITEMS

### A Organization Reports

Director Caspary reported that he attended the Association of California Water Agencies (ACWA) State Legislative Committee Meeting on August 9th, where they discussed AB 2060 (Soria), Lake and Streambed Alteration Agreements, Exemptions, which would codify groundwater recharge for high floodflows. He noted that MWD was opposed due to possible impacts to their water rights, and the Committee took no position on this bill. He also noted that Adam Quiñonez, ACWA State Relations Director, announced his resignation. He also reported that he attended the Santa Monica Bay Restoration Commission Governing Board Meeting on August 15th. He noted that Commissioner Laurie Newman tendered her resignation, and the Commission received a presentation regarding the Safe Clean Water Program and considered a draft resolution prepared by LA Waterkeeper regarding recommendations to advance and improve the Safe Clean Water Program.

### B Director's Reports on Outside Meetings

Director Polan reported that he and Director Burns attended the ACWA Region 9 Program

on August 13th regarding Water Workforce Development Solutions, which included discussions regarding public agencies assisting in providing housing for their employees who cannot afford to live in their service area, and in-house training and education.

Director Burns noted that the ACWA Region 9 Program included discussions regarding asking current employees for referrals of potential employees, and seeking 16- to 25-year-old disenfranchised youth as future employees.

Board President Lewitt reported that he attended the Heal the Bay ONE Water Day Event on August 16th, where General Manager David Pedersen served on a panel discussion regarding stormwater capture.

## **C General Manager Reports**

### (1) General Business

General Manager David Pedersen provided an update regarding Director elections for Districts 1 and 4. He noted that Randy Levine was the only candidate who filed nomination papers for Division 1, and he would be appointed in lieu of election. He also noted that Director Polan was the only candidate who filed nomination papers for Division 4, and he would be reappointed in lieu of election. He reported that recently a 5.2 magnitude earthquake occurred, which was centered 19 miles from Bakersfield, and a 4.4 magnitude earthquake occurred in South Pasadena. He noted that staff followed the emergency response protocol and procedure, and inspected the dam and other facilities for earthquake damage. He referred to the November 5, 2024 General Election, and noted that vote-by-mail ballots would be mailed 29 days before the election. He reminded the Board that the next Board meeting would be held on September 3rd, and the Las Virgenes – Triunfo Joint Powers Authority meeting would also be held on September 3rd at 5 p.m. in the Board Room.

### (2) Follow-Up Items

None.

## **D Directors' Comments**

Director Coradeschi stated that he was pleased with the presentations provided at the August 8th JPA workshop regarding the Advanced Water Purification Facility architectural renderings and public benefit area concept plan. He also stated that the City of Agoura Hills had presented him with a plaque acknowledging the District for sponsoring its Summer Concert series.

Director Caspary acknowledged staff for their efforts in applying for grants and funding totaling approximately \$300 million for the Pure Water Project Las Virgenes-Triunfo.

Director Burns stated that he traveled through Bakersfield days before the 5.2 magnitude earthquake, and he inquired whether residents from the Three Springs area in Westlake Village were informed regarding the District's response in inspecting the dam. General

Manager David Pedersen responded that the dam was an earthen dam, which was excavated to bedrock, and it has very low risk for earthquake damage.

**9. FUTURE AGENDA ITEMS**

None.

**10. PUBLIC COMMENTS**

None.

**11. ADJOURNMENT**

Seeing no further business to come before the Board, the meeting was duly adjourned at **10:19 a.m.**

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Jay Lewitt, President  
Board of Directors  
Las Virgenes Municipal Water District

ATTEST:

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Gary Burns, Secretary  
Board of Directors  
Las Virgenes Municipal Water District

(SEAL)



**DATE:** September 3, 2024  
**TO:** Board of Directors  
**FROM:** Finance and Administration

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**SUBJECT: On-Call SCADA System Support and Professional Services**

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**SUMMARY:**

The District uses a Supervisory Control and Data Acquisition (SCADA) system for its potable water, recycled water and sanitation enterprises. The SCADA system provides automation of processes, alarm protocols, data collection for analysis and reporting, and remote control and monitoring of processes and equipment. On November 16, 2021, the Board authorized the General Manager to execute a five-year professional services agreement with The RoviSys Company (RoviSys) for systems integration and on-call support services. Staff is requesting additional funds, in the amount of \$100,000, to continue professional support services on the District's SCADA technology investment.

**RECOMMENDATION(S):**

Authorize the General Manager to execute an agreement with The RoviSys Company, in the amount of \$100,000, for on-call SCADA system support and professional services.

**FISCAL IMPACT:**

Yes

**ITEM BUDGETED:**

Yes

**FINANCIAL IMPACT:**

The total cost of this action is \$100,000. Sufficient funds are available for the work in the adopted Fiscal Year 2024-25 Budget.

**DISCUSSION:**

In June 2020, the District adopted standards for its operational technology (OT) platforms that included SCADA programming, hardware, and tag naming standards. The District's OT standards include Rockwell Automation PLCs and Wonderware Systems Platform SCADA



system. On November 16, 2021, the Board accepted a proposal from The RoviSys Company (RoviSys) and authorized the General Manager to execute a five-year professional services agreement for design and installation services associated with the Wireless Backhaul Communications System Upgrade Project. Funding for that project included \$100,000 for on-call support services across the following categories:

- Testing Platforms
- Network Upgrades
- Systems Design
- Hardware Recommendations
- Security Assessments
- IT Governance
- Capital Improvement Projects requiring SCADA and Information Technology Components
- Operator Training
- Annual Planning and Budgeting
- Technical Support

On September 19, 2023, the Board authorized an additional \$100,000 for continued on-call SCADA system support and professional services. Staff utilized these funds for professional services with RoviSys on various aspects of the stated categories. With the District's hiring of a Control Systems Supervisor, along with plans for future SCADA personnel, staff plans to transition away from some of the on-call support provided by RoviSys. Staff is requesting additional funds in the amount of \$100,000, for RoviSys to provide ongoing on-call SCADA System Support and Professional Services.

**GOALS:**

Ensure Effective Utilization of the Public's Assets and Money

Prepared by: Ivo Nkwenji, Information Systems Manager



**DATE:** September 3, 2024  
**TO:** Board of Directors  
**FROM:** Water Operations

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**SUBJECT: Water Main Break at 5745 Parkmor Road: Continuation of Emergency Declaration**

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**SUMMARY:**

On June 4, 2024, the Board adopted Resolution No. 2640, continuing the declaration of emergency due to a 12-inch water main break at 5745 Parkmor Road in the City of Calabasas to ensure that the work can be completed expeditiously.

**RECOMMENDATION(S):**

Approve the continuation of an emergency declaration due to a 12-inch water main break at 5745 Parkmor Road in the City of Calabasas.

**ITEM BUDGETED:**

Yes

**FINANCIAL IMPACT:**

There is no direct financial impact associated with continuing the emergency declaration.

**DISCUSSION:**

Engineering has been completed for the retaining wall, and the District is waiting for delivery of the plans from Stable Earth Supply. Once the plans are received, the plans will be sent to the City of Calabasas for approval and issuance of the permit to build the wall. Once the permit is issued, Toro Enterprises will continue digging to place the footing and install the retaining wall. The District is collaborating with the homeowner on the style and color of the brick that will be used for the retaining wall.

Section 2-6.402 of the Las Virgenes Municipal Water District Code requires that once the Board has declared an emergency, it must determine by a four-fifths vote at each subsequent regular Board meeting whether to continue or terminate the authorization for emergency. Staff recommends that the emergency declaration be continued.

**GOALS:**

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

Prepared by: Darrell Johnson, Director of Water Operations

**ATTACHMENTS:**

[Brick Sample 1.pdf](#)

[Brick Sample 2.pdf](#)











# The Metropolitan Water District of Southern California

# Agenda

The mission of the Metropolitan Water District of Southern California is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

## Board of Directors

August 20, 2024

12:00 PM

<b>Tuesday, August 20, 2024</b> <b>Meeting Schedule</b>
08:30 a.m. FAM 10:30 a.m. EOP 11:30 a.m. Break 12:00 p.m. BOD

Agendas, live streaming, meeting schedules, and other board materials are available here: <https://mwdh2o.legistar.com/Calendar.aspx>. Written public comments received by 5:00 p.m. the business days before the meeting is scheduled will be posted under the Submitted Items and Responses tab available here: <https://mwdh2o.legistar.com/Legislation.aspx>.

If you have technical difficulties with the live streaming page, a listen-only phone line is available at 1-877-853-5257; enter meeting ID: 891 1613 4145.

Members of the public may present their comments to the Board on matters within their jurisdiction as listed on the agenda via in-person or teleconference. To participate via teleconference 1-833-548-0276 and enter meeting ID: 815 2066 4276 or to join by computer [click here](#).

MWD Headquarters Building • 700 N. Alameda Street • Los Angeles, CA 90012

Teleconference Locations:

525 Via La Selva • Redondo Beach, CA 90277

City Hall • 303 W. Commonwealth Avenue • Fullerton, CA 92832

3008 W. 82nd Place • Inglewood, CA 90305

2680 W. Segerstrom Avenue Unit 1 • Santa Ana, CA 92704

Long Beach Water Department • 1800 E. Wardlow Road • Long Beach, CA 90807

Lobby Conference Room • San Diego County Water Authority • 4677 Overland Avenue • San Diego, CA 92123

148 Lighthouse Road • Hilton Head Island, SC 29928

7 Upper Meadow Lane • Oak Bluffs, MA 02568

Conference Room • 1545 Victory Boulevard, 2nd Floor • Glendale, CA 91201

## 1. Call to Order

- a. Invocation: Director Stephen J. Faessel, City of Anaheim
- b. Pledge of Allegiance: Director Tracy M. Quinn, City of Los Angeles

## 2. Roll Call

**3. Determination of a Quorum****4. Opportunity for members of the public to address the Board on matters within the Board's jurisdiction. (As required by Gov. Code §54954.3(a))****5. OTHER MATTERS AND REPORTS**

- A. Report on Directors' Events Attended at Metropolitan's Expense [21-3618](#)  
**Attachments:** [08202024 BOD 5A Report](#)
- B. Chair's Monthly Activity Report [21-3619](#)  
**Attachments:** [08202024 BOD 5B Report](#)
- C. Interim General Manager's summary of activities [21-3620](#)  
**Attachments:** [08202024 BOD 5C Report](#)
- D. General Counsel's summary of activities [21-3621](#)  
**Attachments:** [08202024 BOD 5D Report](#)
- E. General Auditor's summary of activities [21-3622](#)  
**Attachments:** [08202024 BOD 5E Report](#)
- F. Ethics Officer's summary of activities [21-3623](#)  
**Attachments:** [08202024 BOD 5F Report](#)
- G. Presentation of 5-year Service Pin to Director Tana McCoy, City of Compton [21-3624](#)
- H. Report on list of certified assessed valuations for fiscal year 2024/25 and tabulation of assessed valuations, percentage participation, and vote entitlement of member agencies as of August 20, 2024 (FAM) [21-3634](#)  
**Attachments:** [08202024 FAM 5H B-L](#)  
[08202024 FAM 5-H Presentation](#)

- I. Presentation of commendatory resolution honoring The Rancho California Water District for 2024 recipient of the Outstanding Public Service Announcement Emmy Awards "Be a Water Hero" Campaign [21-3691](#)
- J. Presentation of commendatory resolution honoring Elsinore Valley Municipal Water District recipient of the American Water Works Association National 2024 Hydrant Hysteria Competition [21-3692](#)
- K. Induction of new Director Mark Gold from City of Santa Monica [21-3694](#)
  - (a) Receive credentials
  - (b) Report on credentials by General Counsel
  - (c) File credentials
  - (d) Administer Oath of Office
  - (e) File Oath

**Attachments:** [08202024 BOD 5K Sufficiency of Credentials](#)

**\*\* CONSENT CALENDAR ITEMS -- ACTION \*\***

**6. CONSENT CALENDAR OTHER ITEMS - ACTION**

- A. Approval of the Minutes of the Board of Directors Meeting for July 9, 2024 (Copies have been submitted to each Director, any additions, corrections, or omissions). [21-3625](#)  
**Attachments:** [2024-0709 BOD Meeting Minutes](#)
- B. Approve Commendatory Resolution for Director Judy Abdo representing City of Santa Monica [21-3693](#)
- C. Approve Committee Assignments

**7. CONSENT CALENDAR ITEMS - ACTION**

- 7-1 Authorize on-call agreements with AECOM, RHA LLC, Strategic Value Solutions Inc., and Value Management Strategies Inc., in amounts not to exceed \$1.5 million each, for a maximum of three years for value engineering and related technical services in support of Capital Investment Plan projects; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (EOT) [21-3614](#)

**Attachments:** [08202024 EOT 7-1 B-L](#)  
[08192024 EOT 7-1 Presentation](#)



- 7-2** Authorize an agreement to Carollo Engineers Inc. in an amount not to exceed \$1.3 million for owner's advisor services to assist with progressive design-build project delivery on the Lake Mathews Pressure Control Structure and Electrical System Upgrades; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (EOT) [21-3615](#)
- Attachments:** [08202024 EOT 7-2 B-L](#)  
[08192024 EOT 7-2 Presentation](#)
- 7-3** Authorize an increase of \$840,000 in change order authority to an existing contract with Steve P. Rados for the installation of an isolation valve for the Wadsworth Pump Plant Bypass Pipeline; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (This action is part of a series of projects that are being undertaken to improve the supply reliability for State Water Project dependent member agencies) (EOT) [21-3616](#)
- Attachments:** [08202024 EOT 7-3 B-L](#)  
[08192024 EOT 7-3 Presentation](#)
- 7-4** Adopt the Mitigated Negative Declaration for the Inland Feeder-Foothill Pump Station Intertie Project and take related CEQA actions; adopt a resolution to accept \$5 million in funding from U.S. Bureau of Reclamation's WaterSMART Drought Response Program: Drought Resiliency Projects grant for Fiscal Year 2024 to support the Inland Feeder/San Bernardino Valley Municipal Water District Foothill Pump Station Intertie project; and authorize the General Manager to accept grant funds, if awarded; designate Metropolitan's Group Manager of Engineering Services to be the signatory to execute actions for reimbursement by U.S. Bureau of Reclamation (EOT) [21-3617](#)
- Attachments:** [08202024 EOT 7-4 B-L](#)  
[08192024 EOT 7-4 Presentation](#)

- 7-5** Amend an existing agreement with Procure America Inc. for a new annual maximum amount of \$340,000 per year for a new not-to-exceed amount of \$1.7 million over the term of the agreement for the audit of Metropolitan's telecommunications circuits; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (EOT) [21-3628](#)
- Attachments:** [08202024 EOT 7-5 B-L](#)  
[08192024 EOT 7-5 Presentation](#)
- 7-6** Authorize a \$875,000 increase to an existing agreement with Computer Aid Incorporated to a new not-to-exceed amount of \$2,625,000 for staff augmentation support services for the operation and maintenance of the Metropolitan Cybersecurity Operations Center for an additional six months; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (EOT) [21-3629](#)
- Attachments:** [08202024 EOT 7-6 B-L](#)  
[08192024 EOT 7-6 Presentation](#)
- 7-7** Approve and authorize the distribution of Appendix A for use in the issuance and remarketing of Metropolitan's Bonds; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (FAM) [21-3688](#)
- Attachments:** [08202024 FAM 7-7 B-L](#)
- 7-8** Review and consider the Lead Agency's adopted Mitigated Negative Declaration and take related CEQA actions, and adopt resolution for 115th Fringe Area Annexation to Eastern Municipal Water District and Metropolitan (FAM) [21-3635](#)
- Attachments:** [08202024 FAM 7-8 B-L](#)  
[08202024 FAM 7-8 Presentation](#)

**\*\* END OF CONSENT CALENDAR ITEMS \*\***

## **8. OTHER BOARD ITEMS - ACTION**

- 8-1** Authorize the General Manager to enter into: (1) a forbearance agreement with Coachella Valley Water District, Imperial Irrigation District, Palo Verde Irrigation District, and the City of Needles to allow water conserved under the U.S. Bureau of Reclamation's conservation program to be added to Lake Mead; and (2) agreements with Imperial Irrigation District and San Diego County Water Authority under U.S. Bureau of Reclamation's conservation program to add water conserved by Imperial Irrigation District to Lake Mead that would otherwise accrue to San Diego County Water Authority; the General Manager has determined that the proposed actions are exempt or otherwise not subject to CEQA (OWS) [21-3681](#)

**Attachments:** [08202024 OWS 8-1 B-L](#)  
[08192024 OWS 8-1 Presentation](#)

- 8-2** Adopt the Twenty-Sixth Supplemental Resolution to the Master Bond Resolution authorizing the issuance of up to \$425 million of Water Revenue and Refunding Bonds, 2024 Series; and approve expenditures to fund the costs of issuance of the Bonds; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (FAM) [21-3703](#)

**Attachments:** [08202024 FAM 8-2 B-L](#)

- 8-3** Adopt resolution establishing the Ad Valorem tax rate for fiscal year 2024/25; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (FAM) [21-3633](#)

**Attachments:** [08202024 FAM 8-3 B-L](#)  
[08202024 FAM 8-3 Presentation](#)

- 8-4** Approve salary increase of 8.25 percent effective June 13, 2024 for Deven Upadhyay as Interim General Manager to reflect the added responsibilities and duties; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA [21-3711](#)

**Attachments:** [08202024 BOD 8-4 B-L](#)

## **9. BOARD INFORMATION ITEMS**

- 9-1** Conservation Report [21-3626](#)

**Attachments:** [08202024 BOD 9-1 Report](#)

- 9-2 Update on proposed agreements with the Plumas Community Protection I Forest Resilience Bond LLC, North Feather I Forest Resilience Bond LLC, and Upper Butte Creek I Forest Resilience Bond LLC to establish watershed partnerships and forest health pilot investigations in the Northern Sierra Nevada; each agreement will not exceed \$200,000 per year for a maximum of two years (OWS) [21-3631](#)

**Attachments:** [08202024 OWS 9-2 B-L](#)  
[08192024 OWS 9-2 Presentation](#)

**10. OTHER MATTERS**

- 10-1 Report on Department Head 2023 Salary Survey [21-3637](#)

**Attachments:** [08202024 BOD 10-1 Presentation](#)

- 10-2 Discussion of Department Head Performance Evaluations [Public Employees' performance evaluations; General Counsel, General Auditor, and Ethics Officer; to be heard in closed session pursuant to Gov. Code 54957] [21-3639](#)

- 10-3 Discuss and Approve Compensation Recommendations for General Counsel, General Auditor, and Ethics Officer [21-3638](#)

**11. FOLLOW-UP ITEMS**

NONE

**12. FUTURE AGENDA ITEMS**

**13. ADJOURNMENT**

**NOTE:** Each agenda item with a committee designation will be considered and a recommendation may be made by one or more committees prior to consideration and final action by the full Board of Directors. The committee designation appears in parenthesis at the end of the description of the agenda item, e.g. (EOT). Board agendas may be obtained on Metropolitan's Web site <https://mwdh2o.legistar.com/Calendar.aspx>

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# The Metropolitan Water District of Southern California

# Agenda

The mission of the Metropolitan Water District of Southern California is to provide its service area with adequate and reliable supplies of high-quality water to meet present and future needs in an environmentally and economically responsible way.

## Special Joint Meeting of the Executive Committee and Board of Directors - Final - Revised 1

Tuesday, August 27, 2024  
Meeting Schedule

09:30 a.m. Sp Exec and BOD

**August 27, 2024**

**9:30 AM**

Agendas, live streaming, meeting schedules, and other board materials are available here: <https://mwdh2o.legistar.com/Calendar.aspx>. Written public comments received by 5:00 p.m. the business days before the meeting is scheduled will be posted under the Submitted Items and Responses tab available here: <https://mwdh2o.legistar.com/Legislation.aspx>.

If you have technical difficulties with the live streaming page, a listen-only phone line is available at 1-877-853-5257; enter meeting ID: 891 1613 4145.

Members of the public may present their comments to the Board on matters within their jurisdiction as listed on the agenda via in-person or teleconference. To participate via teleconference 1-833-548-0276 and enter meeting ID: 815 2066 4276 or to join by computer [click here](#).

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MWD Headquarters Building • 700 N. Alameda Street • Los Angeles, CA 90012

Teleconference Locations:

3008 W. 82nd Place • Inglewood, CA 90305

13 Pumphouse Road • Garden Valley, ID 83622

Lobby Conference Room • San Diego County Water Authority • 4677 Overland Ave. • San Diego, CA 92123

525 Via La Selva • Redondo Beach, CA 90277

City Hall • 303 W. Commonwealth Avenue • Fullerton, CA 92832

7 Upper Meadow Lane • Oak Bluffs, MA 02568

Conference Room • 1545 Victory Boulevard, 2nd Floor • Glendale, CA 91201

Bluffton Library • 120 Palmetto Way • Bluffton, SC 29910

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\* The Metropolitan Water District's meeting of this Committee is noticed as a joint committee meeting with the Board of Directors for the purpose of compliance with the Brown Act. Members of the Board who are not assigned to this Committee may participate as members of the Board, whether or not a quorum of the Board is present. In order to preserve the function of the committee as advisory to the Board, members of the Board who are not assigned to this Committee will not vote on matters before this Committee.

## 1. Call to Order

## 2. Roll Call

- 3. **Determination of a Quorum**
- 4. **Opportunity for members of the public to address the Board limited to the items listed on the agenda. (As required by Gov. Code §54954.3(a))**

**EXECUTIVE COMMITTEE ITEMS**

**5. OTHER MATTERS AND REPORTS**

- a. Chair's Report
- b. Interim General Manager's Report of Metropolitan Activities
- c. General Counsel's Report of Metropolitan Activities
- d. General Auditor's Report of Metropolitan Activities
- e. Ethics Officer's Report of Metropolitan Activities

**\*\* CONSENT CALENDAR ITEMS -- ACTION \*\***

**6. CONSENT CALENDAR OTHER ITEMS - ACTION**

- A. Approval of the Minutes of the Executive Committee Meeting of July 23, 2024 (Copies have been submitted to each Director, any additions, corrections, or omissions) [21-3788](#)

**Attachments:** [08272024 Sp Exec and BOD 6A \(EXEC 07232024\) Minutes](#)

- B. Approve draft Committee and Board meeting agendas and schedule for September 2024 [21-3789](#)

**Attachments:** [08272024 Sp Exec and BOD 6B Draft Packet](#)

**\*\* END OF CONSENT CALENDAR ITEMS \*\***

**7. COMMITTEE INFORMATION ITEMS**

- a. Report on the Colorado River Board Meeting [21-3790](#)
- b. Colorado River Activities [21-3791](#)

**8. SUBCOMMITTEE REPORTS AND DISCUSSION**

- a. Report, discuss, and provide direction to Audit Subcommittee of the Executive Committee [21-3798](#)

**SPECIAL BOARD ITEMS**

## 9. BOARD INFORMATION ITEMS

- 9-1** Labor Negotiations Update [Conference with labor negotiators; to be heard in closed session pursuant to Gov. Code Section 54957.6. Metropolitan representative(s): Katano Kasaine, Chief Financial Officer; Gifty Beets, Human Resources Section Manager; Mark Brower, Human Resources Group Manager; Adam Benson, Finance Group Manager; Employee Organization(s): The Employees Association of The Metropolitan Water District of Southern California/AFSCME Local 1902; the Management and Professional Employees Associations MAPA/AFSCME Chapter 1001; the Supervisors Association; and the Association of Confidential Employees]. [ADDED ITEM 8/23/2024] [21-3804](#)

**Attachments:** [08272024 Sp Exec and BOD 9-1 Non-Interest Disclosure Notice](#)

## 10. OTHER BOARD ITEMS - ACTION

- a.** Status of investigations and provide direction on potential interim measures; the General Manager has determined the proposed action is exempt or otherwise not subject to CEQA. [Conference with legal counsel—anticipated litigation; based on existing facts and circumstances, including receipt of correspondences containing allegations of serious Equal Employment Opportunity, retaliation, and other violations; there is significant exposure to litigation against Metropolitan; two potential cases; to be heard in closed session pursuant to Gov. Code Section 54956.9(d)(2)] [21-3793](#)
- b.** Review of Department Head Performance Evaluation [Public employee performance evaluation: General Manager, to be heard in closed session pursuant to Gov. Code Section 54957] [21-3799](#)
- c.** Public Employee Discipline/Dismissal/Release [to be heard in closed session pursuant to Gov. Code Section 54957] [21-3800](#)

## 11. FOLLOW-UP ITEMS

NONE

## 12. FUTURE AGENDA ITEMS

## 13. ADJOURNMENT

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# Metropolitan Water Operations

SEPTEMBER 3, 2024

# Metropolitan Water District

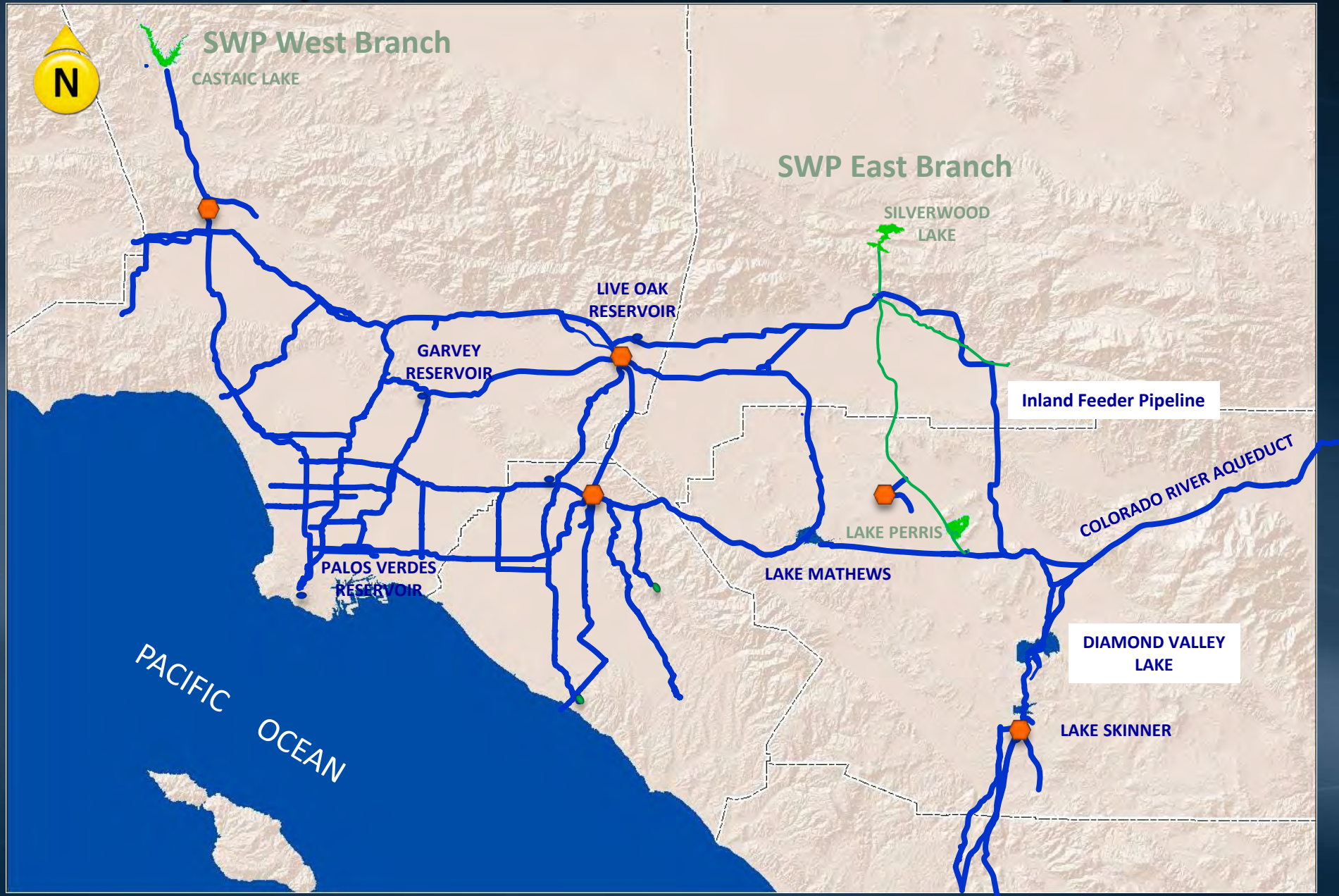


# Metropolitan's Imported Water Supply





# Metropolitan's Distribution System





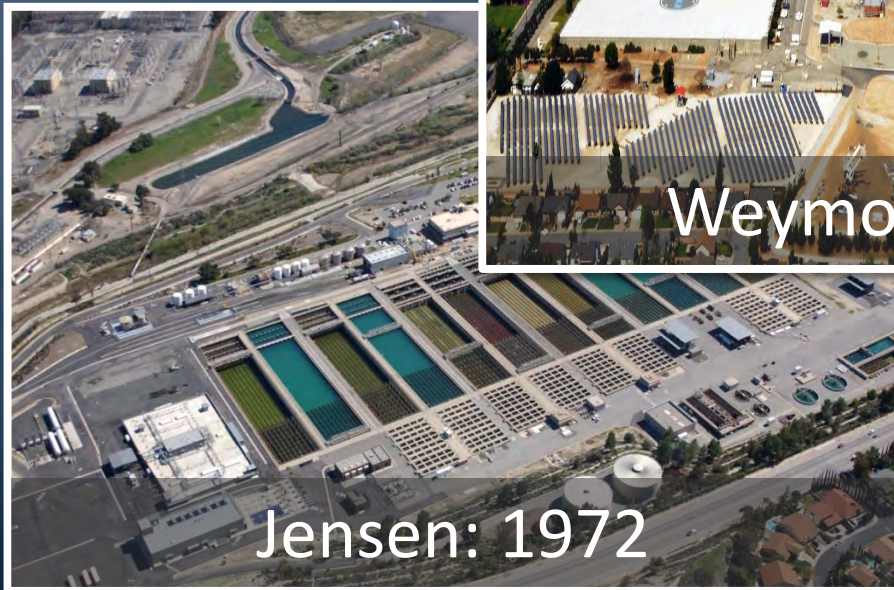
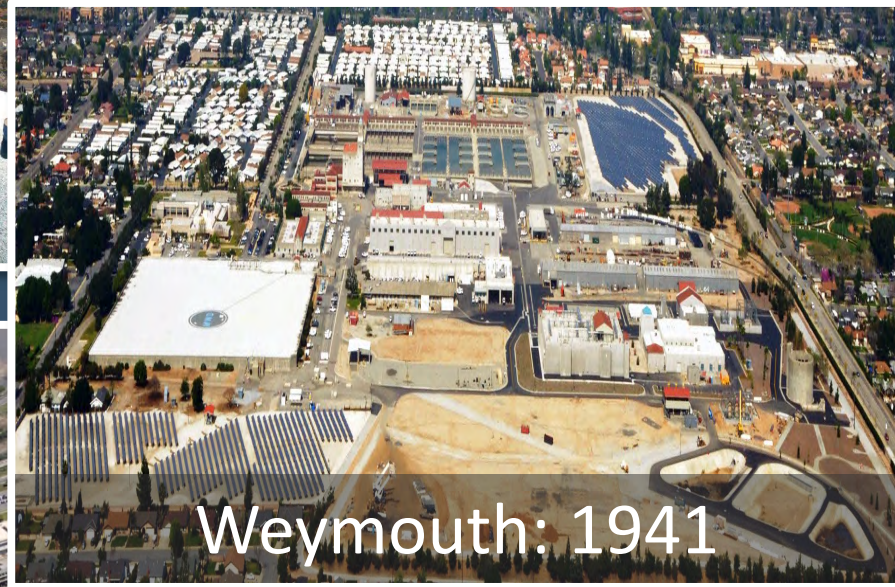
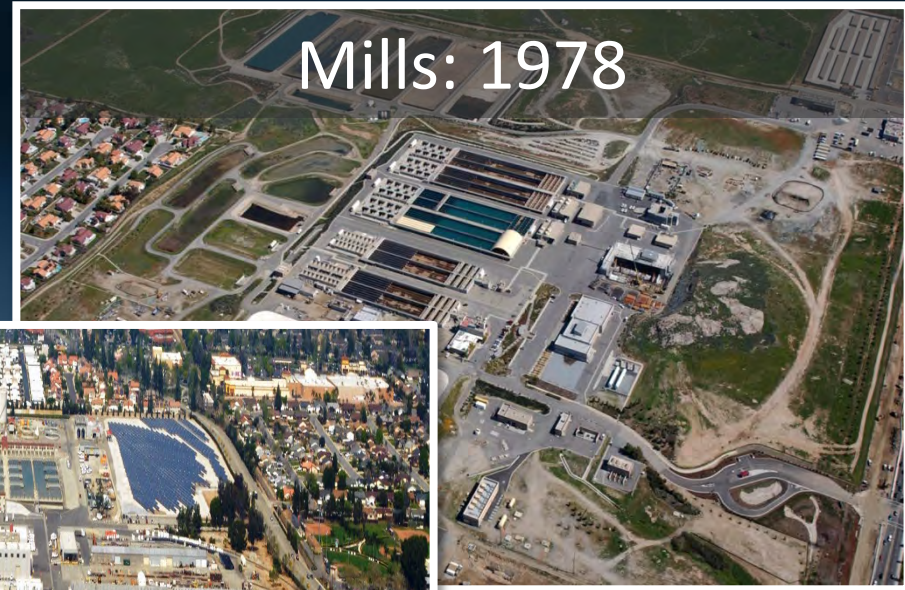
# Overview of Metropolitan



Metropolitan's Service Area  
(26 member agencies)

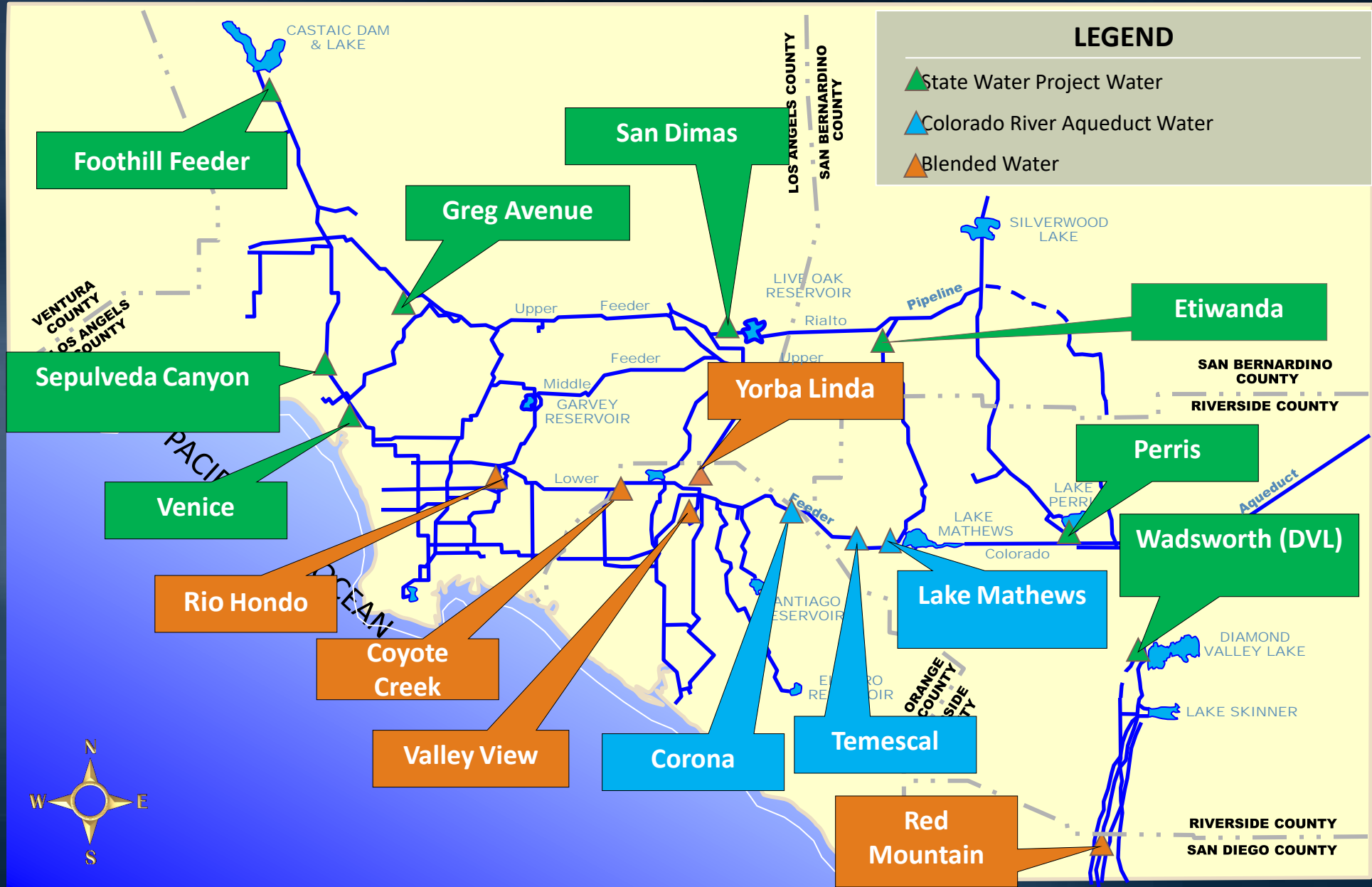


# Water Treatment Plants





# 16 Hydroelectric Power Plants: 131 MW

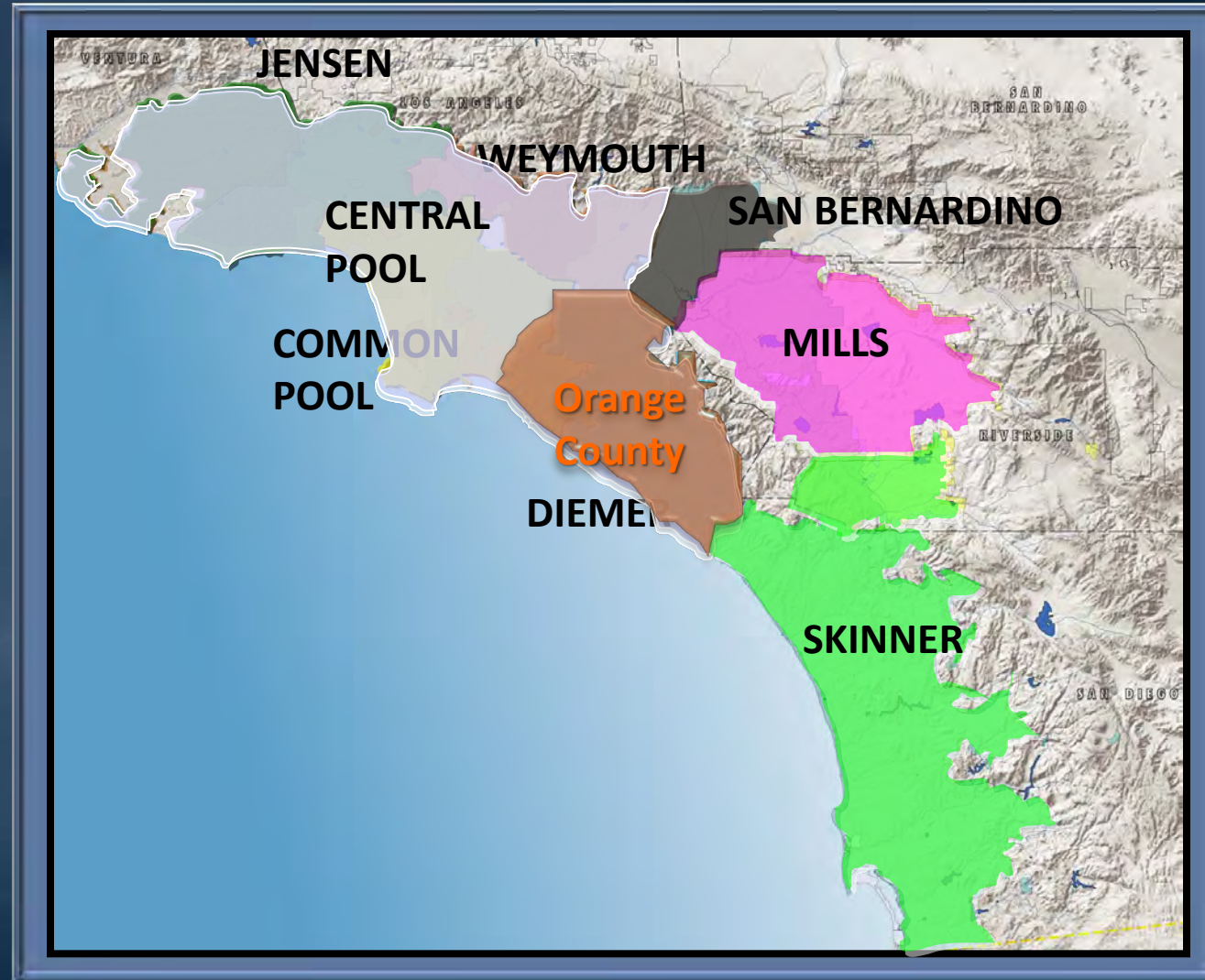


# Colorado River Aqueduct





# Metropolitan Load Areas



# Extraordinary Surplus Operations





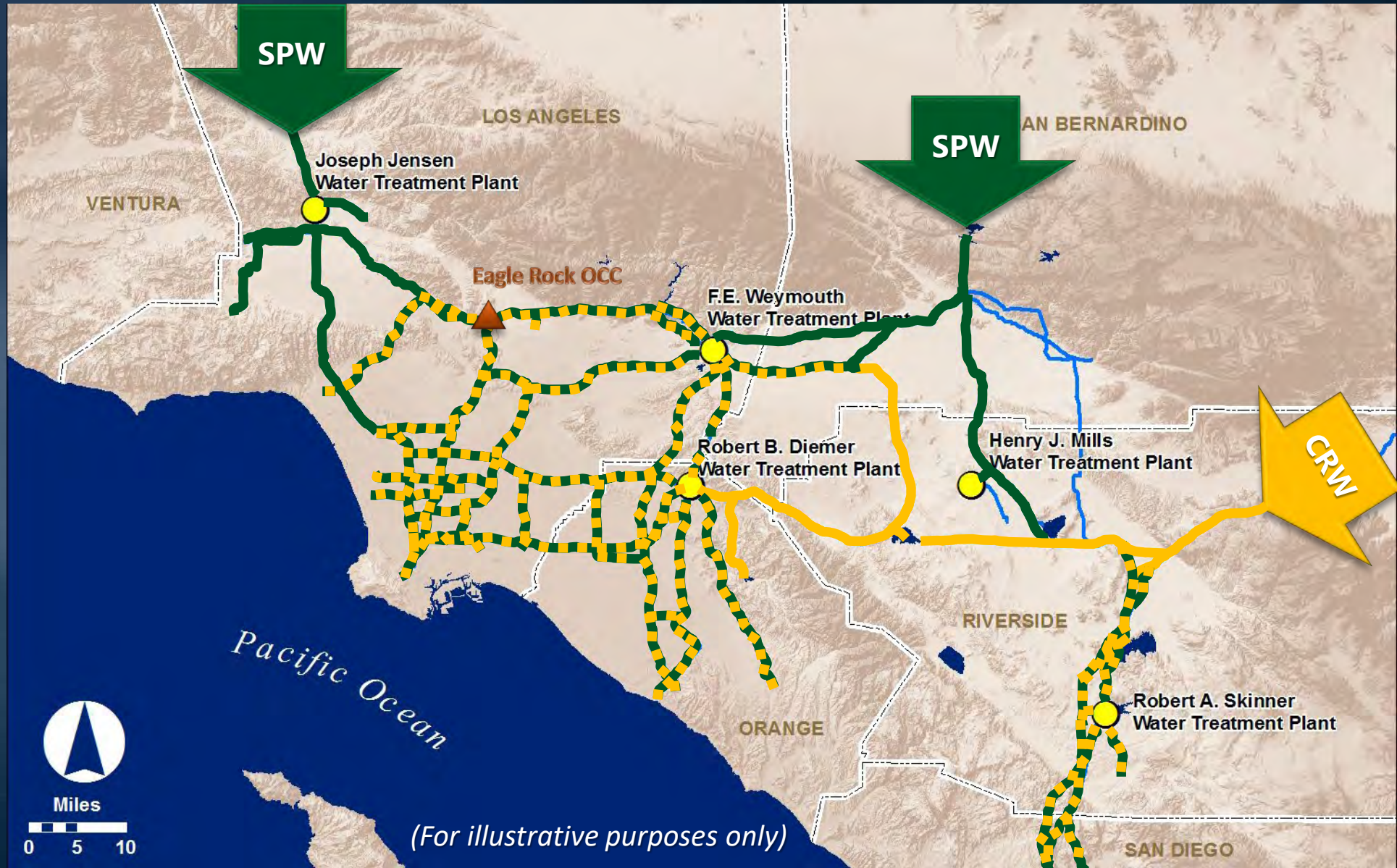
# Extraordinary Drought Operations



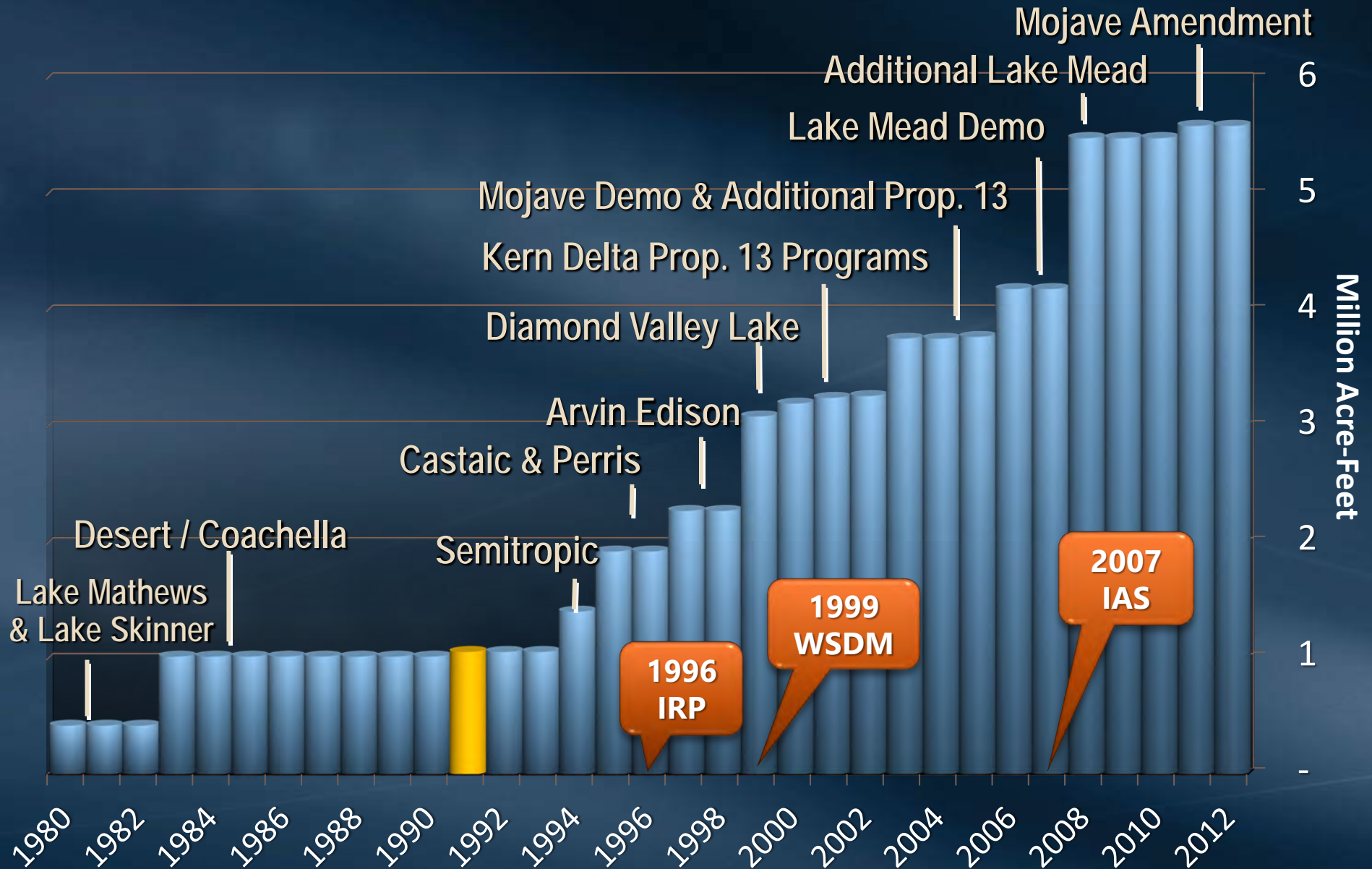


# Blending Operations

## 35% SPW Blends

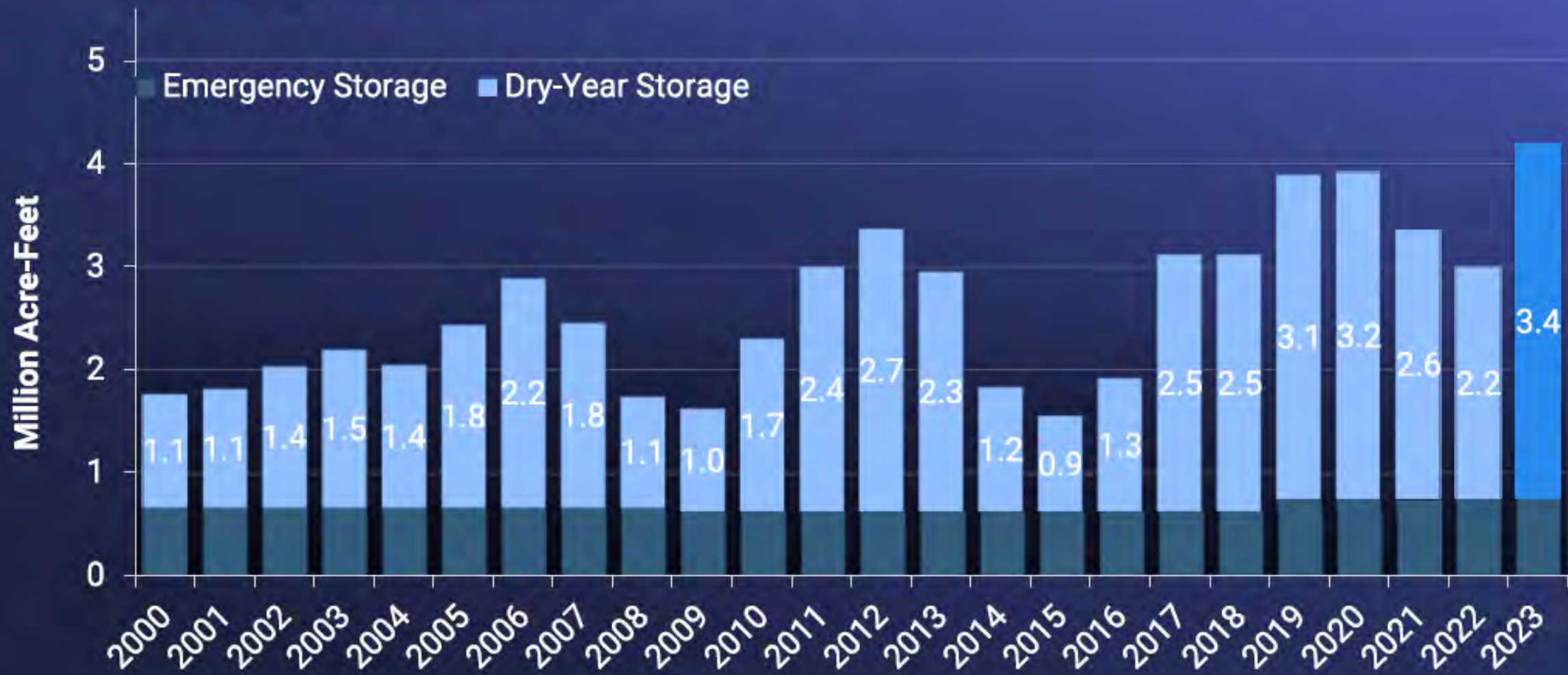


# Metropolitan's Storage Capacity





# Record-High Storage Projection for Metropolitan End-of-Year Balances



**Note:**  
2023 end-of-year balance is preliminary as they are subject to DWR adjustments and USBR final accounting.

# Metropolitan's 2023 Storage Actions: ~ 1.2 MAF Increase



- Notes:**
- 1) Dashed lines indicate 2023 starting storage balances.
  - 2) Ending storage balances are projections (as of December 12, 2023) & will vary based on actual conditions.
  - 3) In-region storage includes emergency storage.
  - 4) Storage buckets are not drawn to scale.



# Groundwater Storage Programs

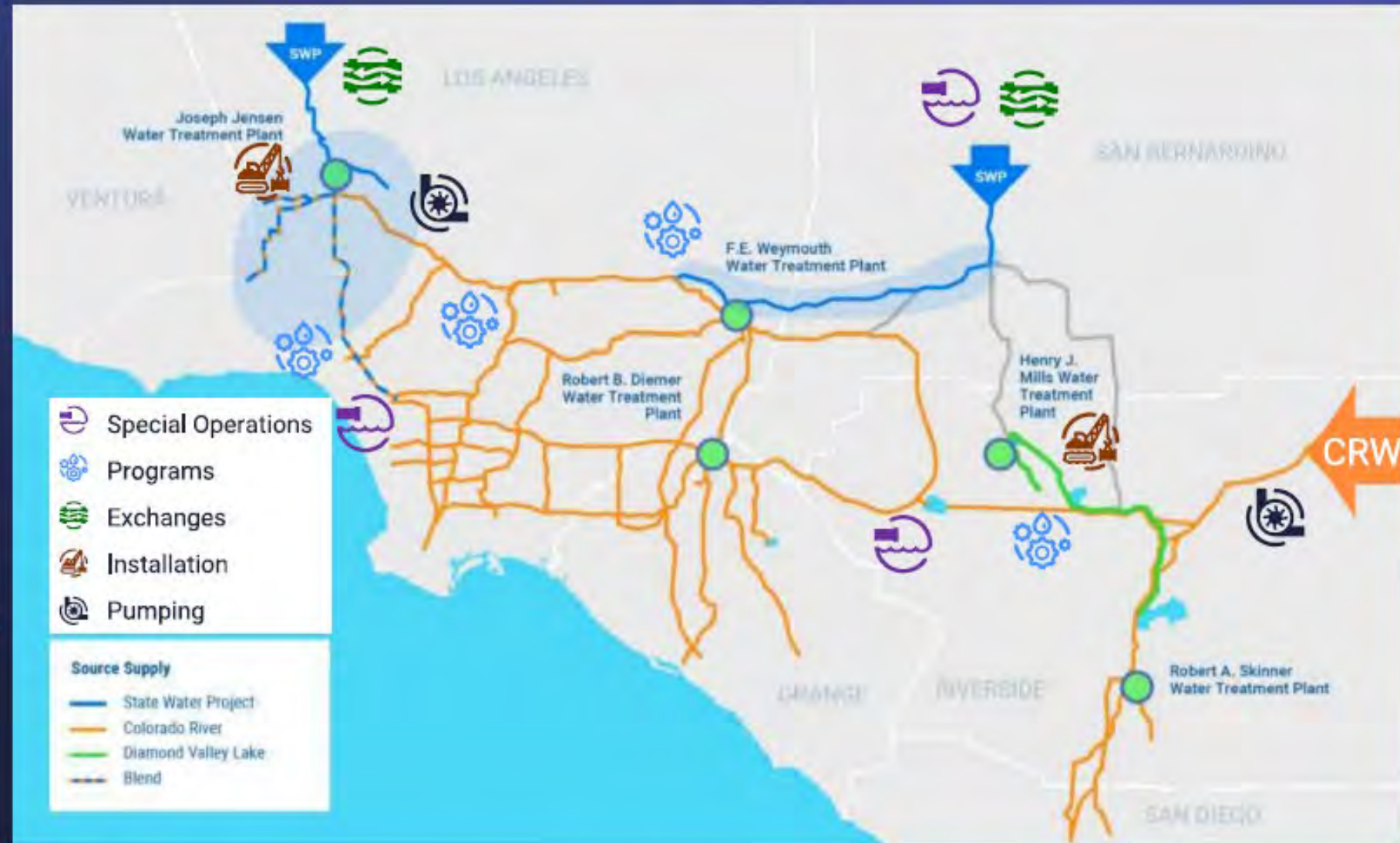




# Review of Existing Drought Actions

## Dry Year Operations

*Actions implemented during last drought*



# New Drought Actions

## Dry Year Operations

*New actions to implement in next drought to increase reliability*

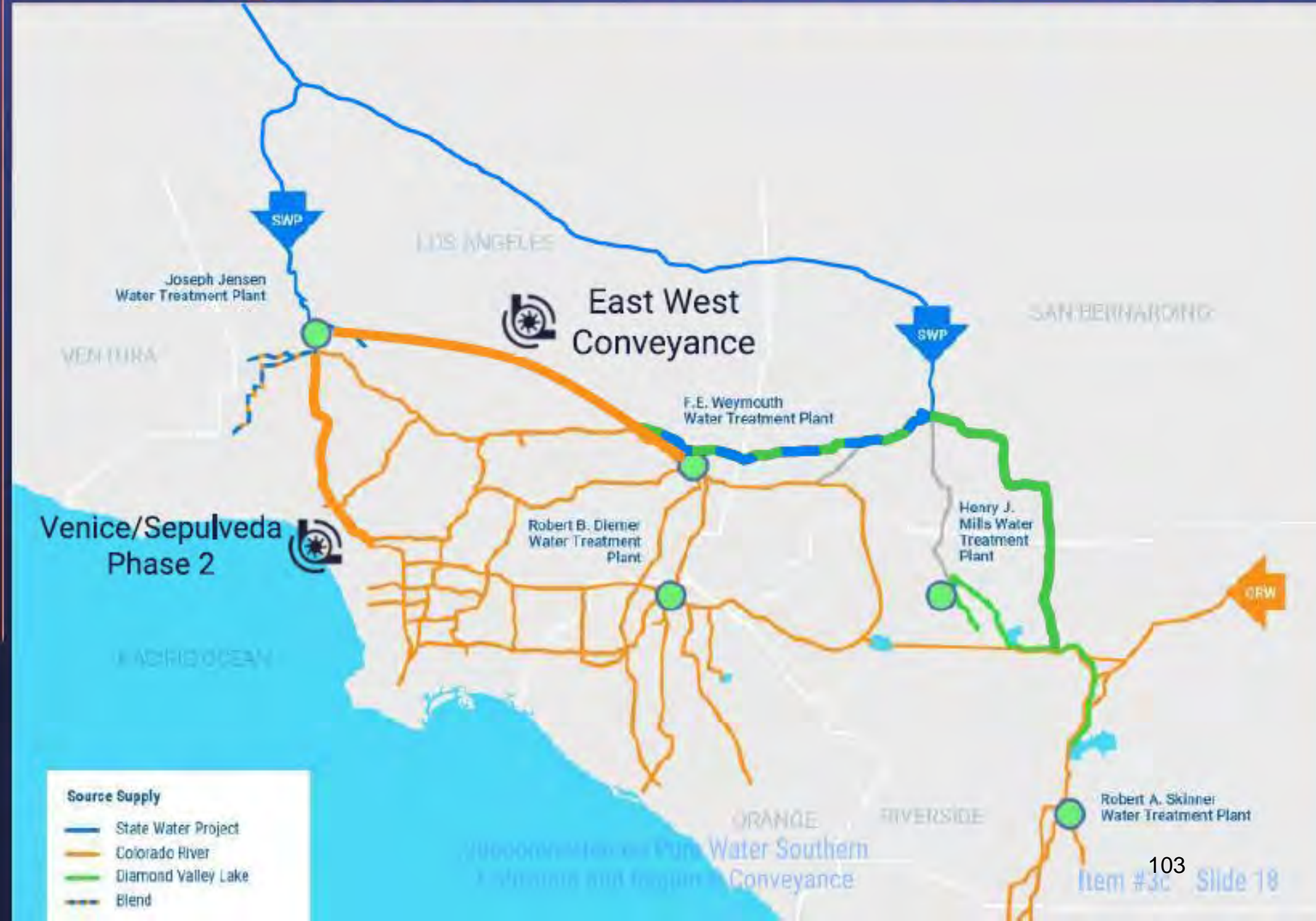




# Meeting Additional West Branch Demand

## Year 4 Drought Operations New Conveyance Options

- Prevents geographic specific allocation
- However, new supply needed to avoid any allocation
  - Pure Water
  - Local Supply
  - Conservation





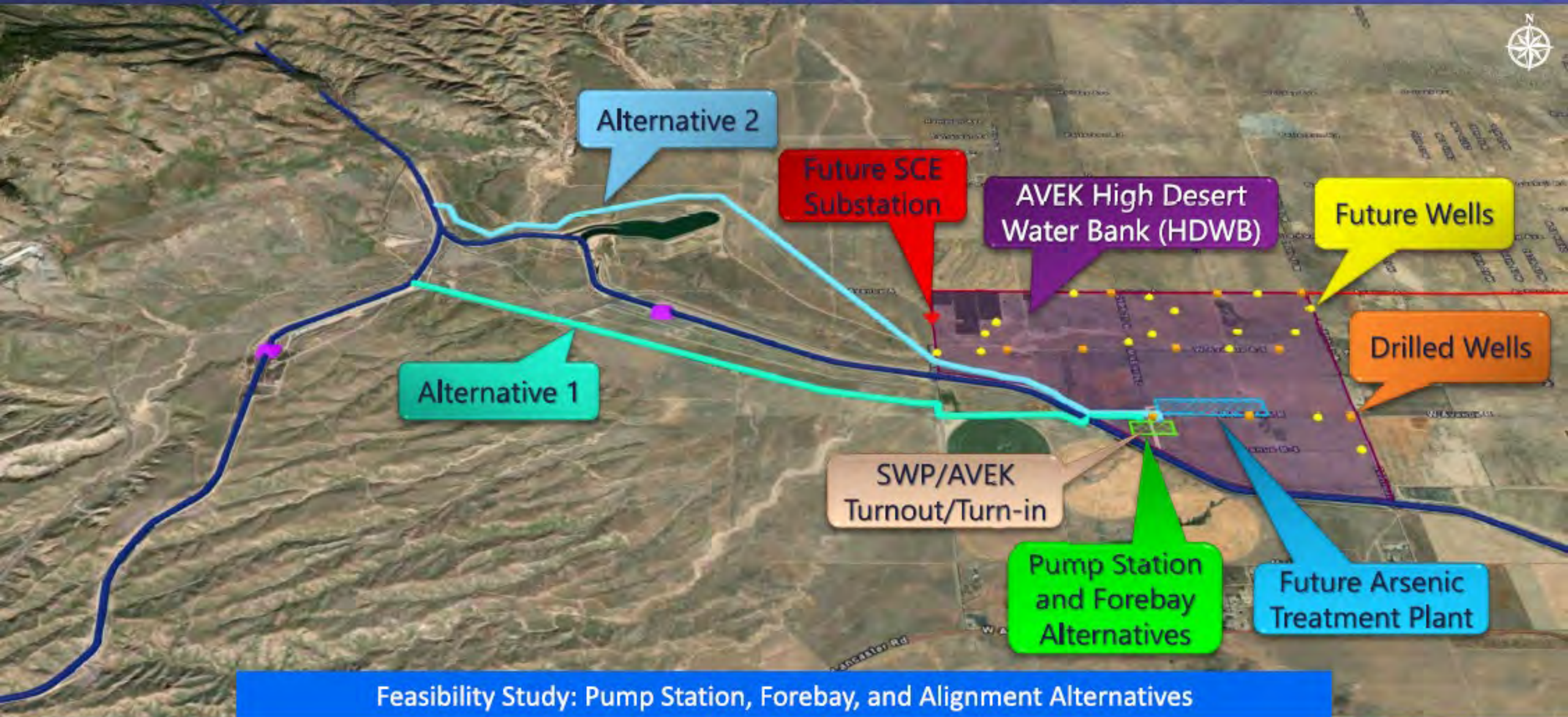
# Sepulveda Feeder Pumping Phase 2

- Enhance SWPDA drought resilience
- Prerequisites
  - Complete Phase 1 (30 cfs)
  - Complete PCCP relining of North Sepulveda Feeder
  - Upgrade Inglewood Lateral
- Urgency to start conceptual design to sync with Phase 1 final design process
  - Future implementation pending on CAMP4W evaluation





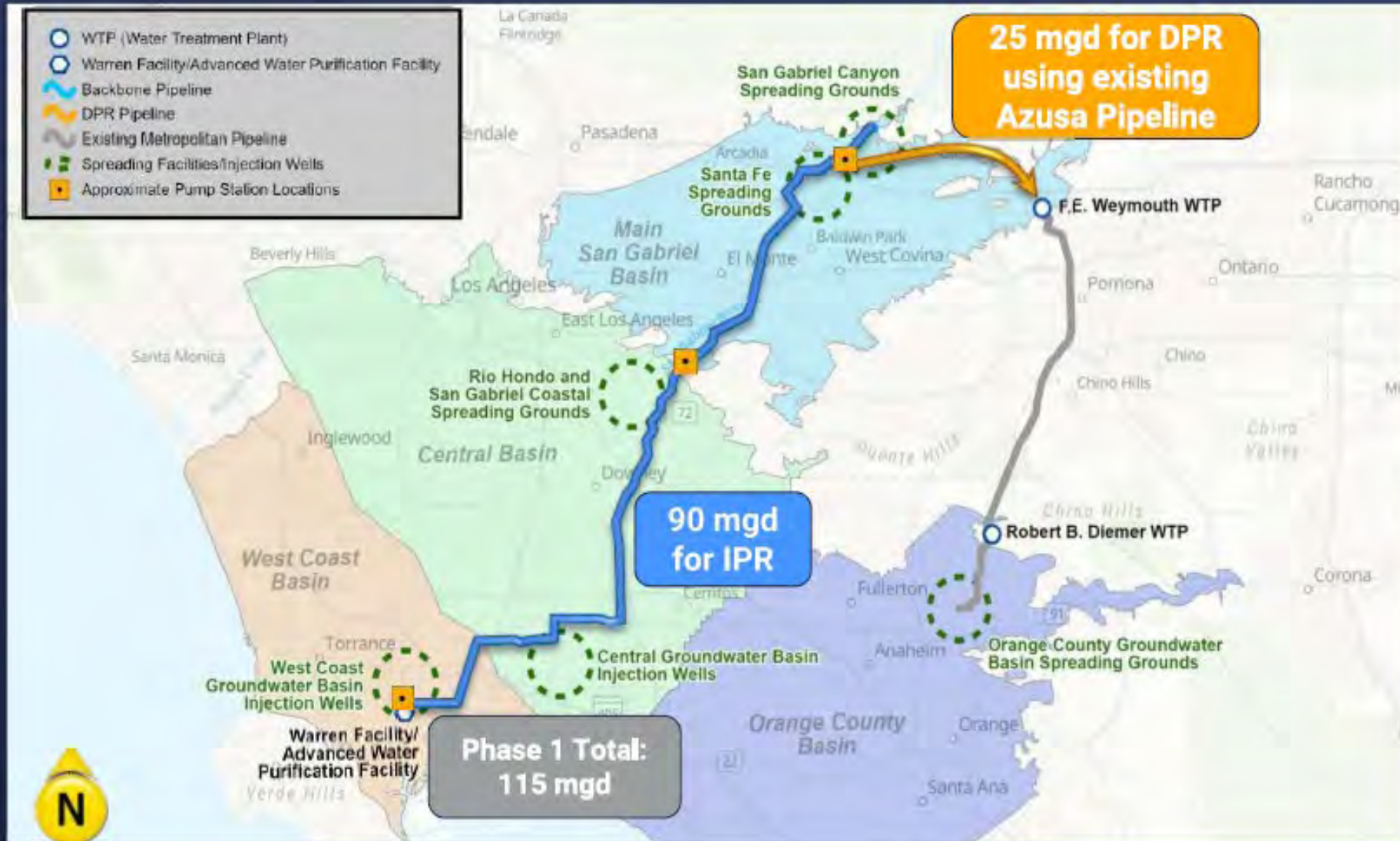
# AVEK Conveyance to the West Branch - Study Update



Feasibility Study: Pump Station, Forebay, and Alignment Alternatives

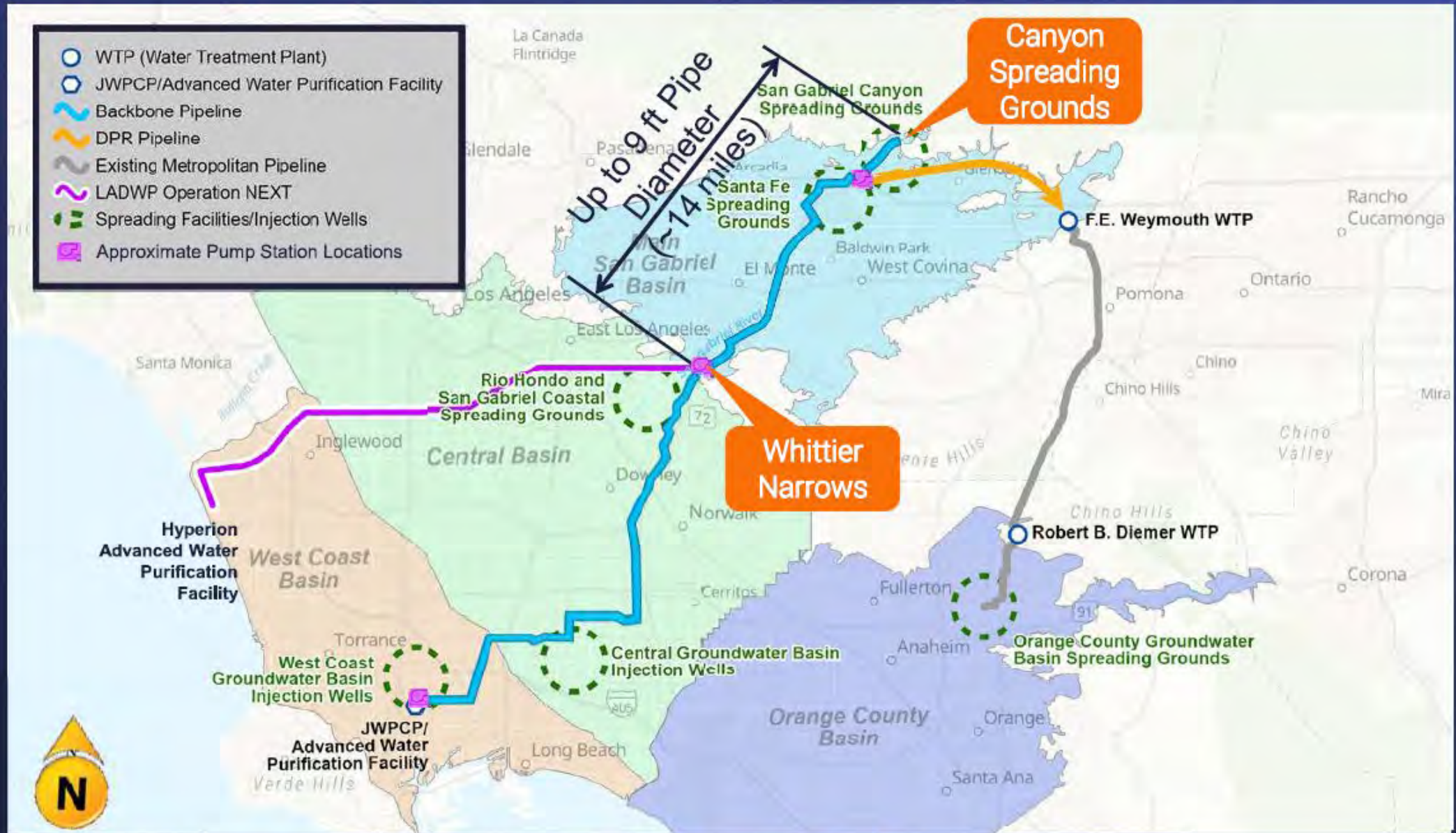


# PWSC Program Overview – Phase 1 (25 mgd for DPR)





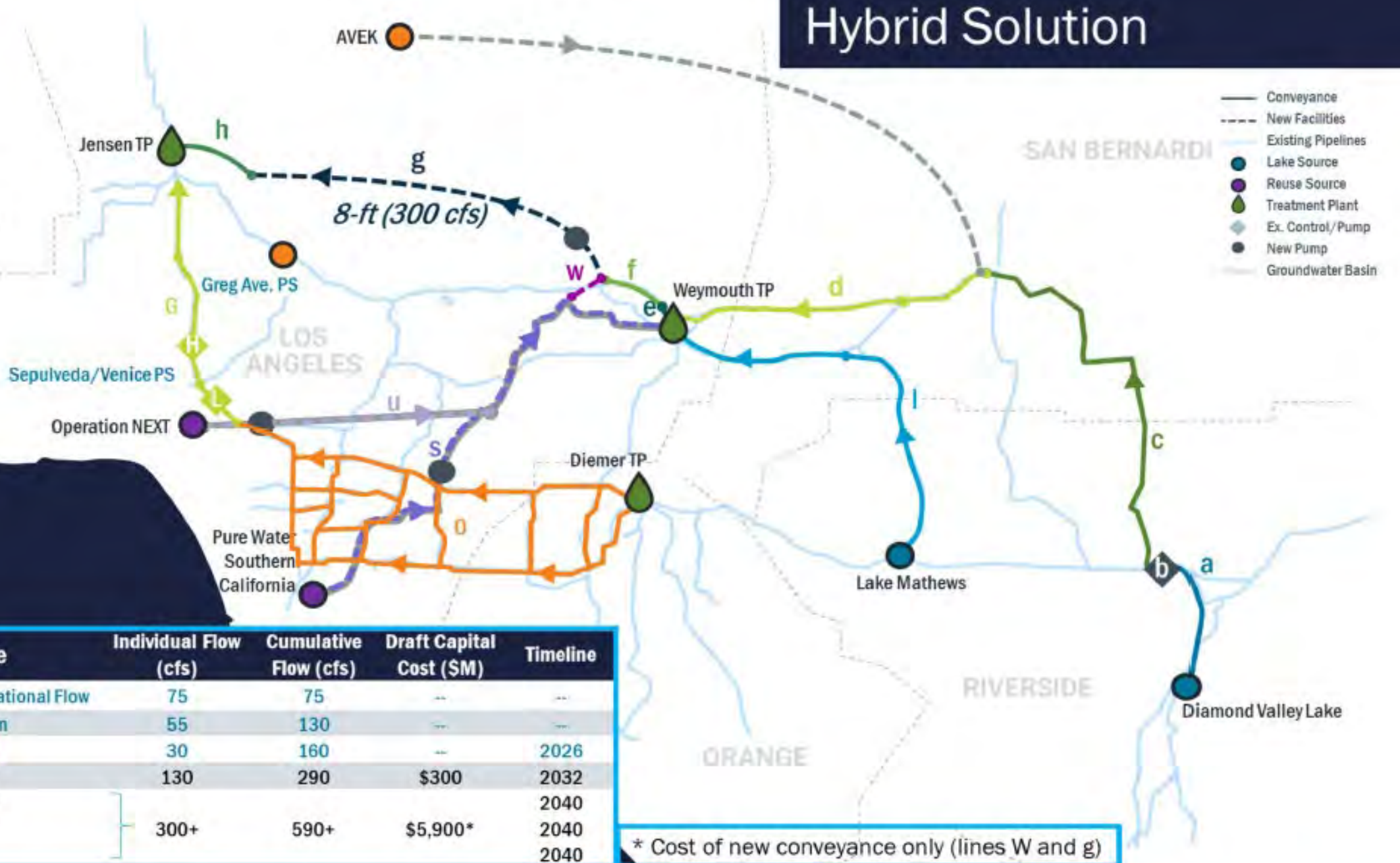
# Upsizing Pipeline for Potential Future Flows





# Hybrid Solution

**Total Flow (cfs)**  
**590+**



Supply Source	Individual Flow (cfs)	Cumulative Flow (cfs)	Draft Capital Cost (\$M)	Timeline
Existing Jensen Minimum Operational Flow	75	75	--	--
Existing Greg Ave. Pump Station	55	130	--	--
Sepulveda/Venice PS Phase 1	30	160	--	2026
Sepulveda/Venice PS Phase 2	130	290	\$300	2032
Lake Mathews / DVL / AVEK	300+	590+	\$5,900*	2040
PWSC				2040
Operation NEXT				2040

\* Cost of new conveyance only (lines W and g)







**DATE:** September 3, 2024  
**TO:** Board of Directors  
**FROM:** Engineering

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**SUBJECT: Service Agreement for Leak Detection: Award**

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**SUMMARY:**

The District’s 400 miles of potable water transmission and distribution pipes are an integral part of the drinking water system – delivering water to households and businesses 24 hours per day, 7 days per week. A reliable delivery network of piping is essential. Without plans in place to rehabilitate and replace aging pipes, the system is prone to leaks and breaks that can be disruptive and costly.

On April 16, 2024, the Board authorized an agreement with HDR Engineering Inc. (HDR) for the Potable Water Pipeline Condition Assessment, Rehabilitation, and Replacement Study. The study will provide guidance for proactive rehabilitations and replacements. On April 25, 2024, staff issued a Request for Proposals to have a company conduct pipe system leak detection utilizing aerial or satellite-based radar technology. This work effort will: (1) validate the prioritization of pipe rehabilitations and replacements as recommended in the report being prepared by HDR; (2) assist staff with the validation of its annual water loss report to the State Water Resources Control Board; and (3) potentially identify underground leaks in mountainous terrain that could potentially contribute to landslides if not repaired.

The District received one proposal from Utilis, Inc., doing business as ASTERRA, to perform satellite-based leak detection and analysis. Staff recommends entering into an Agreement with ASTERRA, in the amount of \$70,000, for the leak detection and analysis of the potable water system.

**RECOMMENDATION(S):**

Authorize the General Manager to execute an agreement with Utilis, Inc., in the amount of \$70,000, for satellite-based leak detection and analysis of the potable water system.

**FISCAL IMPACT:**

Yes

**ITEM BUDGETED:**

Yes

**FINANCIAL IMPACT:**

Sufficient funds are available in the adopted Fiscal Year 2024-25 Budget for this work. No additional appropriation is required. This project would be funded from CIP No. 10728, Potable Water System Pipe Rehabilitation and Replacement Program. Up to \$50,000 in grant funding is available from the Metropolitan Water District of Southern California through their Municipal Leak Detection and Repair Grant Pilot Program. The District has applied for the grant. Any proceeds received will be applied towards the cost of the agreement.

**DISCUSSION:**

The District owns and operates approximately 400 miles of potable water pipes throughout 122 square miles of service area. A high percentage of these pipes were installed in the 1960s and 1970s, and have reached or will soon reach the end of their useful life. In recent years, the District has been experiencing an increasing number of pipeline failures due to corrosion, material degradation, and poor installation procedures. Pipes range in size with the smallest pipe being 4-inches in diameter and the largest 42-inches in diameter. Pipe materials vary from cement mortar lined/coated steel, asbestos cement, PVC, ductile to cast iron.

The District's Mission Statement is **Dedicated to Providing High-Quality Water Service in a Cost-Effective and Environmentally Sensitive Manner**. More specifically, the District's 2022 Strategic Plan also calls for Strategic Objective No. 2 - Improve LVMWD's water supply reliability through comprehensive maintenance and replacement programs and Strategic Objective No. 9 - Enhance LVMWD's asset management programs. The District aims to proactively maintain, rehabilitate, or replace water pipelines in the most cost-effective manner possible while minimizing the number of breaks and leaks that can disrupt service to customers and require costly repairs. On April 16, 2024, the Board authorized execution of a Professional Services Agreement with HDR Engineering, Inc., to conduct a study and develop a Pipeline Condition Assessment, Rehabilitation and Replacement Plan. The study is currently underway and will inform future Capital Improvement Plans and rate setting studies.

Leak detection will help both inform and validate the results of the Study. For example, if the study being performed by HDR identifies several locations that call for a high priority to replace and a high number of leaks are also identified by ASTERRA, the priority for the rehabilitation or replacement would be validated. Conversely, if a section of pipe is identified as a low priority, but ASTERRA identifies a high number of leaks, the urgency for rehabilitating or replacing that section of pipe would be reevaluated.

Every year, the District is required to submit a Water Loss Validation Report to the State Water Resources Control Board as part of annual reporting requirements. There are several causes for real water loss, which is defined as physical loss of water from distribution system, leakage from tanks, transmission or distribution main lines, and services up to the meter. Overall water losses are considered non-revenue water because it is water that is not formally billed and not paid for its use. Apparent water losses can include fire hydrants, water meter inaccuracies, water theft, and main breaks. The data collected as part of the proposed services would help to validate water loss reporting by identifying the number and magnitude of underground leaks in the potable water system. The information will help to inform actions that need to be taken to

more accurately record and reduce water losses.

Historically, the District and other agencies that provide water service in rugged terrain have and will continue to be defendants in lawsuits associated with landslides. This is because a water pipe could develop a leak that weakens a hillside and cause a landslide that damages property. However, landslides can be caused by many other factors, including rain that saturates the soil, earthquakes, and other natural causes. Landslides caused by natural causes can damage pipes and cause leaks, but it can be challenging to prove otherwise. The proposed leak detection services will help to identify locations where pipes should be repaired, and liability can be avoided by the District.

On April 25, 2024, staff issued a Request for Proposals to have a company conduct pipe system leak detection utilizing aerial or satellite-based radar technology. The District received one proposal from Utilis, Inc., (dba ASTERRA) to perform satellite-based leak detection and analysis. Based on the proposed scope of work, project understanding and approach, team experience and fee proposal, and positive reviews received by other water agencies that have utilized ASTERRA's satellite-based radar leak detection services, staff recommends accepting the proposal from ASTERRA and authorizing the General Manager to execute an agreement, in the amount of \$70,000.

It should be noted that the agreement includes an auto-renewal clause, which would automatically renew the agreement after one year. This language is standard whenever an agreement includes "Software as a Service" (SAAS) work elements; however, staff will cancel the agreement before the automatic renewal goes into effect, unless subsequent Board approval for a renewal is made at a later date.

Up to \$50,000 in grant funding is available from the Metropolitan Water District of Southern California. The District has applied for the grant and any proceeds will be applied towards the cost of the agreement.

**GOALS:**

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

Prepared by: Joe McDermott, Assistant General Manager

**ATTACHMENTS:**

[ASTERRA Statement of Work](#)





**ASTERRA Statement of Work  
&  
Software Terms of Use**

**Provided to:**

**Las Virgenes Municipal Water District  
July 25, 2024**

<b>Table of Content</b>	
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## Statement of Work (SOW)

This Statement of Work (“**SOW**”) is provided in connection with the Terms of Use governing the use of ASTERRA’s Services and Platform.

Capitalized terms not defined herein shall have the respective meanings as set forth in the Terms of Use.

### **A. ROLES, RESPONSIBILITIES AND SERVICES – ASTERRA**

#### **1. GENERAL**

ASTERRA offers its Clients, a patented technology operated by **Utilis Inc.** for pipe replacement modeling, and leak detection in urban and rural water networks, using L-band synthetic aperture radar (SAR) mounted on a satellite. The technology is based on a proprietary algorithm that detects soil moisture through the analysis of SAR data.

#### **2. ASTERRA’S PRODUCTS OVERVIEW**

ASTERRA will provide Client with the following Products available through the Platform: “Recover”, “MasterPlan” (the “**Products**”), and their related Service Tiers: “Detect”, “Prevent” or “Advise” (the “**Service Tiers**”).

##### **2.1 Recover - Satellite-Based Leak Detection and Analysis**

ASTERRA Recover provides customers with leak detection monitoring for drinking and wastewater systems utilizing Synthetic Aperture Radar (SAR) signals from satellites to illuminate the area of interest and collect the resulting reflected signals. These signals are analyzed with the ASTERRA patented algorithm and processed to identify specific indicators of wet soil saturated with potable or wastewater, screening out the signal noise and other interference. The result is a map showing likely leak locations, or Points of Interest (POI). These results typically encompass 5 – 10 % of the entire system length, so that the clients time and resource cost to inspect is much lower than traditional inspection methods. Recover is available as a subscription with various levels of service to match client’s needs.

##### **2.2 MasterPlan – Pipeline Monitoring and Deficiency Assessment**

Similar to Recover, ASTERRA MasterPlan utilizes Synthetic Aperture Radar (SAR) signals from satellites to illuminate the area of interest and collect the resulting reflected signals over time. These signals are analyzed with the ASTERRA patented algorithm and processed to identify the condition of underground water infrastructure, with pipes scored on a 1 – 5 scale, from a low level of deficiency observed to high levels of deficiency. The algorithm scores pipe segments exhibiting non-surfacing leaks and analyzes leak clusters over time contributing to the development of long-term maintenance and pipe replacement plans. MasterPlan is compatible with all GIS-based asset planning model tools and easily integrates with attribute



data such as pipe age, material, and work orders from surfacing leaks. MasterPlan is available in the Advise level subscription or as an additional service to Clients in the Prevent tier.

## **B. ROLES, RESPONSIBILITIES – CLIENT**

### **1. GENERAL**

**Client** is responsible for providing baseline system data, work order history and in some cases, an acoustic field verification team to inspect points of interests (POI) identified by ASTERRA. **Client** shall identify a primary contact person for technical, administrative, and field inspection coordination.

### **2. CLIENT RESPONSIBILITIES:**

Client shall provide ASTERRA with the following materials (“**Materials**”):

**2.1 Area of interest (AOI):** the Client will provide ASTERRA with an area of interest (AOI). Unless agreed otherwise by the parties, the AOI is a designated geographical area to be surveyed using ASTERRA technology. AOI is required for all Products. AOI is attached as **Annex A** hereto and as agreed upon number of linear miles or area defined in Section E herein.

**2.2 Recover Product/MasterPlan Pipe System Information:** prior to image acquisition, the Client shall provide ASTERRA with a detailed and accurate GIS pipe system layer in the form of a shapefile or KML/KMZ. ASTERRA will use this layer to identify POI locations. The GIS layer should include pipe material, pipe age, pressure zone, and diameter, length of pipeline, trunk, main and service to be analyzed, and major appurtenances including hydrants, valves, and any other detailed information available.

**2.3 Recover/MasterPlan Leak Detection History (Work Orders):** The Client shall provide ASTERRA with a detailed and accurate history of leak findings and repairs through the “Go-Live Date”.

**2.4 Recover/MasterPlan Leak Detection Performance Metrics:** The Client shall provide ASTERRA with relevant and available performance metric data related to previous Client-utilized leak detection methodologies, field investigation process, timing, methods, and data delivery timing information, customer cost of water and cost of energy per CSM interview. This information will be used to calculate performance metrics of the service.

## **C. WORK PROCESS TIMELINE**

1. Upon receipt of Client’s Materials, ASTERRA shall initiate the satellite imagery acquisition and analysis. Once the analysis is completed, ASTERRA will inform Client of the “Go-Live-Date” and access to Product will be granted to Client. “Go-Live-Date” notice will be furnished by ASTERRA upon 7-14 business days after the scheduled image acquisition date. Image



acquisition dates may be changed by a third party (satellite operator) or due to technical constraints. "Go-Live-Date" may be affected due to poor image quality according to ASTERRA's quality assurance standards.

2. Unless otherwise agreed upon by both parties, ASTERRA will provide Services only in the AOI overlapping with the Client's provided GIS pipe system layer.
3. Recover leak field inspection work can begin after the leakage report has been delivered to the Client customer portal and ASTERRA has provided training, guidance, and interpretation of the leakage data.
4. Unless otherwise agreed upon by the parties, field work with an ASTERRA field engineer will be conducted only within the borders of the AOI and at sites where access is provided by the client.
5. Delays in the provision of Materials may result in delays and/or additional cost in performing the Services. Where required, Client shall furnish access to Client's premises, and appropriate worksite, as necessary for performance of those portions of the Services to be performed at Client's premises.
6. Solely to the extent that ASTERRA provides Client pursuant to the applicable SOW with field work (by its own personnel or by its subcontractors), ASTERRA agrees to defend and indemnify Client and its respective directors, officers, employees, consultants, successors and assigns (collectively "Client Indemnitee") from and against any claim by a third party brought against Client Indemnitee, relating to any negligence or willful misconduct of ASTERRA or its subcontractors in providing such field work, except if the claim results from the instructions of Client or a Client Indemnitee.

#### **D. ACCESS TO PLATFORM AND PRODUCTS**

1. Provision of the Platform: portal environment, applicable licenses, including U-Collect and U-View licenses, analytics, reports and data that can be used in Client's GIS systems.
2. Access to the Platform shall only be granted upon ASTERRA's "Go-Live" notice to the Client and shall expire on the Service termination date.
3. Upon expiration or termination of the Agreement for any reason, Client will not be able to access the Services and/or, the data stored within the Platform, the Platform, related software and mobile applications, ASTERRA's support and any other software or data related to the Service. Any and all data not exported by Client to Client's own storage, shall no longer be available to Client following Service's termination. An exception will be made for Clients who renew their subscription within 12 months of termination of their previous subscription.
4. The provision of ongoing technical and support services by ASTERRA are in accordance with the Service Level Agreement ("SLA").





**E. FEES & PAYMENT TERMS**

1. Annual subscription fee per Package and Service Tier requested by Client (exclusive of Taxes) (“Annual Fee”) and Additional Services as required by Client (“Support Service Fee”) as provided in the table below.
2. Package Name: Prevent, Subscription Duration: 12 Months
3. Potable Water lines surveyed: 395 Miles
4. Table of fees:

<b>ASTERRA Package: Prevent</b>	QTY	Price
Annual Subscription Package	1	\$70,000
Final Program Report	1	Included
<b>TOTAL</b>		<b>\$70,000</b>

5. Payments by Client shall be made as follows:
  - a. Annual Subscription Fee and any additional services shall be invoiced by ASTERRA on the Go-Live-Date.
6. Payment is due 30 days from the invoice date.
7. Requests for analysis outside the agreed upon AOI provided by the Client in Annex A may result in additional fees.
8. CSM SERVICES LIST & Service Level Agreement (SLA) is attached hereto as Annex B



**ACCEPTANCE OF TERMS**

By executing this SOW, you confirm your approval of the SOW on behalf of Client listed below, to be contractually bound by:

1. This SOW; and
2. The Terms of Use and Service Level Agreement incorporated by reference into this SOW.

**IN WITNESS WHEREOF**, the parties have executed this Agreement as of the date first written above.

**Utilis Inc., dba., ASTERRA**

**Las Virgenes Municipal Water District**

Signature: \_\_\_\_\_

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

Date: \_\_\_\_\_



## TERMS OF USE

These Terms of Use (the “Terms”) is made and entered into as this [redacted] day of [redacted] 2024 (“Effective Date”), by and between Utilis Inc., dba., ASTERRA (the “Company”, “ASTERRA”) a private company having its registered offices at 4180 La Jolla Village Dr., Suite 530, La Jolla, CA 92037, and Las Virgenes Municipal Water District (“Client(s)”, “you”) a corporation organized and existing under the laws of California with a principle place of business and mailing address at 4232 Las Virgenes Rd #1994, Calabasas, CA 91302. Terms of use govern the provision of the services that provide information for leak detection analysis, pipeline monitoring and deficiency assessment, using remote sensing technology (the “Service(s)”) operated by Utilis Israel Ltd., Utilis, Inc., Utilis SAR Ltd or Utilis Japan., all trading and doing business as ASTERRA (“ASTERRA”). Each of Client and ASTERRA will be referred to as a "party" and together the "parties".

### 1. Definitions and Interpretation

1.1. Capitalized terms not defined herein have the meanings given in the Statement of Work (the “SOW”) or the Service Level Agreement (the “SLA”), which are hereby incorporated into, and form part of, these Terms (together the “Agreement”), unless specifically excluded.

1.2. If there is a conflict between any provision of these Terms, the SOW, the SLA or any other agreement related to the Services, these Terms and the Agreement shall prevail, unless specifically expressed otherwise.

### 2. License Grant

2.1 Subject to the Terms, Client requests and ASTERRA grants, a nonexclusive, non-transferable, non-sublicensable, limited access license, to use the portal environment, applicable licenses, analytics, reports and data that can be used in client’s GIS systems (the “Platform”) during the Term, solely in accordance with the Terms herein, for Client’s internal business purposes only.

2.2 Services, additional services, and/or licenses shall be issued in separate SOWs, in the form

attached hereto as Statement of Work, signed by both parties, numbered sequentially (SOW1, SOW2, etc.), all attached to and governed by these Terms.

### 3. ASTERRA Limited Warranties

ASTERRA warrants and undertakes that:

3.1. it will provide the Services using the degree of skill, care, and diligence which would reasonably and ordinarily be expected from a skilled and experienced provider of the Services (or of services materially similar to the Services);

3.2. each member or individual involved in the provision of the Services shall be suitably qualified, adequately trained and competent to provide the relevant part of the Services in respect of which they are engaged.

3.3. the Services, when used in the manner envisaged by this Agreement, do not, to the best of ASTERRA’s knowledge, infringe the intellectual property rights of any third party.

3.5. ASTERRA shall not be liable for any material delay or failure to provide the Services to the



extent that such material delay or failure is caused by Client's failure to comply with the Agreement, including but not limited to, the following obligations:

- a. provision of data as agreed between the Parties and set out in the SOW – to be made ready on or before any agreed date of provision.
- b. failure by Client to make available personnel, Information, or to provide site physical access, as reasonably required for the performance of the Services.
- c. a failure by Client to make available adequate infrastructure to install, activate and use of the Service (such as: Client's systems and devices) to support the provision of the Services.

3.6 The Services hereunder are provided on an "AS IS" basis. Except for the above express warranty, ASTERRA makes no other warranties, express or implied, relating to the Services. ASTERRA does not represent or warrant that the Services shall be uninterrupted or error-free. ASTERRA disclaims and excludes any implied warranties of non-infringement, merchantability and/or fitness for a particular purpose.

#### 4. Payment Terms

4.1 In consideration of the Service, Client will pay all invoices issued under this Agreement in accordance with stated payment terms on the relevant SOW. Any invoice that has not been paid within such period of time shall bear interest at the rate of 1% per month or any part of a month. Client is responsible for any applicable tax, duty, or tariff (except with respect to ASTERRA's income), and all reasonable costs of shipment.

4.2 All Customer's payment obligations to ASTERRA are non-cancelable and paid fees are non-refundable. Client is responsible for paying all fees applicable to its subscription to the Service, whether or not it actively used, accessed or otherwise benefited from the Service. Unless stated differently in the SOW, fees are exclusive of any sales tax, VAT, withholding tax or other governmental charges or transaction charges. Where applicable, ASTERRA will provide the Client its tax certificates and Client shall withhold taxes from payments due as per such certificates.

#### 5. Technical Support

5.1. During the Term, ASTERRA, either directly or with the assistance of third parties, will provide Client technical support for technical issues regarding the Services, in accordance with the SLA terms. For the purpose of the provision of technical support for the Client's technical questions, problems and inquiries, Client will cooperate, and work closely with ASTERRA, to reproduce malfunctions, including conducting diagnostic or troubleshooting activities, as ASTERRA reasonably requests.

ASTERRA may suspend the Services for planned maintenance work ("**Planned Maintenance**") or for rectifying critical outages ("**Unplanned Maintenance**"). In relation to Planned Maintenance, ASTERRA shall provide Client at least 14 calendar days' prior notice stating the scope, time, and duration of the Planned Maintenance. In relation to Unplanned Maintenance, ASTERRA shall endeavor to provide Client with such advance notice as is reasonably practicable in the circumstances.



## 6. Privacy

As part of the Services, you may be granted a certain number of U-Collect, U-View and ASTERRA's Dashboard Licenses. The applicable terms of use and privacy policy are detailed in <https://ASTERRA.io/privacy-policy-portal-application/>

## 7. Confidentiality

Each party ("**Recipient**") agrees to: (a) keep all Confidential Information (as defined below) confidential; (b) not without the other party's ("**Discloser**") prior written consent to disclose any Confidential Information to any other person save those of its personnel who have a need to know the same in connection with this Agreement and its performance of this Agreement; (c) to use the Confidential Information solely in connection with this Agreement and the performance of its obligations hereunder and not otherwise for its own benefit or for the benefit of any third party. "Confidential Information" means all data, material, and information of a confidential nature in any form whatsoever disclosed (whether directly or indirectly) by or on behalf of the Discloser to Recipient, including: (a) the identity and business, financial and/or technical affairs of that party's business contacts, including Clients, agents, distributors and licensees; (b) any information that Recipient obtains or receives as a result of discussions leading up to the signature of this Agreement or subsequent performance of this Agreement; (c) any information obtained or observed as a result of any site visit; (d) all financial information of Discloser; (e) all data provided to Recipient by or on behalf of the Discloser in connection with the Services.

Confidential Information does not include information: (a) disclosed as a requirement of law or any regulatory body to whose rule Recipient is subject provided that Recipient, if legally permissible, gives Discloser prompt written notice of such requirement prior to such disclosure and only discloses that portion of the Confidential Information that is legally required; (b) known to Recipient prior to the commencement of this Agreement otherwise than as a result of being obtained directly or indirectly from the Discloser; (c) obtained from a third party who lawfully possessed such Confidential Information and which has not been obtained in a breach of a duty of confidence owed to the Discloser; (d) developed independently by Recipient without the use of Discloser's Confidential Information or (e) in the public domain other than as a result of a breach of a duty of confidence owed to the Discloser. Upon request of Discloser or upon the expiry or termination of this Agreement, Recipient shall delete and destroy any Discloser's Confidential Information then in its possession or control. Recipient acknowledges that remedies at law may be inadequate to provide Discloser with full compensation in the event of a material breach of any confidentiality and nondisclosure obligations herein without bond or other security obligation, to seek injunctive relief in the event of any such breach.





## 8. Client Data; Client Feedback

8.1 Client acknowledges and agrees that ASTERRA will handle and use (by itself or by using trusted third-party service providers) the data that the Client feeds to the Platform (or that ASTERRA feeds to the Platform on Client's behalf) ("**Client Data**") and the data and output generated by the Platform when used by the Client, as follows:

- (a) To provide the Services to the Client, conduct administrative and technical activities necessary to maintain and provide the Services and to improve and customize the Services;
- (b) To conduct analysis or generate metrics related to the Services;
- (c) For commercial and marketing purposes, publication of case studies and white papers regarding the Services itself (only in a form not identifying the Client and not disclosing any Client-specific output generate by the Platform unless specifically approved by the client);
- (d) To bill and collect fees (if applicable), to enforce this Agreement, and to take any action in any case of dispute or legal proceeding of any kind involving the Client with respect to this Agreement;
- (e) To prevent fraud, misappropriation, infringements, and other illegal activities and misuse of the Services;
- (f) To develop new products, features, and services, and for research and testing, provided that no information identifying the Client is publicly shared without prior authorization from the Client.

The Client will not be entitled to any remuneration from ASTERRA for the foregoing uses.

8.2 ASTERRA may, but are under no duty to, review Client Data made available through the Service. We may, in our sole discretion, temporarily or permanently delete or block access Service, if we find that it violates these Terms or for any other reason

8.3 Client may provide ASTERRA with information or content concerning enhancements, changes, or additions to the Service or other Company offerings, that are requested, desired or suggested by the Client or users on its behalf, including information pertaining to bugs, errors and malfunctions of the Service, performance of the Service, content and accuracy of the Service, the Service's compatibility and interoperability, and information or content concerning enhancements, changes or additions to the Service that Client requests, desires or suggests ("**Feedback**"). Client hereby assigns, without charge, all right, title and interest in and to the Feedback to ASTERRA, including the right to make commercial use thereof, for any purpose ASTERRA deems appropriate.

## 9. Intellectual Property

9.1 All rights, title and interest in and to the Service, Platform and the Service's software, including, without limitation, patents, copyrights, trademarks, trade names, service marks, trade secrets and other intellectual property rights, and any goodwill associated therewith, including computer code, graphic design, layout and the user interfaces of the Service, whether or not based on or resulting from Feedback, are and will remain at all times owned by ASTERRA, or licensed to ASTERRA.



All rights in and to the Service or Platform that are not expressly granted to Client in this Agreement are hereby reserved by ASTERRA.

9.2 Except for Client's limited access to use the Service during the Term, this Agreement does not grant or assigns to Client, any other license, right, title, or interest in or to the Service or Platform, or the intellectual property rights associated with them.

9.3 Client acknowledges and agrees solely in connection with Client's provision of the Service, ASTERRA is hereby granted a limited, revocable, nonexclusive, internal, and royalty-free license, solely during the Term to access, host and maintain Client Data for the strict limited purposes of delivering the Service to Client and supporting Client's use of the Service as described herein.

#### **10. Disclaimer; Limitation of Liability; Indemnification**

10.1 The Services, as set forth in this Agreement, include the provision of information and investigative output based on the technology developed by ASTERRA, and subsequent analyses, recommendations, evaluations, ranking reports, and guidance on best practices based on the foregoing. By their nature, the Services provided are solely decision making and support tools acquired by Client. Any and all acts, omissions decisions and performance by Client based on the Services provided to Client under this Agreement, are the sole responsibility of Client and such activity does not form any part of the Services. By signing the Agreement Client signals its understanding of the scope of the Services. The contract is with Utilis Israel Ltd.,

Utilis, Inc., Utilis SAR Ltd and Utilis Japan, as applicable, also doing business as ASTERRA.

**10.2 LIMITATION OF LIABILITY.** IN THE EVENT THAT, NOTWITHSTANDING THE TERMS ABOVE, ASTERRA IS FOUND LIABLE FOR DAMAGES OF ANY KIND BASED ON ANY THEORY OF LIABILITY (INCLUDING LIABILITY FOR NEGLIGENCE) CONNECTED AND/OR RELATED TO THE SERVICES COVERED BY THIS AGREEMENT, ASTERRA'S TOTAL AND AGGREGATE LIABILITY FOR SUCH DAMAGES SHALL NOT EXCEED THE PAYMENTS MADE BY CLIENT TO ASTERRA IN THE TWELVE MONTHS PRECEDING THE EVENT PURPORTEDLY GIVING RISE TO THE CLAIM.

**10.3 EXCLUSION OF CONSEQUENTIAL DAMAGES.** ASTERRA SHALL NOT BE LIABLE TOWARD CLIENT, OR ANY OTHER THIRD PARTY FOR ANY INDIRECT, SPECIAL OR CONSEQUENTIAL DAMAGES, INCLUDING, WITHOUT LIMITATION, ANY DAMAGE OR INJURY TO BUSINESS EARNINGS, LOSS OF DATA, LOST PROFITS OR GOODWILL AND/OR PERSONAL INJURY, SUFFERED BY ANY PERSON ARISING FROM AND/OR RELATED WITH AND/OR CONNECTED TO THE SERVICES COVERED BY THIS AGREEMENT, WHETHER BASED ON A CLAIM OR ACTION OF CONTRACT, TORT, OR OTHERWISE, (INCLUDING NEGLIGENCE) EVEN IF ASTERRA IS ADVISED OF OR SHOULD HAVE BEEN AWARE OF THE POSSIBILITY OF SUCH DAMAGES.

#### **10.4 INDEMNIFICATION**

**10.4.1 Indemnification by ASTERRA.** Subject to this Agreement and without derogating from the foregoing, ASTERRA shall defend and indemnify Client and its respective directors, officers, employees, consultants,



successors and assigns (collectively “**Client Indemnitee**”) from and against any claim by a third party alleging that the use of the Service as contemplated under this Agreement, infringes a third party’s patent, copyright, trade secret or other intellectual property rights which are enforceable in the jurisdictions in which the Client’s support teams operate. Notwithstanding the foregoing, ASTERRA shall have no liability or obligation to Client Indemnitees with respect to any claim for infringement relating to: (1) Client’s use of the Service in combination with other products not provided or endorsed by ASTERRA; (2) modifications or alterations of the Service which are not performed by ASTERRA or with its permission; (3) a breach or alleged breach by Client of its representations, under the Agreement; in any case of (1) – (3) above, only to the extent that the Service would not be infringing in the absence of such circumstances.

**10.4.2 Indemnification by Client.** Client shall defend, indemnify and hold harmless ASTERRA and its directors, officers, employees, and subcontractors (collectively “**ASTERRA Indemnitee**”), upon ASTERRA’s request and at Client’s expense, from, and against, any damages, liabilities, loss, costs, expenses and payments, including, but not limited to, reasonable attorney’s fees and legal expenses, arising out of any claim, suit, action, arbitration or proceeding brought against ASTERRA Indemnitee, relating to: (a) a breach or alleged breach by Client of any of its representations, warranties, covenants or obligations hereunder; (b) infringement or misappropriation of any intellectual property rights by Client; (c) any negligence or willful misconduct of Client or its users or other representatives; or (d) any claims in connection with the Client Data. To the extent that the Client is a governmental body, and not

withstanding Section 10.4.3 below, the above Indemnity obligation will be subject to such additional conditions that apply to Client under the applicable law.

**10.4.3** The indemnified party shall promptly notify the indemnifying party in writing of any claim for which it seeks indemnification hereunder; provided that the failure to provide such notice shall not relieve the indemnifying party of its indemnification obligations hereunder except to the extent of any material prejudice directly resulting from such failure. The indemnifying party shall bear full responsibility for, and shall have the right to solely control, the defense (including any settlements) of any such claim; provided, however, that (a) the indemnifying party shall keep the indemnified party informed of, and consult with the indemnified party in connection with the progress of such litigation or settlement and (b) the indemnifying party shall not have any right, without the indemnified party’s written consent (which consent shall not be unreasonably withheld), to settle any such claim in a manner that does not unconditionally release the indemnified party. At the indemnifying party’s request, the indemnified party will provide reasonable cooperation with respect to any defense or settlement.

## **11. Term and Termination**

**11.1** Unless otherwise specified in the applicable SOW, this Agreement commences upon the Client’s date of signature herein or acceptance date by Client, as applicable. The Service shall commence on the date on which the relevant Service is 'live', being the first date on which the Client or the first of the Client’s users is granted



access to the Platform's data, upon a notice by ASTERRA to Client ("Go – Live- Date") and will continue for a period of twelve (12) months thereafter ("Initial Term"), at which point the subscription will automatically renew for an additional twelve (12) months period ("Renewal Term") (Initial Term and Renewal Term, collectively, the "Term"), if not otherwise terminated earlier pursuant to this section 11 or if a Party has given a notice of non-renewal at least sixty (60) days prior to the end of the initial Term or Renewal Term.

11.2 Notwithstanding the foregoing, either party may terminate for a material breach by the other party unremedied for thirty (30) consecutive days after written notice thereof, at any time.

11.3 Either party may immediately terminate this Agreement if (A) any proceeding is commenced in good faith against the other party for any relief under any bankruptcy or insolvency law, or any law relating to the relief of debtors, readjustment of indebtedness, reorganization, arrangement, composition, or extension of debts; (B) the other party commences proceedings for any relief under any bankruptcy or insolvency law, or any law relating to the relief of debtors, readjustment of indebtedness, reorganization, arrangement, composition, or extension of debts; (C) there is issued a decree or order of a court having jurisdiction for the appointment of a receiver, liquidator, or trustee or assignee in bankruptcy or insolvency of the other party or of a substantial part of the other party's property, or for the winding up or liquidation of the other party's affairs; or (D) there is a general assignment by the other party for the benefit of creditors or the admission by the other party in writing of its

inability to pay its debts generally as they become due.

11.4 Upon expiration or termination of this Agreement for any reason: (i) Client will not be able to access the Services and/or the data stored within the Platform, the Platform, ASTERRA's support and any other software or data related to the Service. Any and all data not exported by Client to Client's own storage, shall no longer be available to Client afterward; and payment obligations of Client for Services provided through the date of termination will immediately become due. Client data will be accessible to a returning Client if they renew their subscription within 12 months of termination of their previous subscription

11.5 Upon expiration or termination of this Agreement and in any event, upon ASTERRA's written request, Client shall return any and all Confidential Information including, but not limited to ASTERRA training materials, and any and all materials incorporating ASTERRA's Confidential Information and all copies and derivatives thereof.

11.6 Sections 3-10, 11.4-11.6, 12 and 13 shall survive any termination or expiration of the Agreement for any reason.

## 12. Governing Law

The parties exclusively submit to the (i) governing law of Delaware or, (ii) solely if the laws that apply to the client prohibit the application of the law of Delaware – the law of Client's principal place of business, and the exclusive jurisdiction and venue of the courts of (i) the City of Wilmington, Delaware, or (ii) if the laws apply to



Client prohibit the jurisdiction of the Delaware Courts – the competent courts of the Client’s principal place of business. The parties agree that the United Nations Convention on Contracts for the International Sale of Goods shall not apply in any respect to this Agreement or the parties. Client shall comply with all applicable (including, all U.S. and applicable foreign) laws and administrative regulations relating to the control of exports of commodities and technical and/or personal data, and all laws directly or indirectly applicable to its activities hereunder or otherwise pursuant to or in connection with this Agreement, the Licenses or use of any software, and the provision of any Services and/or support.

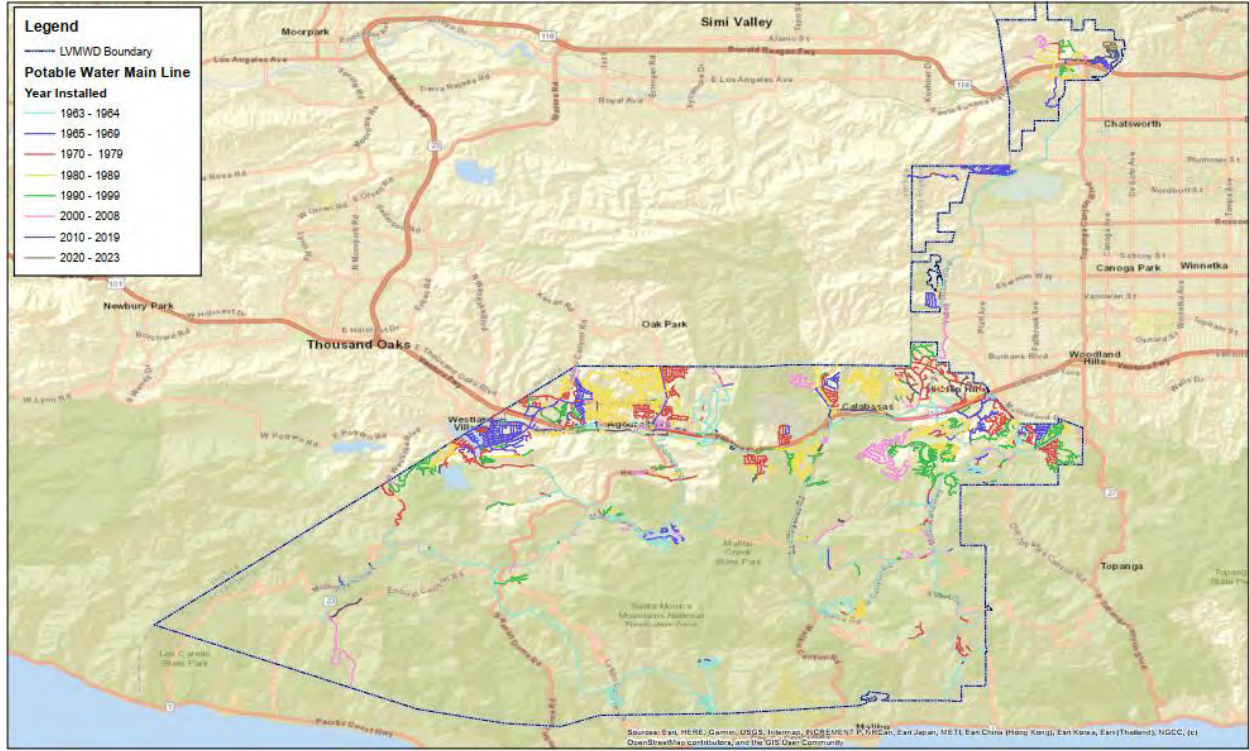
### 13. **Miscellaneous**

This Agreement may be amended by an authorized representative of each party in a duly executed written document referencing this Agreement and expressing the intent of each party to amend this Agreement. If any provision of this Agreement is found to be invalid or unenforceable, the remaining provisions shall remain in full force and effect, and this Agreement shall be deemed amended to replace, to the extent legally permitted, the rights and obligations contained in such invalid or unenforceable provision. The invalidity or unenforceability of any provision shall not constitute a failure of consideration hereunder. Any failure or delay in exercising, or any single or partial exercise of, any right or remedy by either party hereto shall not be deemed a waiver of any further, prior, or future right or remedy hereunder, including the right of such party at any time to seek such remedies as may be available for any breach or breaches of such term or condition. Nothing in this Agreement shall

make either party the agent of the other for any purposes whatsoever. Except to the extent such rights cannot be restricted by applicable law, neither party may assign, sublicense, or transfer this Agreement without the prior written consent of the other party, and any such attempt by a party to sublicense, assign or transfer any rights, duties, or obligations hereunder is null and void and subject to the other party’s right to immediately terminate this Agreement. Notwithstanding the above, ASTERRA may assign, sublicense, or transfer this Agreement to an affiliate of ASTERRA or in connection with the merger, acquisition, or sale of all or substantially all of the assets of ASTERRA relating to this Agreement. This Agreement entered into between the parties on or around the date of this Agreement, together with the signed SOW constitute the entire agreement and understanding of the parties relating to the subject matter hereof, superseding all prior or contemporaneous agreements, representations, promises, and understandings, whether written, electronic, oral or otherwise and any additional or conflicting terms contained in any other document (including, without limitation, any pre-printed, additional or conflicting terms on any Client purchase order, or acknowledgment from either party) shall be null, void and of no effect on either party.



## ANNEX A – AREA OF INTEREST





## ANNEX B - CSM SERVICES DESCRIPTION LIST AND SLA

**Tier: Prevent**

### **Standard Features:**

- **System-Wide Advanced Temporal and Spatial Leak Analysis** - ASTERRA will provide the customer with a system-wide analysis of those locations identified as having a high probability of subsurface leakage using advanced temporal (data collected across time) and spatial (data collected across space) analysis.
- **Leak Location List with Prioritization** - Each customer will receive a list of potential leaks (Points of Interest, POI's) for leak detection investigation based on SAR algorithm results and machine learning. Each list can be prioritized based on piping attributes (pipe type, age, pressure, etc.) if available and provided by the client.
- **Customer Portal and Performance Dashboard (4 Licenses)** - Licenses for access to EO Discover, ASTERRA's Customer Portal and Performance Dashboard for tracking leak investigation results over the course of the subscription period.
- **U-Collect Software & U-View Software (4 Licenses)** - Access to field investigation input and viewing software.
- **On-Line Customer Support**
- **Customer Success Plan** - ASTERRA will provide each customer with a customized execution and success plan that will be reviewed and updated over the course of the subscription period.
- **Best Practice Tutorials (On-Line)** - ASTERRA will provide on-line tutorials which cover training and troubleshooting for the customer portal, U-Collect and U-View applications.

### **Additional Services available to the customer include:**

**Final Program Report** – ASTERRA will provide a cost benefit report summarizing program progress, estimated water saved and impact of project on utility non-revenue water savings. Report is provided in PDF format.



### Service Level Agreement (SLA)

This Service Level Agreement (“SLA”) is provided in connection with the Terms of Use governing the use of the ASTERRA’s Services and proprietary Platform (the “Software”). ASTERRA will endeavor to quickly respond to Software support requests and reported Software errors, bugs, or malfunctions (each, an “Inquiry”), and provide a solution to your Inquiry, as set forth in this SLA. Capitalized terms not defined herein shall have the respective meanings as set forth in the Terms of Use.

ASTERRA’s handling and resolution of Inquiries is subject to the following procedure and processes:

1. Inquiries shall be submitted to ASTERRA’s helpdesk by e-mail ([csm@ASTERRA.io](mailto:csm@ASTERRA.io)), or via the Client’s portal help feature, during ASTERRA’s standard business hours (9:00am to 5PM).
2. When ASTERRA receives notice of an Inquiry from you, along with all pertinent information at your disposal, regarding the Inquiry, ASTERRA will record the time in which the notification was received, during ASTERRA’s business hours indicated above (if the Inquiry is received by ASTERRA outside of its business hours, the Inquiry receipt time will be recorded as 9:00 am on ASTERRA’s next business day - the “Opening Time”).
3. Upon receiving an Inquiry, ASTERRA, using its reasonable judgment, will classify the Inquiry’s severity level as Critical, High, Medium, or Low, in accordance with the following guidelines:
  - a. Critical – Complete failure of the Software.
  - b. High – Significant fault in one or more of the primary functionalities of the Software.
  - c. Medium – Features of the Software are partially malfunctioning.
  - d. Low – Minor error or malfunction in the Software.
4. “Response” is ASTERRA’s provision of a preliminary, interim resolution or workaround for the Inquiry, partially alleviating the symptoms reported in the Inquiry. ASTERRA’s response will be in writing via email or via phone contact from the Client’s assigned Customer Success Manager.
5. “Final Resolution” is ASTERRA’s provision of a permanent and full resolution to the Inquiry.

ASTERRA will endeavor, using commercial efforts, to respond to Inquiries as set forth below and to provide a Final Resolution. Response Times are specified in relation to the Opening Time, as recorded in ASTERRA’s logs, as follows:

Priority	ASTERRA’s availability to commence handling the Inquiry	Response Time after Opening Time
Critical	ASTERRA’s business hours	8 hours
High	ASTERRA’s business hours	32 hours
Medium	ASTERRA’s business hours	3 business days
Low	ASTERRA’s business hours	2 business weeks



**DATE:** September 3, 2024  
**TO:** Board of Directors  
**FROM:** Engineering and Facilities

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**SUBJECT: Water Supply Reliability and Diversification Study: Award**

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**SUMMARY:**

The District is currently 100 percent reliant on Metropolitan Water District of Southern California (MWD) for its drinking water. Except for the last drought, MWD has generally provided an excellent level of reliability. However, the District remains vulnerable to future shortages due to drought, climate change, and other factors such as earthquakes. A Water Supply Reliability and Diversification Study will identify the optimal mix of drinking water sources that will improve the District’s water supply reliability. Without a comprehensive study, it will be uncertain what the optimal water supply portfolio should consist of in the long-term. The study will inform the District which mix of supply projects will provide greater water supply reliability in the most cost-effective manner. Staff recommend executing a professional services agreement with Kennedy/Jenks Consultants, Inc., in the amount of \$499,871, for the Water Supply Reliability and Diversification Study.

**RECOMMENDATION(S):**

Accept the proposal from Kennedy/Jenks Consultants, Inc., and authorize the General Manager to execute a professional services agreement, in the amount of \$499,871, for the Water Supply Reliability and Diversification Study.

**FISCAL IMPACT:**

Yes

**ITEM BUDGETED:**

Yes

**FINANCIAL IMPACT:**

Sufficient funds are available in the adopted Fiscal Year 2024-25 Budget for this work. No additional appropriation is required.

**DISCUSSION:**

## Background:

Las Virgenes Municipal Water District's (LVMWD's) Mission Statement is Dedicated to Providing High-Quality Water Service in a Cost-Effective and Environmentally Sensitive Manner. More specifically, the District's 2022 Strategic Plan also calls for Strategic Objective No. 2 - Improve LVMWD's water supply reliability. The District is currently 100 percent reliant on Metropolitan Water District of Southern California (MWD) for its drinking water. Between 95 and 100 percent of this water comes from the State Water Project. Depending on the time of year and hydrologic conditions, up to five percent of water received from MWD comes from the Colorado River Aqueduct (CRA) system.

With the exception of the last drought, MWD has generally provided an excellent level of reliability. The District is still vulnerable to future shortages due to drought and climate change. Absent construction of the Delta Conveyance Project, imported water deliveries from the State Water Project will be subject to continued pumping restrictions due to endangered fish species in the Delta, drought, and even potential interruption following a failure in the Delta. Further, efforts to improve water supply reliability require substantial time and investment.

Currently, the Las Virgenes-Triunfo Joint Powers Authority (JPA) treats wastewater to Title 22 standards for non-potable reuse. Much of this water is for irrigation purposes as part of the purple pipe systems for the District and Triunfo Water & Sanitation District (TWSD). In the winter and shoulder months when irrigation demands are typically low, excess reclaim water that is not needed by the irrigation demands is discharged to Malibu Creek. However, disposal into the creek is prohibited between April 15th and November 15th each year when there are risks of algal blooms in the creek exacerbated by nutrient loading from the tertiary treated wastewater.

The historical means of disposing excess recycled water is changing due to permitting and regulatory restrictions. Beginning in November 2030, the discharge of tertiary treated water to Malibu Creek will be more severely restricted as part of a settlement with the Environmental Protection Agency. Due to this new restriction, the JPA has been planning and will soon be constructing the Pure Water Project Las Virgenes-Triunfo (Pure Water Project). This project will take all excess tertiary water and run it through an advanced treatment process that will supplement the drinking water systems for the District and TWSD. Initially, the PWP is projected to provide 1,470 acre-feet per year for District customers starting as early as 2028, and up to 3,500 acre-feet per year by the year 2040. This amount includes supply augmentations from storm run-off, conservation of current recycled water demands particularly during the shoulder months (October/November and April/May), and other potential sources such as impaired groundwater from the City of Thousand Oaks.

The District has also been interested in and is currently exploring desalination to help diversify its water supply. The Pacific Ocean lies only a few miles from the District's service area and is within reach through a planned interconnection pipeline with Los Angeles County Water District 29 that serves the incorporated areas of Malibu. A desalination facility could also be constructed to the west in Oxnard or Port Hueneme within Calleguas Municipal Water District's (CMWD) service area as part of regional effort that the District may choose to participate. The District is in the process of completing an interconnection pipeline with CMWD.

Groundwater availability within the District's service area is sparse. The District has been



having discussions with the City of Thousand Oaks to pipe impaired groundwater from the basin underlying the Los Robles Golf Course, which is to the west and outside of the District's service area. Studies indicate that the small groundwater basin could provide between 400 and up to 700 acre-feet of water per year that would be part of the augmentation for the Pure Water Project. However, any water treated from this basin may not likely count towards the District's supplies as it would likely be returned directly or indirectly to the City of Thousand Oaks through the CMWD Interconnection after it is treated. The District has also had conversations with the City of Thousand Oaks to divert tertiary treated water from their Hill Canyon Wastewater Treatment Plant to the Pure Water Project. This water too would likely not count towards the District's supplies and would be returned to the City.

#### Existing and Potential Alternative Water Supplies:

- Current Status Quo (SWP and CRA only via MWD)
- Pure Water Project Las Virgenes-Triunfo
- Ocean Desalination (direct or through an exchange agreement with another agency)
- Routine or backup supply through Calleguas Municipal Water District via the new Interconnection (CMWD is developing alternative supplies under their WRIST Program)
- Routine or backup supply through District 29
- Exchange Agreements with Calleguas, District 29, and/or Los Angeles Department of Water and Power
- Stand-alone water banking (outside of MWD)

#### Study Purpose:

This study sets out to identify alternatives to diversify the District's water supply portfolio for the purpose of providing a more reliable supply of water to customers in a cost-effective and environmentally sensitive manner during a variety of water supply conditions. The Water Supply Reliability and Diversification Study will ideally answer the following questions?

- What is the optimal/most-feasible water supply portfolio near-term and long-term?
- To what degree should the District and its customers rely on MWD for bolstering supply reliability versus local/non-MWD supply?
- To what extent are alternative supplies reliable?
- What are the realistic timelines for planning and implementing various alternative water supplies?
- How much will the optimal portfolio cost and what is the impact to the average customer's water bill?
- Will District customers be willing to support diversification and what are the cost limitations to avoid the potential of investing in assets that become underutilized/stranded if water consumption were to decrease due to the cost of water?

#### Study Components:

- Multiple water supply and demand scenarios
- Sensitivity analysis and variable supply portfolio based on water supply conditions (drought versus normal and water supply surplus years)
- Account for latest climate change predictions, the District's Climate Action and Adaptation Plan, etc.
- Range of costs and rate/bill impacts would be provided for alternative supply scenarios

to help provide guidance on which supply projects/programs to pursue. Consultant will be responsible for capital and operational cost estimates for water supplies. District staff will utilize these costs to determine bill impacts.

- Form a diverse stakeholder group/task force to obtain feedback/input and to help provide an informed recommendation for the optimal water supply portfolio.

At the Strategic Planning Workshop held on February 13, 2024, staff presented and recommended to the Board that a Water Supply Reliability and Diversification Study be pursued in the coming year. The Board had indicated a desire to proceed, and funds were budgeted to implement a study. On June 12, 2024, a Request for Proposals was issued to solicit proposals from qualified consultants. One proposal was received by Kennedy/Jenks Consultants, Inc. The total fee for the study is \$499,871. Staff reviewed the proposed scope of work, fee, and schedule, and has found it to be reasonable and competitive for this type of study. A copy of the proposal is attached for reference.

The final deliverable will be a planning document that documents the efforts of the study, including engagement with stakeholders and ultimate recommendations for bolstering water supply reliability and diversification. A draft report will be presented to staff and the Board for comment and feedback before the report is finalized. The study is scheduled to begin in September 2024 and be completed by December 2025.

Based on the proposed scope of work, project understanding and approach, team experience and fee proposal, and exceptional performance on projects performed for the District in the past, staff recommends accepting the proposal from Kennedy/Jenks Consultants, Inc., and authorizing the General Manager to execute a professional services agreement, in the amount of \$499,871.

**GOALS:**

Provide Safe and Quality Water with Reliable Services

Prepared by: Joe McDermott, Assistant General Manager

**ATTACHMENTS:**

[Proposal by Kennedy/Jenks Consultants, Inc.](#)

## Legend

- Recycled Water
- ▲ Groundwater Banking
- Surface Water Agreements/Interties
- ◆ Desalinated Water



# Las Virgenes Municipal Water District Water Supply Reliability and Diversification Study

July 19th, 2024

July 19, 2024

Joe McDermott, PE | Director of Engineering and External Affairs

**Las Virgenes Municipal Water District**

4232 Las Virgenes Road

Calabasas, CA 91302

**Subject: Proposal for Water Supply Reliability and Diversification Study (Study, WSDS)**

Dear Mr. McDermott:

Kennedy/Jenks Consultants, Inc. (KJ) offers the Las Virgenes Municipal Water District (District) a highly qualified team to conduct a comprehensive study to diversify the District's water supply portfolio to support the creation of a more reliable and cost-effective water supply for customers. KJ's local team offers a proven method to identify and screen potential supply sources for further exploration. Selecting KJ for this assignment will provide the District with the following benefits:

**A collaborative process and transparent screening approach to build alignment with your stakeholders:**

KJ will bring a fresh look to identify and objectively compare water supply options that complement your PureWater Program, explore opportunities for shared regional assets, and that considers innovative approaches to groundwater banking and desalination. Key members of our team, Meredith Clement (PM), Timothy Waters (PE), and Dawn Taffler (PIC) recently conducted a similar [Water Supply Alternatives Study for Calleguas Municipal Water District](#) that evaluated a wide range of potential projects to provide emergency supply during an extended outage of imported water. **Many of the project types and specific facilities from the Calleguas study have a potential nexus with the options that the District is interested in pursuing, allowing our team to develop concepts and costs quickly to compare a broad suite of projects.**

**A knowledgeable, fresh-eyes perspective, built on recent and relevant water supply planning work:**

KJ will bring a knowledgeable and fresh perspective to identify and objectively compare water supply options to produce purified water, augmenting existing supplies. KJ has worked extensively with the District and various other local water districts, including the Calleguas Municipal Water District. These experiences have enriched KJ's proficiency in regional geography, local resource availability, and strategic alternatives that have enhanced and strengthened KJ's ability to support the District in reliability and diversification of water supplies. Leveraging a combination of deep-seated knowledge, adept leadership, and a team of innovative professionals, KJ excels in providing comprehensive historical insights alongside pioneering concepts. **This enables KJ to effectively support the District in evaluating and selecting diverse water supply augmentation strategies with fresh-eyes and the necessary technical expertise.**

**Proven ability working with your key stakeholders to identify a reliable water supply tailored to your needs:**

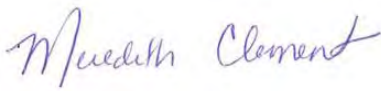
KJ understands your culture, your local issues, and your water, wastewater, and recycled water systems. KJ has been providing planning, design, and construction management services for the District for over 35 years. In the last two decades, our team has completed water supply, desalting, intertie, and groundwater projects for Calleguas and Thousand Oaks that are directly relevant to this effort. **The KJ team offers a wealth of local knowledge, bringing practical solutions tailored to your needs that can be documented in a well written report, providing a road map for a more resilient future and water supply.**



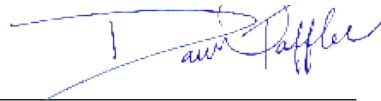
KJ understands the importance of this Study in identifying a cost-effective and resilient water supply for the future, which can be supported by the District’s board, your stakeholders and your community.

We look forward to working with you on this important Study and continuing to deliver the best value to the District, its residents, and the community. Please contact Meredith Clement at **(805) 973-5718** or **MeredithClement@kennedyjenks.com** or **Dawn Taffler** at **(626) 568-4323** or **DawnTaffler@kennedyjenks.com** should you have any questions regarding our submittal.

Very truly yours,  
**Kennedy/Jenks Consultants, Inc.**



Meredith Clement  
Project Manager



Dawn Taffler, PE  
Principal-in-Charge

**Firm Information**

Legal Name: **Kennedy/Jenks Consultants, Inc.**

Telephone Number: **(626) 568-4323**

Name of Principal: **Dawn Taffler, PE**

Ability to execute agreement included in this form: **Yes**

Ability to comply with District’s insurance: **Yes**



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**Las Virgenes Municipal Water District**  
Water Supply Reliability and Diversification Study

**1 | Project Understanding, Approach, Scope of Work**

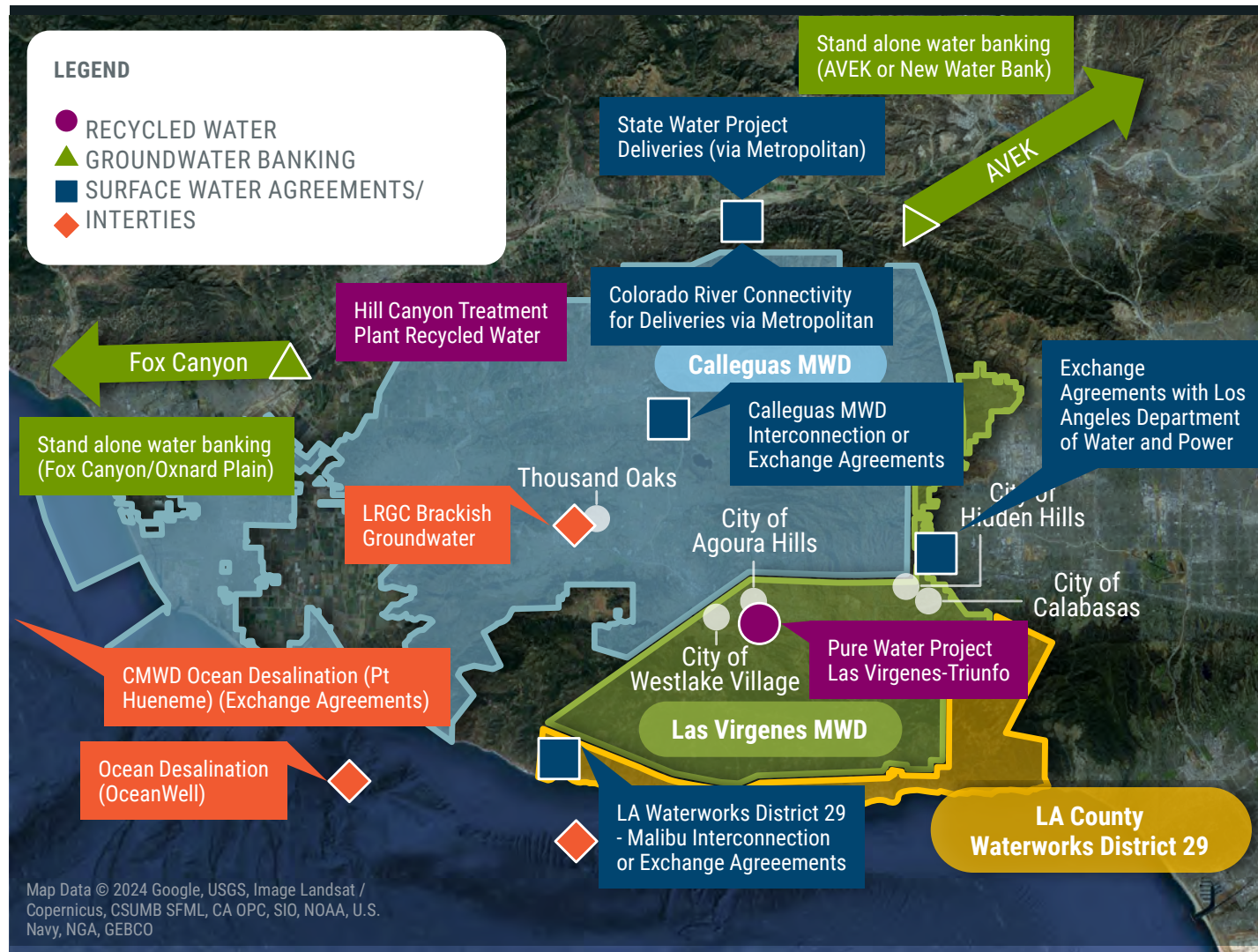
## Understanding of Your Vision

### The Purpose of the Study

This study sets out to identify alternatives to diversify the District's water supply portfolio (see Map 1) for the purpose of providing a more reliable supply of water to customers in a cost effective and environmentally sensitive manner under a variety of water supply conditions.

The ultimate goal of the study is to answer the following questions:

- What is the reliability of the current supply?
- To what degree should the District rely on MWD versus local/non-MWD supply?
- To what extent are alternative supplies reliable?
- What are the realistic timelines for planning and implementing various alternative water supplies?
- How much will the optimal supply portfolio cost and what is the impact to the average customer's water bill?
- What is the optimal/most-feasible water supply portfolio, near-term and long-term?



▲ Map 1. Local service areas and Stakeholders shown with future water supply concepts.

## A Collaborative Approach to Diversifying Water Supply for Future Resilience

KJ's approach will be tailored to LVWMD's needs, building on the success of recently completed local and regional planning projects. The foundation will be built on an understanding of the District's future supply and demand, including the vulnerabilities related to changing climate and regulations. Concepts for diversifying water supplies will be identified and vetted with your staff, decision makers, and stakeholders. Projects will be evaluated, costs estimated, and a preferred portfolio will be identified to answer the questions posed in the RFP. KJ's detailed approach to executing the well-defined, yet flexible scope described in your RFP is illustrated in Figure 1 on the following page.

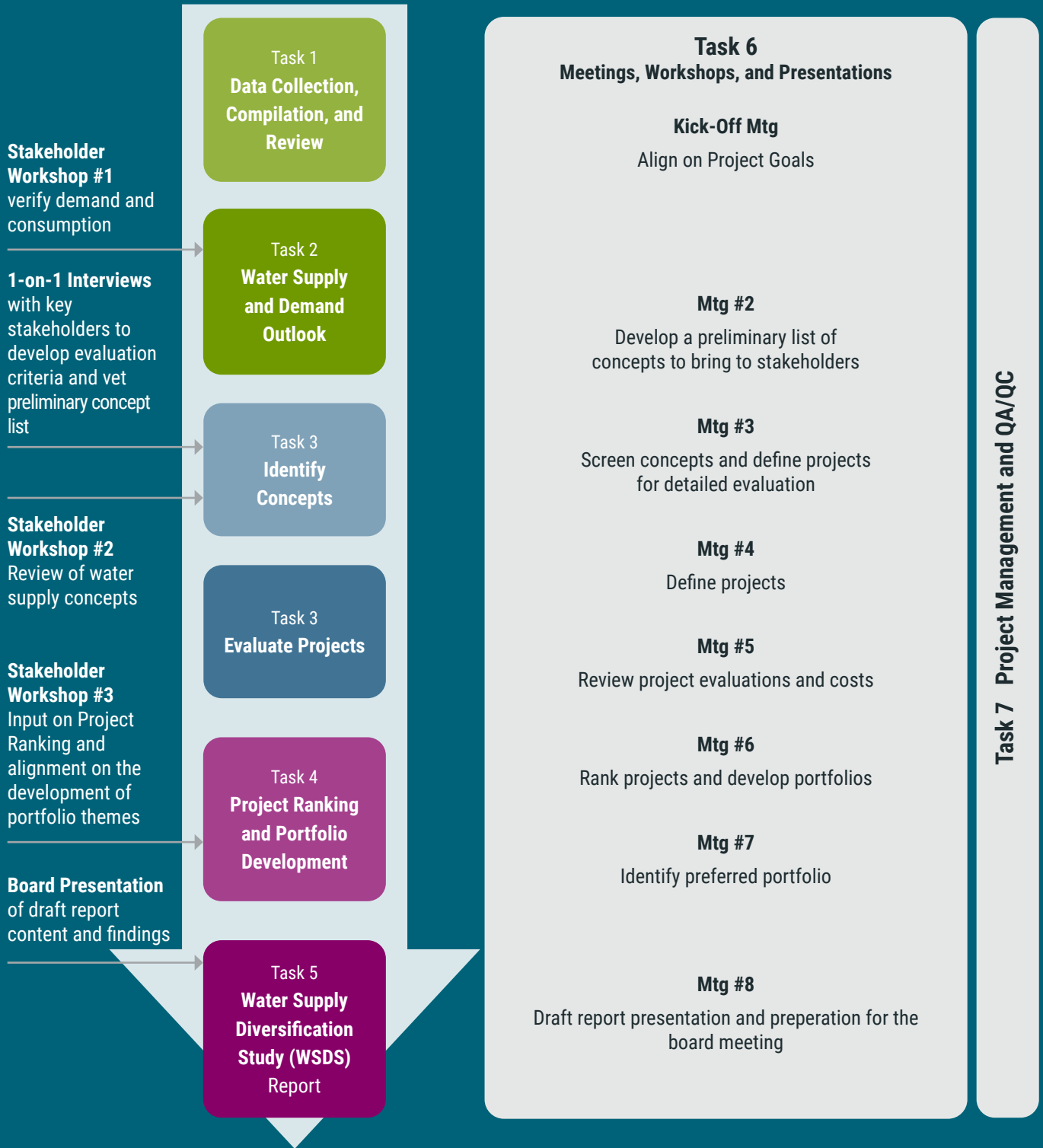
The KJ Team will partner with the District to facilitate a collaborative process with your internal and regional stakeholders, building on synergistic water supply plans/projects within the region to identify a viable path to meet your water supply reliability and diversification goals. We have found that the combination of workshops with 1-on-1 interviews builds trust and transparency by allowing parties to listen to others in a group setting with the option to voice concerns in confidence that they may otherwise hold back in a group setting. The goal is to bring people together to listen to varying perspectives, bring new ideas to the table, and feel a part of the process. Table 1 provides additional detail about the focus and desired outcomes of the interviews, workshops, and presentations proposed to support the technical evaluations.

## Conducting Face-to-Face Interviews and Effective Workshops to Solicit Input and Build Trust

Activities	Focus and Desired Outcomes
Stakeholder Workshop #1 (in-person or virtual)	<ul style="list-style-type: none"> <li>• Introduce project goals and objectives</li> <li>• Verify demand and consumption patterns</li> </ul>
1-on-1 Interviews (in-person or virtual)	<ul style="list-style-type: none"> <li>• Communicate study goals and objectives and solicit input on screening criteria and weighting values with key stakeholders</li> <li>• Vet a preliminary concept list</li> <li>• Gather information on synergistic or related projects and studies being undertaken by others in the region</li> <li>• Receive feedback on real and perceived challenges related to concepts (e.g., institutional, regulatory, customer acceptance, feasibility, cost)</li> </ul>
Stakeholder Workshop #2 (in-person)	<ul style="list-style-type: none"> <li>• Interactive discussion of preliminary concept list</li> <li>• Solicit input on concepts to add to the list</li> <li>• Gain insight into concepts that may have insurmountable obstacles</li> </ul>
Stakeholder Workshop #3 (in-person or virtual)	<ul style="list-style-type: none"> <li>• Walk through short-list of projects and distribute fact sheets</li> <li>• Present initial evaluation results including: preliminary scoring, ranking, and sensitivity analysis of weighted criteria</li> <li>• Interactive discussion of portfolio development approach</li> </ul>

▲ Table 1. Overview of KJ's stakeholder interactions throughout the Study.

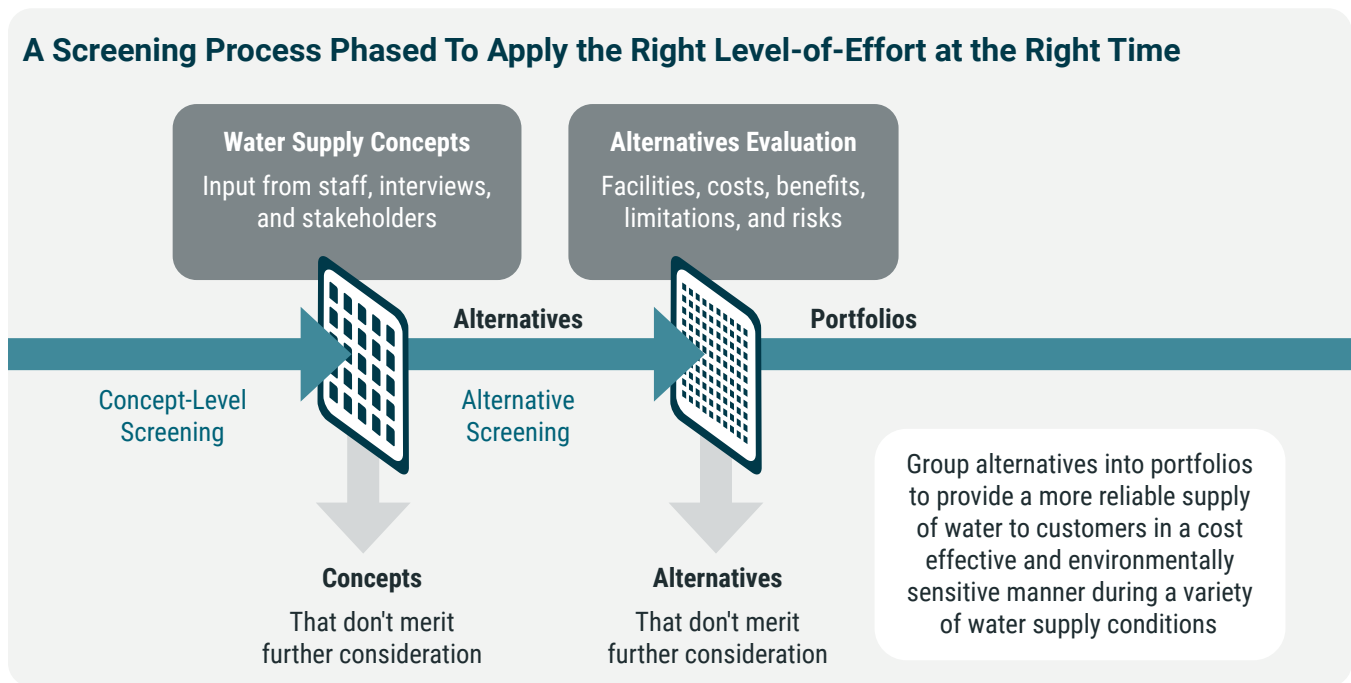
# A Comprehensive and Collaborative Approach to Water Supply Diversification



▲ **Figure 1.** The KJ Team will partner with the District to facilitate a collaborative process with regional stakeholders, leveraging existing water supply plans and projects. Our approach assures a thorough, cost-effective, and holistic solution, culminating in a comprehensive report detailing the preferred portfolio of projects.

## Decision-Making Made Easy Through Proven Screening Methodology and Visual Scorecard Approach

KJ believes the combination of effective workshops and a proven screening methodology can provide the District and your stakeholders with relevant information to make a prudent decision about the projects and portfolios to diversify your existing supply, increase independence from imported water, and provide a cost-effective strategy for the future. **Figure 2** presents KJ's transparent screening process that will be used to vet an initial long-list of concepts and subsequently identify a **short-list of projects** for screening to create portfolios of near- and long-term projects for implementation by the District. The screening criteria will be developed with the District and scoring will be based on technical data, quantitative alternative analysis, and most importantly, applied judgment. **The outcome will be the selection of multi-beneficial, cost-effective projects or a portfolio of projects to secure local, reliable, and resilient supplies for the future.**



▲ **Figure 2.** This figure illustrates our transparent screening process, which will help the District and stakeholders make informed decisions by vetting an initial long-list of concepts to create cost-effective, multi-beneficial project portfolios. This approach aims to diversify your water supply, increase independence from imported water, and ensure a resilient, reliable future strategy.

### Concept-Level Screening to Vet a Wide-Range of Concepts

A long-list of concepts will be identified based on discussions with the District, 1-on-1 interviews, and a workshop with key stakeholders. Concepts will be defined at a high-level, identifying key water supply benefits, infrastructure needs.

A concept-level screening process will identify significant challenges, risks, and insurmountable obstacles, filtering a long-list of water supply opportunities to select the top projects for the next stage of screening. **The Concept-level screening** will identify projects to move forward for further analysis or removal of concepts that have insurmountable challenges.

Potential considerations may include:

- **Ability to Provide Supply During a Drought** – based on the amount of production, or new supply, that would be made available during peak seasons or over multiple dry years.



- **Engineering/Constructability Considerations** – based on the complexity of new facilities to be designed and built, including considerations for available space and construction challenges that would be very difficult and/or unreasonably expensive.
- **Implementation Considerations** – would address issues such as timeline of implementation, operational complexities that would impact current or future District activities, environmental impediments, and perceived public acceptance.
- **Institutional/Regulatory Complexity**– reflects the level of regional or regulatory coordination needed to execute a concept. May include jurisdictional limitations, complexity of agreements with external agencies, permitting challenges, water rights, and more.
- **Financial Considerations** – can initially be addressed on a qualitative basis relative to other alternatives. Cost estimates are typically developed at the project-level.

## Project Level Screening Using a Visual Scorecard Approach

The **Short-list of projects** will be developed to define major facilities and operational considerations with sufficient detail to provide a concept-level capital and life cycle cost estimate.

**Project-level screening** will reflect economic, environmental, social, and operational considerations, which can serve to frame the full range of benefits from water supply projects in a manner that can resonate with diverse stakeholders and decision makers.

### Scorecard Approach for Analyzing Projects Across Multiple Criteria

A “scorecard” approach is one effective way to analyze a range of projects across several criteria. This approach helps organize both qualitative and quantitative information to inform decisions. Implementation can range from fairly simple to complex, depending on the number of projects assessed and criteria used, using this following 3-step approach:

1

**Scoring:** establish a scale (i.e. 1-5) to apply quantitative and qualitative criteria.

2

**Weighting:** solicit weighting percentages for each criteria from stakeholders and/or create weighting themes to represent priorities or perspectives.

3

**Ranking:** multiply the criteria score by the weighting to get a total score, then rank the projects from highest to lowest scoring. The use of multiple weighting themes can provide a sensitivity analysis to identify projects that rise to the top irrespective of weighting distributions.

District staff and the KJ Team will perform an initial scoring assessment for each of the projects and provide a completed table to stakeholders and/or executive management for comment prior to presentation in a stakeholder workshop. Input from stakeholders will be integrated into the evaluation and a color coded alternatives matrix will be developed (**Figure 3**) to visually identify high-ranking projects that move forward and low-ranking projects that are eliminated from further consideration.

## Proven Success In Scoring, Weighing, and Ranking Projects Using Scorecard Approach

The KJ Team has used a similar approach to compare facility siting locations in contentious areas of San Francisco where NIMBY-ism often drives decisions for recycled water programs. This included nine actively involved agencies with a list of 20+ potential projects, and most recently, in the Santa Cruz area where environmentalists, anti-developers, and academics actively participate in water resource planning. In each case, this simple process, communicated through workshops and webinars, has helped a diverse set of stakeholders across numerous clients visually identify projects that rise to the top.

Example Ranking Results	Ranking by Weighted Category				Top Scoring Alternatives <i>Selected Projects</i>
	Lowest Cost	Maximize Water Supply	Most Local Control	Shortest Timeframe	
Alternative 1	1	1	2	1	✓
Alternative 2	3	2	3	4	✓
Alternative 3	5	5	4	2	
Alternative 4	7	6	5	6	
Alternative 5	2	4	1	3	✓
Alternative 6	4	3	7	5	
Alternative 7	6	7	6	7	

▲ **Figure 3.** This example illustrates weighted ranking results colored to show the gradient from the highest ranking (1) to lowest ranking (7) alternatives, respectively.

## Fact Sheets Providing the Right Amount of Information to Support Sound Decisions

**Harding Road**

**Advantages**

- Adequate available space
- Site is moderately disturbed with paved areas
- Minimal earthwork required
- Low liquefaction, lateral spread potential, dynamic settlement potential, landslide potential and bluff erosion potential.

**Disadvantages**

- Constrained road access – existing road is narrow and highly utilized
- Potential impact to lake recreationalists and golf course patrons
- Construction complexities due to proximity to Lake Merced
- High groundwater level may limit underground construction and require expensive dewatering
- Potential conflict with Lake Merced Watershed Report
- Fencing and security requirements
- Limited space for truck turnaround and chemical delivery
- High visibility
- Geotechnical design issues – Unbalanced lateral loads would require significant mitigation (added expense). High groundwater may be encountered depending on depth of structures, requiring dewatering (added expense).
- Conflict with agreement with FICA. Too far parking space for events related to Championship events

**Engineers Opinion of Probable Costs**

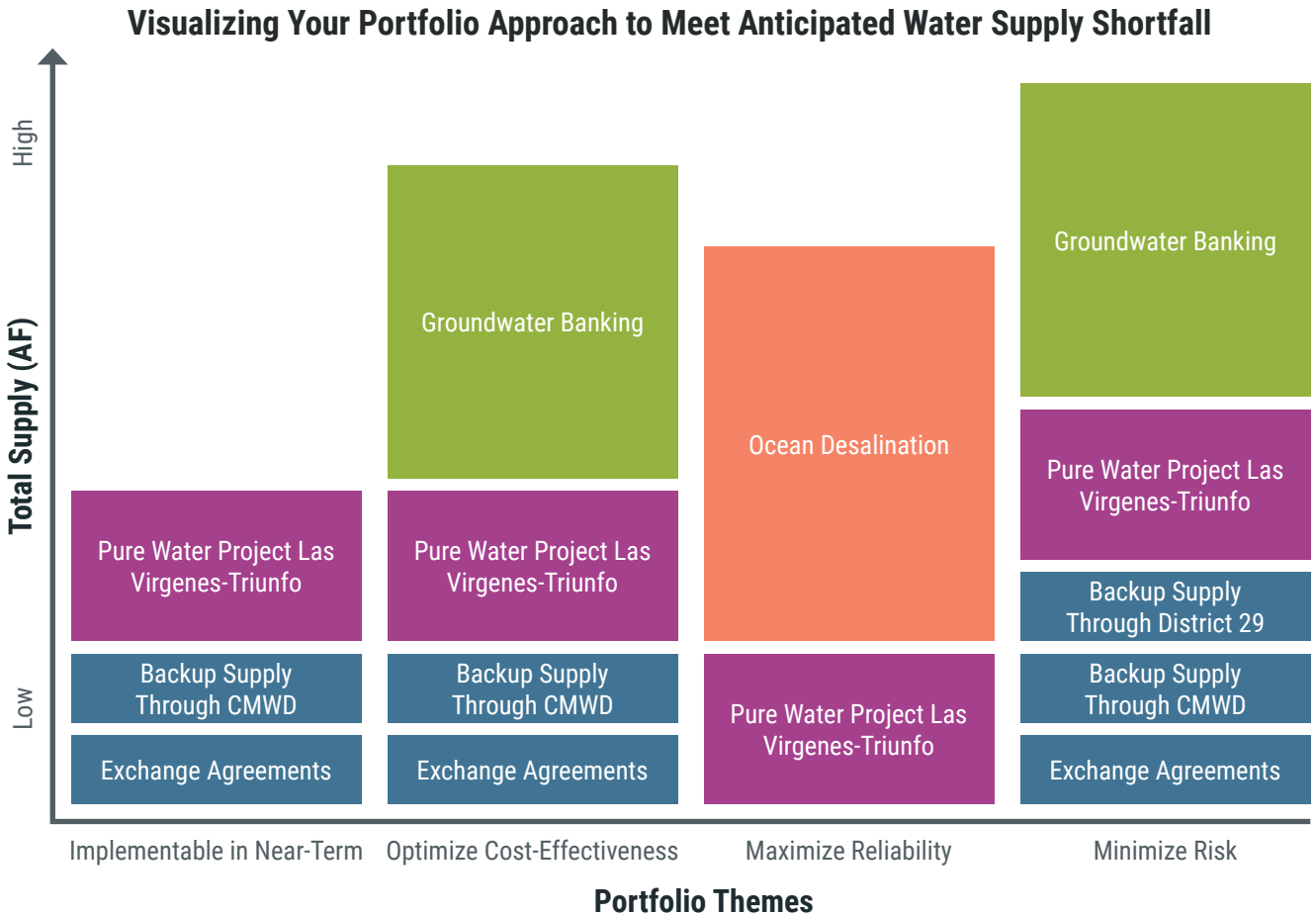
Cost Component	Estimated Cost (mil \$)	Description
Treatment Plant	\$65	
Pipelines	\$15 to \$28	Includes Old Great Highway, Outer Sunset, Sunset Median alignments
Operational Storage	\$10	New below ground off-site storage and above ground pump station at SFRPD Sports Storage Area or Existing Central Reservoir Site
Pump Station	\$4	
Other Project Costs	\$8	
<b>Raw Construction Cost</b>	<b>\$106 to \$119</b>	
Excavation + Contingency + Soft Costs	8.7% (or 0.7%)	
<b>Total Project Cost</b>	<b>\$117 to \$126</b>	

Project fact sheets (similar to those shown in **Figure 4**) and preliminary rankings will be developed to support solicitation of input and feedback in stakeholder workshops, and to guide the grouping of projects for the portfolio evaluation.

◀ **Figure 4.** Example of a Short-List fact sheet produced by KJ following the Initial Screening Workshop for SFPUC's Westside Recycled Water Program provided easy to access information that was used in future project phases, including implementation, environmental documentation, and grant applications.

## Key Considerations for Developing Portfolios

Following **Stakeholder Workshop #3**, the District will be provided with a comprehensive list of projects to package into various portfolios to identify an optimal set of projects for the near-term and long-term. Portfolio-based themes would be crafted to encompass the goals, objectives, and evaluation criteria defined by the District and its stakeholders. Example portfolios are presented in **Figure 5**. The intent is to package projects to reflect multiple perspectives and prioritization of different goals, which will allow the District to drive alignment on a recommended set of near- and long-term projects.

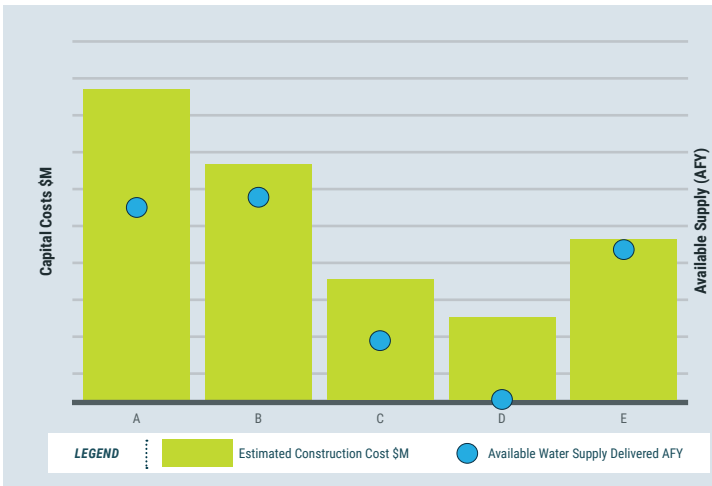


▲ **Figure 5.** The KJ Team will work with the District to develop portfolios of projects that emphasize different themes that reflect the goals and objectives of the stakeholders. We can help the district identify a cost-effective portfolio that best meets District set criteria to diversify LVMWD water supplies.

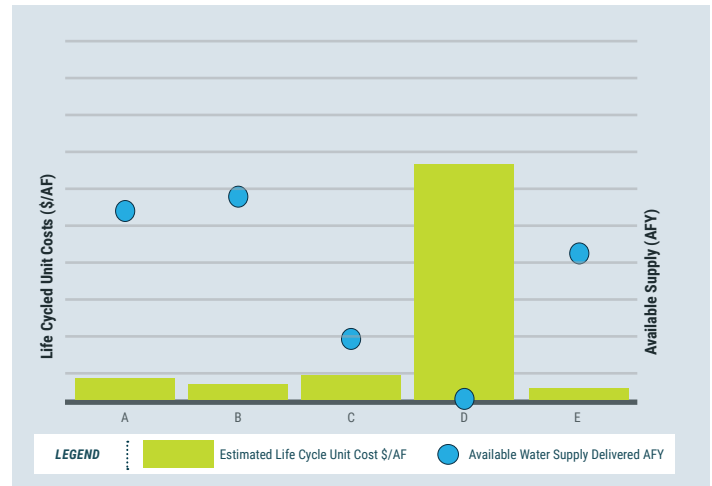
## Prioritizing a Portfolio that Maximizes Cost-Effectiveness

One of the focus areas of the Study is to identify optimal portfolio costs and minimize impacts to the average customer’s water bill. To accomplish this, as part of the screening process, capital and life cycle unit costs will be developed for the short-list of projects, as well as for portfolios of combined projects. Costs will be provided to the District to enter into an existing spreadsheet tool to estimate anticipated impacts to the average customer’s water bill. **Figure 6**, on the following page, illustrates how project costs and available supplies can be presented to help compare the relative capital investment and relative life cycle unit costs of each project.

## Relative Comparison of Capital and Life Cycle Unit Costs



▲ **Figure 6A.** A comparative analysis of relative capital costs (left) tells part of the story. For example, Project A has the highest cost but can deliver a relatively high volume of water, while Project D has the lowest cost, but also delivers the lowest volume of water.



▲ **Figure 6B.** A closer look at life cycle unit-costs (right) provides a better "apples-to-apples" comparison. You can now see that Project A is much more cost-effective on the dollar per acre-foot basis as compared to Project D, which has a significantly higher cost per volume of water delivered.

Portfolios (or sets of projects) will be compared based on a combination of qualitative and quantitative criteria, discussions with the District, and integration of input from stakeholders collected in **Workshop #3**. An important consideration for portfolio selection is performance in a range of water supply conditions (e.g. drought vs normal vs wet years). A range of costs and rate/bill impacts will be provided for the portfolio scenarios to guide the optimal selection of a preferred portfolio. The estimated capital and operations & maintenance (O&M) costs for projects in the preferred portfolio, along with the potential implementation timeline, will be used to determine potential impacts to the average customers water bill utilizing the District's spreadsheet model.

### Memorializing the Process and Findings in a Comprehensive Report with an Accessible, Succinct Executive Summary for a Broader Audience

The outcomes of this work will culminate in a comprehensive report that presents the engineering evaluation, transparent screening process, and stakeholder engagement that resulted in the identification of a preferred portfolio of projects.

- **Admin draft chapters** will be developed as the project progresses to allow the District to review and digest the report along the way.
- **A draft report** will incorporate comments from each admin draft chapter and include a high-level executive summary suitable for a non-technical audience. Supporting technical information will be included in appendices to document the work and assumptions without complicating the flow of the report.
- After presenting the draft report to the Board, a **final report** will be submitted for distribution to stakeholders.

“The Kennedy/Jenks Team’s performance on the Santa Cruz Regional Recycled Water Facilities Planning Study (RWFPS) was critical to identifying a phased approach to achieve the City’s sustainable water supply initiative. Dawn’s facilitation of in-person workshops and webinars enabled successful stakeholder collaboration, focused on making [the] region more resilient in the long-term. She was highly responsive through the two-year study period, keeping the project on-track and developing a comprehensive RWFPS that satisfied all SWRCB grant requirements. I personally enjoyed Dawn’s high-level of energy and dedication to helping the City develop a road-map for the future of reuse in Santa Cruz.”

- Heidi Luckenbach

Deputy Director/Engineering Manager,  
City of Santa Cruz Water Department

# Scope of Work

This section presents KJ's proposed scope of work for the Water Supply Diversification Study (Study, WSDS) based on the scope of work presented in the RFP. A summary of tasks and associated major deliverables is provided in **Table 2** below.

## What KJ will do for the District

Task	Major Deliverable	Associated Meeting / Workshop
Task 1: Data Collection, Compilation, and Review	<ul style="list-style-type: none"> <li>• Data Request Tracking Table</li> <li>• Electronic Document Archive</li> </ul>	<ul style="list-style-type: none"> <li>• M#1 - Kickoff meeting to align on project goals</li> </ul>
Task 2: Water Supply and Demand Outlook	<ul style="list-style-type: none"> <li>• Summary water supply challenges (surplus, normal, and dry years)</li> <li>• Summary of demands (near- and long-term)</li> <li>• Define evaluation criteria</li> <li>• Technical materials for W#1 and 1-on-1 interviews</li> <li>• Summary of potential supply gap</li> </ul>	<ul style="list-style-type: none"> <li>• W#1 - Verify demand and consumption patterns and projections with stakeholders</li> </ul>
Task 3: Identify Concepts and Evaluate Projects	<ul style="list-style-type: none"> <li>• Table and map(s) of existing and potential future water supply concepts</li> <li>• Project Fact Sheets and cost tables</li> </ul>	<ul style="list-style-type: none"> <li>• 1-on-1 Interviews - Input on evaluation criteria and water supply concepts</li> <li>• M#2 - Develop preliminary list of concepts</li> <li>• W#2 - Review concepts and screening with stakeholders</li> <li>• M#3 and M#4 - Screen concepts and define projects for detailed evaluation</li> <li>• M#5 - Review project evaluations and costs</li> </ul>
Task 4: Project Ranking and Portfolio Development	<ul style="list-style-type: none"> <li>• Matrix of project ranking outcomes</li> <li>• Technical materials for W#3</li> <li>• List of portfolio themes and associated projects</li> <li>• Outcomes of portfolio evaluation</li> </ul>	<ul style="list-style-type: none"> <li>• M#6 - Rank projects and develop portfolios</li> <li>• W#3 - Stakeholder input to project ranking and alignment on the development of portfolio themes</li> <li>• M#7 - Identify preferred portfolio</li> </ul>
Task 5: WSDS Report	<ul style="list-style-type: none"> <li>• Draft WSDS Report</li> <li>• Final WSDS Report</li> </ul>	<ul style="list-style-type: none"> <li>• M#8 - Prepare for presentation to the Board</li> </ul>
Task 6: Meetings, Workshops, and Presentations	<ul style="list-style-type: none"> <li>• Agendas, presentation slides, and summaries for workshops and meetings</li> <li>• Compiled outcome from 1-on-1 interviews</li> <li>• Board presentation materials</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings and workshops shown in corresponding Tasks 1-5</li> <li>• Presentation of draft report to the Board</li> </ul>



### Task 7: Project Management and QA/QC

- Monthly status reports and invoices
- Monthly Schedule update
- Agendas and action items
- Coordination calls

▲ **Table 2.** Summarized tasks, deliverables, meetings, and workshops for the WSDS Report.

M# - MEETING NUMBER, TYPICALLY WILL BE LVMWD AND KJ STAFF ONLY. INCLUDES AGENDA, MATERIALS, AND MINUTES.

W# = WORKSHOP NUMBER, TYPICALLY WILL INVOLVE STAKEHOLDER GROUP AND INCLUDES AGENDA, MATERIALS, AND SUMMARY OF OUTCOMES.

## Assumptions common to all tasks:

- Las Virgenes Municipal Water District (District, LVMWD) will lead communication, outreach, and identify the Stakeholders to be invited to events.
- LVMWD will be responsible for communication with stakeholders, including inviting stakeholders to meetings and setting meeting dates and times.
- The stakeholder group will not exceed 22 individual members.
- All deliverables will be provided in electronic format, with drafts typically provided in Microsoft Word to facilitate review and comment, and final files provided in portable document format (PDF).
- LVMWD will review deliverables within 2 weeks and provide a single consolidated set of comments for each deliverable. KJ will use regular check-in meetings to resolve issues and gain clarification on LVMWD comments.
- LVMWD will use cost data provided by KJ to determine customer bill impacts.

## Task 1 - Data Collection, Compilation, and Review

### Task 1.1 Data Acquisition and Review

The purpose of this task is to summarize the water resources of the region, the District, and its neighbors, the facilities to convey water sources, and to identify the opportunities and challenges to growing water supplies in the local area. KJ will develop a data request and tracking table to document data needs, acquisition, and review.

Relevant studies will be reviewed at a high-level to identify information that may be relevant to the WSDS. **Studies by LVMWD may include, but not be limited to those shown in the blue box.**

- 2020 Urban Water Management Plan for Las Virgenes Municipal Water District (July 2021)
- Las Virgenes Municipal Water District & Las Virgenes-Triunfo Joint Powers Authority Climate Action & Adaptation Plan (September 2023)
- Joint Powers Authority of Las Virgenes Municipal Water District and Triunfo Sanitation District Recycled Water Master Plan (June 2014) and any available updates
- Las Virgenes Municipal Water District Potable Water Master Plan (June 2014) and any available updates
- Pure Water Project Programmatic Environmental Impact Report
- Pure Water Project Program Implementation Plan (2022)

Neighboring agencies and regional agencies have also produced many documents that may inform the WSDS, including the following:

- Los Angeles County Waterworks District 29 2020 Urban Water Management Plan (October 2021)
- Calleguas Municipal Water District 2020 Urban Water Management Plan (June 2021)
- Calleguas Municipal Water District Water Supply Alternatives Study (March 2022)
- Data as available from the Calleguas Municipal Water District Water Resources Implementation Study
- 2020 Metropolitan Water District Integrated Water Resources Plan (2020)
- State Water Project Draft 2023 Delivery Capability Report (May 2024)
- State Water Project Long-Term Drought Plan (March 2024)
- CEQA documents and term sheets for banking programs such as:
  - Kern Water Bank Authority
  - Rosedale-Rio Bravo Water Storage District Banking and Exchange Program
  - Semitropic Water Banking and Exchange Program
  - Antelope Valley East Kern Water Agency

KJ will request any available updates to the identified studies. In addition, KJ will request GIS data documenting the service area boundaries, pressure zones, and major facilities (including treatment and conveyance facilities, and interconnections), water supply and demand data, agreements related to water allocations, and other relevant information related to water supply concepts.

#### Deliverables

- ▶ Data request tracking table (with regular updates)
- ▶ Electronic document archive
- ▶ Electronic document archive

## Task 2 - Water Supply and Demand Outlook

### Task 2.1 Define Purpose

KJ will summarize recent droughts in the service area, actions taken by LVMWD to strengthen supply resiliency, and the remaining supply vulnerabilities as identified in the recently completed Climate Action and Adaptation Plan (CAAP). Relevant CAAP topics include:

- Impacts of climate change on the water resources, water supply, and water and wastewater infrastructure within LVWMD and Triunfo Water and Sanitation District (TWSD) service areas.
- Future conditions modeled using the State of California Cal-Adapt tool.
- Relevant information from the Department of Water Resources (DWR) Climate Change Vulnerability Assessment regarding State Water Project (SWP), imported water supplies, and anticipated maximum allocations. Using available data, KJ will define likely supplies in a surplus, normal, and drought year, and define the likelihood of a surplus, normal, or drought condition. The outcome of Task 2.1 will demonstrate the need for supply diversification and show how the WSDS fits within the District's ongoing actions to improve system resiliency.

#### Deliverables

- ▶ Summary water supply challenges faced by the LVMWD service area, water supply in surplus, normal, and dry years

### Task 2.2 Future Demand Projections

Because LVMWD has already undertaken extensive and successful water efficiency measures, additional demand management is not considered to be a meaningful project concept. However, KJ proposes compiling existing demand projections and using the estimated future demands as a benchmark to assess the needed future supply.

LVMWD regularly undertakes projections of its water demands, both near-term as part of the Annual Water Supply and Demand Assessment reporting to DWR, and long-term as part of Urban Water Management Plan preparation. Using existing data, KJ will prepare a summary of near- and long-term demands through the planning horizon of 2045. KJ will define anticipated demands in a surplus, normal, and drought year and define the likelihood of a surplus, normal, or drought condition. This summary will include the sensitivity analysis of these projections to climate change, economic conditions, land use changes, and regulation.

**Workshop #1** - The summary of water demand projections will be presented at the stakeholder group assembled by LVMWD. Invitees will include the list of stakeholders provided in Attachment D of the RFP, which will be inclusive of local land use jurisdictions, chamber of commerce, environmental entities, local and neighboring water districts, board members, and District staff. This workshop could be held virtually or in person at LVWMD headquarters. A two-hour duration is assumed, with up to 2 KJ staff leading and participating. Effort for **Workshop #1** is included in Task 6.2.

Following **Workshop #1**, KJ will prepare a summary of near- and long-term demand projections in the LVWMD service area, including the influence of climate change, economic conditions, land use changes, and regulations. This summary will present a range of water demand for the future planning horizon.

#### Deliverables

- ▶ Summary of future demand projections for the District's service area, and anticipated demands in surplus, normal, and dry years
- ▶ Technical materials for **Workshop #1**

### Task 2.3 Define Screening Approach and Criteria

KJ will propose evaluation criteria to guide analysis of the water supply concepts, projects, and portfolios. Evaluation criteria will be quantitative and qualitative, considering factors such as:

- **Ability to Provide Supply During a Drought** – volume or available flow of new supply during peak seasons or over multiple dry years and the geographic area where supply could be delivered.
- **Engineering/Constructability Considerations** – based on the complexity of new facilities, including considerations for available space and construction challenges.
- **Implementation Considerations** – such as timeline for implementation, operational complexities, environmental impediments, and perceived public acceptance.
- **Institutional/Regulatory Complexity** – level of regional or regulatory coordination needed to execute a concept. May include jurisdictional limitations, complexity of agreements with external agencies, permitting challenges, water rights, and more.
- **Financial Considerations** – can initially be addressed at a qualitative basis relative to other concepts. Capital and life cycle unit cost estimates will be developed at the project-level.

**1-on-1 Interviews** - KJ will develop interview materials outlining desired study outcomes and potential screening criteria. KJ will ask stakeholders to “weigh” screening criteria with the weighting score adding to 100%. It is assumed there will be up to 10 individual stakeholder interviews with each interview lasting no more than 60 minutes and held using Microsoft Office (MSO) Teams videoconferencing. Effort for conducting 1-on-1 interviews is included in Task 6.3.

Following the stakeholder interviews, KJ will put together a list of recommended evaluation criteria for LVWMD review. Before proceeding to Task 3, LVWMD will need to confirm the desired evaluation criteria and weighting of the criterion.

#### Deliverables

- ▶ Development of materials for stakeholder interviews
- ▶ Recommended evaluation criteria

### Task 2.4 Perform Sensitivity Analysis and Variable Supply Portfolio

KJ will prepare an analysis of the “supply gap” given the anticipated supply and demand conditions evaluated in Tasks 2.1 and 2.2. As part of Task 2.4, KJ will evaluate the “status quo” using the evaluation criteria defined in Task 2.3. The evaluation of the status quo and the sensitivity analysis given the variable current supply portfolio will be presented in the WSDS Report.

#### Deliverables

- ▶ Define potential supply gap based on a comparison of supplies and demands under different hydrologic conditions

## Task 3 - Identify Concepts and Evaluate Projects

### Task 3.1 Identify Water Supply Concepts with Select Stakeholders

Water supply sources available to LVMWD include treated, drinkable water brought in from Metropolitan Water District of Southern California (Metropolitan), recycled water derived from the TWRP, groundwater from the Russell Valley Basin (used to supplement the TWRP), and surface runoff collected in the Las Virgenes Reservoir. Water from Metropolitan originates from the SWP. LVMWD has a management strategy to minimize reliance on imported water, including aggressive use of recycled water, use of groundwater to supplement recycled water supplies, and storing water in Las Virgenes Reservoir during low-demand periods in the winter to meet peak demand periods during summer months.

As part of Task 3.1, KJ will develop a table and map(s) of existing and potential future water supply sources. Future water supply concepts, shall include, but not be limited to:

- Pure Water Project Las Virgenes
- Ocean desalination direct
- Ocean desalination exchange
- Supply through Calleguas Municipal Water District
- Supply through LA County Waterworks District 29
- Exchange agreements with Calleguas, District 29, and/or Los Angeles Department of Water and Power
- Water banking outside of Metropolitan

Ahead of the 1-on-1 interviews, KJ will perform a rough screening of the water supply concepts against the evaluation criteria developed in Task 2. This screening will not present precise numbers or specific evaluation results, but rather describe the viability of a given concept (e.g., does it have a fatal flaw, is the anticipated yield low, medium, or high, what is the relative cost of implementation). The intent of the interviews is to obtain stakeholder input on proposed concepts, information on synergistic projects or new concepts, and their perspectives to guide the screening. Up to 10, 1-on-1 interviews are assumed to be via electronic platform with up to 2 KJ staff present, lasting up to 1 hour each.

#### Deliverables

- ▶ Table and map(s) of existing and potential future water supply concepts

### Task 3.2 Refine Water Supply Concepts with Broad Stakeholder Group

As part of Task 3.2, KJ will update the list of water supply concepts and use this updated list to facilitate a brainstorming session with the broad stakeholder group.

**Workshop #2** – KJ will facilitate a brainstorming session with the broad stakeholder group with the intent of refining water supply concepts and identifying any concepts overlooked during earlier stakeholder interviews. The workshop is assumed to be a hybrid meeting, with 1 KJ staff appearing in person and 2 KJ staff participating remotely, lasting up to 2 hours. Effort for **Workshop #2** is included in Task 6.2.

#### Deliverables

- ▶ Technical materials for **Workshop #2**

### Task 3.3 Project Evaluation

The six concepts selected in Task 3.2 will be evaluated using the criteria developed in Task 2. For the six selected projects, KJ will develop the following information:

- Project description with a map that lays out the major components of the alternative such as water source, treatment needs, treatment process, and conveyance. Key information about the water sources and limitations on using the water source will be described (water quality limitations, volume available, legal framework). The estimated yield of the project will be described in terms of flow rate and volume. KJ will utilize spreadsheet calculations to estimate pipeline and pump station capacity requirements and facilities sizes. Facility upgrades may vary based on water supply concept or possible groups of projects in a given portfolio.
- Detailed information on infrastructure needed to realize the supply yield (wells, conveyance, treatment, storage)
- Improvements to District resiliency
- Potential environmental impact and permitting complexity
- Institutional arrangements needed to realize the supply
- Costs will be developed at a conceptual level (Association for the Advancement of Cost Engineering International, Class 5)
  - For water supply concepts, high-level relative capital costs will be developed to support the initial screening, it may be that some concepts have insufficient information available to develop capital costs in which case a range will be developed based on professional experience
  - For projects, estimated capital costs and annual O&M costs will be developed
- Annualized capital costs will be developed based on a standard interest rate and life of project facilities, representing the:
  - Present value of initial capital costs for the planning period
  - A life cycle unit cost will then be developed by adding the annualized capital costs plus O&M costs divided by the volume of water supply delivered in a year. This will reflect the present value per unit of water delivered in acre-feet (AF) or cubic-feet-per-second.
  - District staff will utilize these costs to determine bill impacts

Each project will have a summary “fact sheet” that can be used for facilitating input from stakeholders. The fact sheet will describe major facilities, include a high-level map, list project benefits and limitations, summarized costs, identify potential risks, and other relevant considerations for implementation.

### Deliverables

- ▶ Project fact sheets, including project maps
- ▶ Project cost tables

## Task 4 - Project Ranking and Portfolio Development

### Task 4.1 Project Ranking

As a part of Task 4.1, KJ will use the screening criteria and weighting of criteria development as a part of Task 2.3.

For each criterion KJ will develop quantitative results or qualitative considerations. A numeric scoring system will be proposed (e.g. 1 to 3, or 1 to # of projects):

- A project that best meets a given criterion will receive the highest score for that criterion
- A project that mostly meets the criterion will receive a mid-range score for that criterion
- A project that does not meet a given criterion will receive the lowest score for that criterion

KJ will then apply the weighting factors to get a rank for each project. A matrix or “scorecard” will be prepared illustrating the highest ranked project and lowest ranked projects.



A sensitivity analysis will be performed to show why a given project rises to the top when one criterion is maximized but falls to the bottom when another criterion is maximized.

The process for developing the weighting, the survey results, the project scoring, and the project ranking table once weighting is applied will be summarized in the WSDS Report. The narrative will illustrate what project would rise to the top if a given criterion was given the highest consideration.

#### Deliverables

- ▶ Matrix of project ranking outcomes

### Task 4.2 Stakeholder Input to Project Ranking and Portfolio Development

As part of **Workshop #3**, KJ will present the results of the project evaluation to stakeholders, seeking input on stakeholder perspectives of project ranking, including additional benefits or challenges. **Workshop #3** will also seek alignment from stakeholders on the development of portfolio themes. Effort for **Workshop #3** is included in Task 6.2.

#### Deliverables

- ▶ Development of technical materials for **Workshop #3**
- ▶ List of portfolio themes and associated projects

### Task 4.3 Develop and Evaluate Portfolios

Task 4.1 will identify the highest-ranking project(s). However, it may be possible to “stack” or combine projects in a portfolio to meet more criterion as identified in Task 2.3. In this Task, KJ will consider how projects can be combined to create portfolios based on various implementation scenarios.

For example, there are some projects that could not be implemented at the same time or whose yield would be constrained and not additive. The reasons that projects could not be implemented concurrently include reliance on the same limited water source. In this case, it would not be productive to make multiple investments or to implement multiple projects when the underlying water source restricts the ultimate benefit. In some cases, yield is limited by reliance on the same infrastructure. While it is possible that additional infrastructure could be built so that projects would not be limited by shared facilities, the cost of that infrastructure would increase project costs, in some cases significantly. It is also possible that projects sharing infrastructure could be operated in a way so that they use the shared infrastructure in different time frames and the benefit of the various projects could be consecutive. These will be the considerations used to recommend a phased portfolio.

Based on input from the District and Stakeholders on portfolio themes and the results of project ranking in Task 4.1, up to four portfolios of projects will be identified reflecting multiple perspectives and prioritization of different goals, which will allow the District to drive alignment on a recommended set of near- and long-term projects. These portfolios will be evaluated and ranked based on input from the District and Stakeholders to identify a recommended portfolio.

Task 4.3 will lay out the future steps and the order of those steps needed to implement the recommended portfolio. Task 4.3 will include discussion of design, permitting, water rights related permitting, and California Environmental Quality Act (CEQA) review.

Results and work conducted in Task 4.3 will be summarized in the WSDS Report.

#### Deliverables

- ▶ List of portfolio themes and associated projects
- ▶ Outcomes of portfolio evaluation

## Task 5 - Water Supply Diversification Study Report

The WSDS Report will memorialize the efforts of the Study, including technical information, costs, the outcomes from stakeholder engagement, and ultimate recommendations for bolstering water supply reliability and diversification.

Using information from prior tasks, including meetings, workshops, and 1-on-1 interviews, KJ will prepare the WSDS Report, with the following proposed structure:

- **Executive Summary** - The executive summary will describe the overall approach to the study, and the criterion used to compare projects, followed by an overview of the range of projects evaluated, with a focus on the recommended water supply portfolio.
- **Chapter 1: Introduction** - This chapter will define the purpose of the study, overview of LVMWD and the region, and the need for alternative water supplies. Chapter 1 will also describe the project approach, including participation of the stakeholder group.
- **Chapter 2: Estimating Future Supplies & Demands** - This chapter will document the challenges faced by existing and near-term supplies available to LVMWD. Supplies will be characterized in surplus, normal, and drought years. The range of potential future demands in the LVMWD service area will also be quantified, including a sensitivity of these demands to different hydrologic cycles (surplus, normal, and drought). This chapter will conclude with a comparison of future demands to future supplies.
- **Chapter 3: Screening Approach** - The multi-step screening approach will be described, defining criteria applied at each step of the analysis. Input from stakeholders will be described in this chapter.
- **Chapter 4: Water Supply Concepts** - This chapter will identify the initial list of water supply concepts developed by the District and vetted by the stakeholders. The results of the initial screening will be presented, identifying concepts that move forward for further analysis as projects.
- **Chapter 5: Water Supply Projects and Portfolios** - This chapter will describe the iterative process of identifying and evaluating projects. A summary for each project will be provided, including costs, benefits, limitations, and risks. The results of the project level screening will be presented to rank projects. The development of portfolios will be described and the approach to identify a recommended portfolio based on input from the District and stakeholders.
- **Chapter 6: Recommended Portfolio** - This recommended portfolio will be the focus of this chapter, identifying the projects and performance for a range of water supply conditions. Project phasing and implementation steps will be discussed with a focus on needed capital investments over time and potential impacts to the average customer's water bill. Next steps will be discussed.
- **Appendices**
  - List of Participating Stakeholders
  - Materials and Summaries from Workshops #1, #2, and #3
  - Project Fact Sheets
  - Project Scoring Sheets
  - Cost Estimates including Customer Bill Impacts

### Task 5.1 Admin Draft Chapters

This task includes the development of Admin Draft chapters 1 to 5, which will be submitted to the District to facilitate review and input as the project progresses. Chapters will be submitted electronically as independent sections to facilitate ease of review by the District in track changes mode.

#### Deliverables

- ▶ Admin Draft Chapters 1 to 5 (electronic copy .doc)

### Task 5.2 Draft Report

In this Task, KJ will prepare the Draft Report that includes revision to Chapters 1-5 based on received District comments, an executive summary, a new Chapter 6, and associated appendices. The Draft Report will be submitted as a compiled PDF document and Word document for the main report. LVMWD will distribute the Draft Report for Stakeholder review, as appropriate.

#### Deliverables

- ▶ Draft Report (electronic copies .doc, .pdf)
- ▶ Response to comments on Admin Draft Chapters 1 to 5

### Task 5.3 Final Report

KJ will prepare a Final Report that includes revision to the Draft Report based on received District, Stakeholder, and Board comments. The Final Report will be submitted as a compiled PDF document.

#### Deliverables

- ▶ Final Report (electronic copy .pdf)
- ▶ Response to comments on Draft Report

## Task 6 - Meetings, Workshops, and Presentations

This task includes effort for key meetings, workshops, and presentations as outlined in Table 2.

### Task 6.1 Project Team Meetings

Regular team meetings to facilitate review progress of activities and specific deliverables are summarized below. Unless noted, these meetings are assumed to be held virtually using MSO Teams videoconferencing and will be attended by up to 3 KJ staff with an assumed duration of 90 minutes.

- **Kickoff Meeting (M#1)** - The focus of the first progress meeting is to confirm the scope, milestones, and available deliverables. KJ Team and LVMWD team roles and responsibilities will be discussed, identifying of the appropriate contacts for given tasks and data requests along and establishing preferred lines of communication. The responsibility for outreach to the proposed stakeholder group will be confirmed, including the list of stakeholders and desired participation outcomes. This meeting is presumed to be held in person at LVWMD headquarters, last up to two hours, with up to 2 KJ staff attending in person and 2 virtually.
- **Meeting #2** - Following the 1-on-1 Interviews (Task 6.3), KJ and District staff will discuss input from the stakeholder groups and to decide what concepts to carry forward for presentation to the broader stakeholder group in Workshop #2 (Task 6.2).
- **Meeting #3** - Following Workshop #2, KJ will hold a meeting with LVMWD staff to discuss initial screening options and determine what concepts to move forward as projects to detailed analysis in Task 3.3. It is assumed that no more than 6 project will be carried forward for detailed evaluation.
- **Meetings #4 to #6** - A series of three meetings will be held to define projects, review project evaluations (including costs), rank projects, and develop portfolios. Given that this may be an iterative process there may be overlapping activities where projects are refined as the evaluation develops.
- **Meeting #7** - This meeting will focus on comparison of the portfolios and identification of a preferred portfolio that best supports the near- and long-term diversification of the District's water supply.
- **Meeting #8** - This meeting will be to discuss the outcomes of the draft report that best supports the near- and long-term diversification of the District's water supply. KJ will walk through the draft presentation slides with District staff to refine talking points and provide the right level of information to gain alignment on the Study outcomes.

### Task 6.2 Stakeholder Workshops

Stakeholder workshops are planned as part of this scope of work, with details introduced in Tasks 2 and 3. Effort to develop technical workshop materials is budgeted with Tasks 2 and 3. Attendance at each workshop, development of an agenda, presentation slides, and effort to summarize the meetings outcomes is accounted for in this task.

- **Workshop #1** is focused on a summary of water demand projections. This workshop could be held virtually or in person at LVWMD headquarters. A two-hour duration is assumed, with up to 2 KJ staff leading and participating.
- **Workshop #2** will be a brainstorming session, facilitated by KJ with support from District communication staff, with the broad stakeholder group with the intent of refining water supply concepts and identifying any concepts overlooked during earlier 1-on-1 interviews. The workshop is assumed to be a hybrid meeting, with 1 KJ staff appearing in person and 2 KJ staff participating remotely, lasting up to 2 hours.
- **Workshop #3** will present the results of the project evaluation to stakeholders, seeking input on stakeholder perspectives of project ranking and the development of portfolio themes. The workshop is assumed to be a hybrid meeting, with 1 KJ staff appearing in person and KJ 2 staff participating remotely, lasting up to 2 hours.

#### Deliverables

- ▶ Agenda, presentation slides and summaries from **Workshops #1-3** (technical materials will be developed as part of prior tasks)

### Task 6.3 One-on-One Interviews

KJ will develop interview materials outlining desired study goals/outcomes and potential screening criteria. KJ will ask stakeholders to “weigh” screening criteria with the weighting score adding to 100%. It is assumed there will be up to 10 individual stakeholder interviews with each interview lasting no more than 60 minutes and held using MSO Teams videoconferencing. The interviews will also be an opportunity for stakeholders to provide their perspectives on preliminary water supply concepts and offer suggestions for new concepts or synergistic projects that may be relevant to the Study.

#### Deliverables

- ▶ Compiled outcomes from stakeholder 1-on-1 interviews

### Task 6.4 Board Presentation

One Board presentation is planned and budgeted to present the Draft WSDS to the Board of Directors. The presentation will include a summary of the approach, the contribution of stakeholders, major findings, and improvements recommended by LVMWD staff. This meeting will be attended in person by up to 2 KJ staff and is assumed to last 2 hours.

#### Deliverables

- ▶ Board presentation materials

## Task 7 - Project Management and QA/QC

KJ will develop and implement the appropriate management procedures and actions to facilitate timely and cost-effective delivery of quality service and deliverables to LVMWD for the Study. This includes project administration related to schedule, budget, and scope management, and communication of project activities with LVMWD.

### Task 7.1 Project Management

This task addresses the management and administrative responsibilities associated with project initiation, schedule, budget control, and monthly status reports and invoice preparation. The scope of work assumes a 16-month duration with submittal of 16 monthly invoices and status reports.

#### Deliverables

- ▶ Monthly status reports and invoices

### Task 7.2 Coordination Calls

Coordination calls will be conducted with the core KJ and District team in between progress meetings and workshops. It is assumed that 8 coordination calls will be conducted over the duration of the project, with an estimated duration of 1 hour with up to 2 KJ attendees.

#### Deliverables

- ▶ Agenda and action items from coordination calls

### Task 7.3 Quality Assurance and Quality Control (QA/QC)

All deliverables to LVMWD be reviewed in accordance with KJ's QA/QC process. KJ will conduct an in-house concepts & criteria review (C&CR) meeting early in the Project to obtain focused technical input from senior KJ staff based on their experience from other similar projects. This process is a component of KJ's quality control process and allows senior staff not directly involved in the project to provide technical review and input into the study. It helps address opportunities for improvements to the study and its processes, and address potential future challenges prior to draft and final reports.

## Task 8 (Optional) - As-Requested Support

This task includes a contingency for additional services that can be provided on an as-requested basis to provide LVWMD flexibility and save on administrative implementation time should additional services and/or activities be needed. KJ would work with LVWMD to define the level of effort and deliverables prior to the authorized use of this budget. Activities may include, but not be limited to:

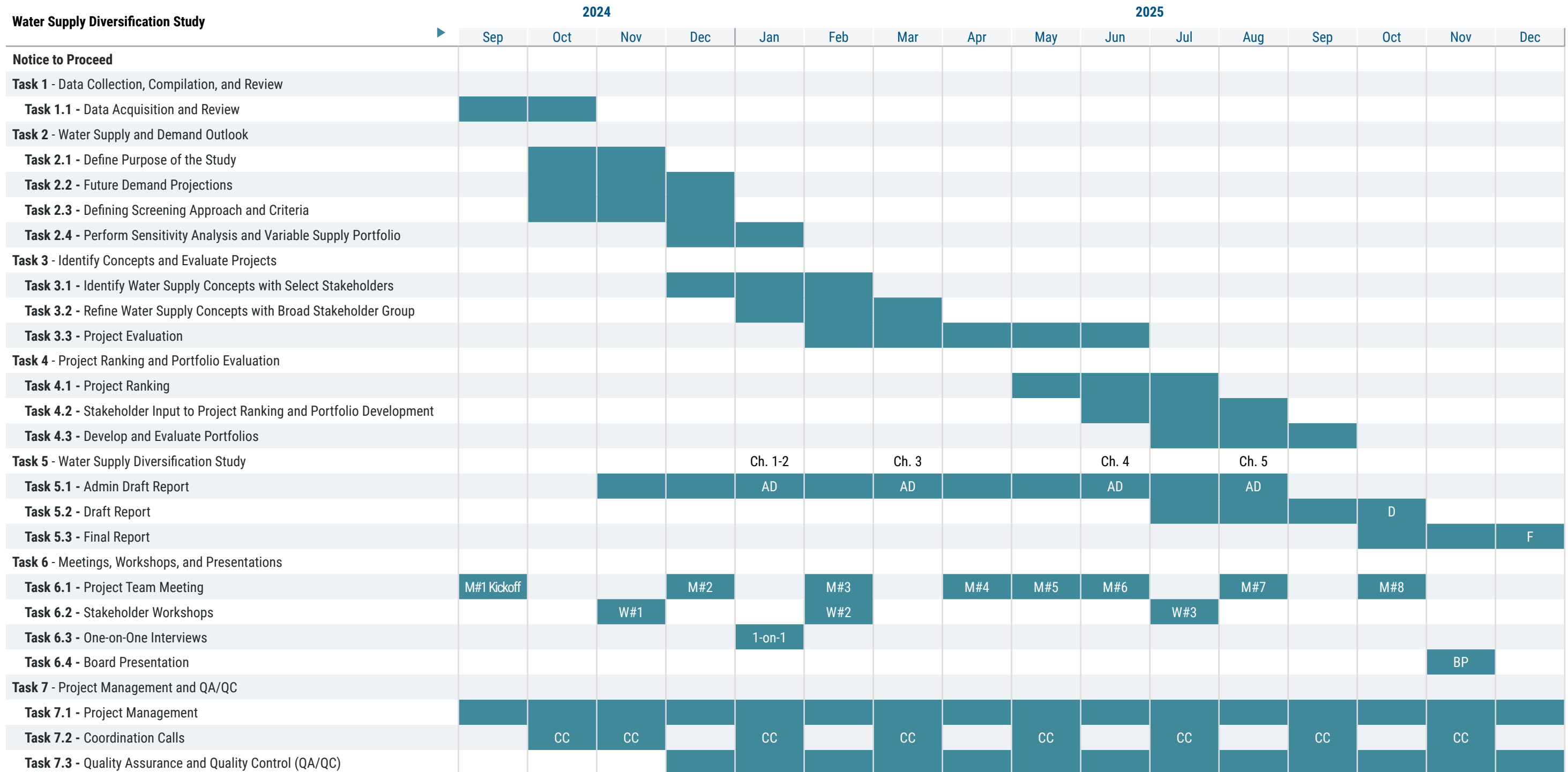
- Evaluation of more than 6 projects in Task 3
- Evaluation of more than 4 portfolios in Task 4
- Technical evaluation of project aspects not discussed above
- 1-on-1 interviews (in addition to the 10 stated in Task 3)
- Additional workshops and/or meetings



### Proposed Schedule

This proposal assumes the scope of services will be complete in sixteen months from receipt of the Notice to Proceed. This schedule assumes the District will provide review comments within two weeks of each submittal. Our proposed project schedule is shown in **Figure 7** below. Adhering to the anticipated notice to proceed date, meeting dates, and review times will be critical to achieving the dates presented in **Figure 7**. Upon selection, KJ can review the schedule to discuss modifications if a shorter timeline is preferred.

LEGEND				
▶	One Day	W#	Workshops	1-on-1
●	Multiple Days	M#	Meetings	AD
		CC	Coordination Call	D
		BP	Board Presentation	F
				1-on-1 Interviews
				Admin Draft
				Draft
				Final



▲ **Figure 7.** Anticipated schedule for the completion of the WSDS Study and Report.

## Proposed Fee Estimate

KJ proposes to provide scope of services on a time and material as summarized in in **Table 3** and detailed in **Section 4 - Cost to Perform Services**. The proposed fee estimate is based on the Schedule of Charges provided.

Tasks	Total Est. Hours	Total KJ Labor	Total Expenses	Total Labor and Expenses
Task 1: Data Collection, Compilation, and Review	42	\$11,110	\$0	\$11,110
Task 2: Water Supply and Demand Outlook	120	\$30,170	\$0	\$30,170
Task 3: Identify Concepts and Evaluation Projects	600	\$149,010	\$0	\$149,010
Task 4: Project Ranking and Portfolio Evaluation	284	\$72,050	\$0	\$72,050
Task 5: Water Supply Diversification Study Report	422	\$102,620	\$66	\$102,686
Task 6: Meetings, Workshops, and Presentations	186	\$48,840	\$1,045	\$49,885
Task 7: Project Management and QA/QC	138	\$38,960	\$0	\$38,960
<b>Tasks 1-7 Total</b>	<b>1792</b>	<b>\$452,760</b>	<b>\$1,111</b>	<b>\$453,871</b>
Task 8 (Optional*): As-Requested Support	0	\$46,000	\$0	\$46,000
<b>Tasks 1-8 Total</b>	<b>1792</b>	<b>\$498,760</b>	<b>\$1,111</b>	<b>\$499,871</b>

▲ **Table 3.** Summarized proposed budget by task.

\* Estimated at 10% of budget.

**Las Virgenes Municipal Water District**  
Water Supply Reliability and Diversification Study

**2 | Key Team**

The KJ team comprises in-house experts with a fresh vision and comprehensive experience in evaluating alternatives. Collaboration with your District staff, Board of Directors, and local stakeholders ensures effective and efficient solutions for the District's Water Supply Reliability and Diversification Study.

**Innovative Solutions, Local Expertise**

- In-house experts who have focused their careers on evaluating and implementing water supply projects.
- A deep understanding of your stakeholders and local, regional, and statewide water resource issues.
- Expertise in water infrastructure technical projects, providing a balance of local knowledge and fresh water management perspectives.

**Success in Water Projects Across California**

- Active in water supply, recycled water, and desalination projects across California, including multiple potable reuse programs in various stages of planning, design, and operation.
- A proven Project Manager supported by experienced professionals in conveyance systems, regulatory and environmental considerations, climate change, regional infrastructure, water resources, supply portfolio development, and cost estimations.
- Sensitivity to local concerns regarding the construction and operation of new facilities within your community.

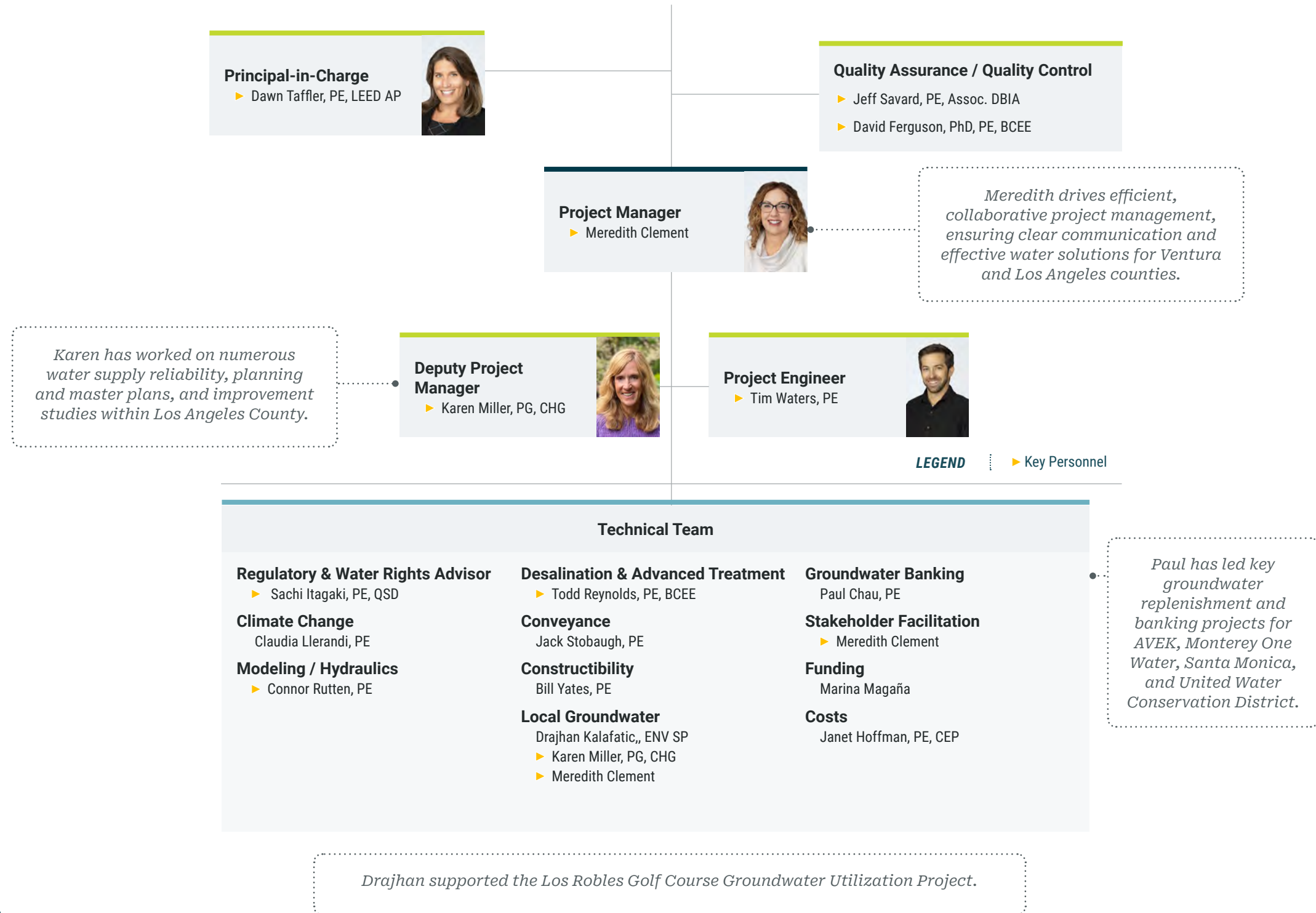
**Reliable and Diverse Water Solutions**

- A clear management structure assures defined lines of authority, responsibility, and communication for timely delivery.
- Applying insights and lessons learned from planning and implementing water supply programs.

Brief biographies for our team members are included in this section. Tailored resumes for all staff are included in Appendix A. Proof of professional registration for staff is included in Appendix B.

**Partnering with the District for Reliable and Effective Water Supply Alternatives**

**Las Virgenes Municipal Water District**





## Meredith Clement Project Manager

**Meredith will be your primary point of contact and leader of our multidisciplinary team, utilizing an organized, collaborative management style to benefit your Study and support District Staff.** Overseeing the execution of work, schedule, and budget compliance and communicating directly with the District on project status. She is the Practice Leader for One Water at KJ, with special expertise in water planning, urban planning, and environmental compliance documentation throughout California, including California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA).

### Years of Experience

26

### Education

MS, Transportation Engineering, California Polytechnic State University

MS, City and Regional Planning, California Polytechnic State University

BS, Environmental Policy, Analysis, and Planning, University of California Davis

### Value to Your Project

- Facilitates effective water resource planning with regional partners, enhancing water supply solutions for Ventura and Los Angeles counties, including the State Water Project.
- Tackles water supply challenges in Ventura and Los Angeles Counties, managing imported water restrictions and coordinating with local water agencies. **Works closely with interdisciplinary teams to deliver efficient water supply solutions with a proactive and adaptable approach.**
- Leads studies like the Calleguas MWD Water Supply Alternatives Study, evaluating 123 different water supply options to improve emergency preparedness.
- Communicates technical information clearly to stakeholders, ensuring understanding and alignment, as demonstrated in the Ventura-Calleguas State Water Project Interconnection EIR.
- Builds strong collaboration within her team, having worked with all members on multiple projects assures effective execution.



## Karen Miller, PG, CHG Deputy Project Manager

**Karen will work directly with Meredith to assure project milestones are met and efforts are within negotiated budgets.** She is a water resources and environmental professional working on specialized water resources & supply, planning, feasibility, and climate change resilience studies in California. She is well versed with the California's water supplies, constraints, and stakeholders, allowing her to deliver innovative and sustainable solutions to the District.

### Years of Experience

28

### Education

MS, Geology, Utah State University

BS, Geology, Duke University

### Registrations

Professional Geologist (PG), CA (7049)

Certified Hydrogeologist (CHG), CA (719)

### Value to Your Project

- Brings 28 years of experience in California's water resources planning, including strategic planning, groundwater management, environmental studies, stormwater capture, feasibility studies, adaptive management, sustainability, and climate resilience.
- Extensive knowledge of Ventura and Los Angeles counties' water supply challenges and solutions, demonstrated through key roles in projects like LADWP's Urban Water Management Plans, One Water LA 2040 Plan, and various groundwater sustainability plans.
- Proven collaboration with regional experts Meredith, Dawn, and Sachi on multiple master plans and grant efforts, showcasing strong communication, technical writing, and analytical skills.





## Tim Waters, PE Project Engineer

**Tim will lead technical tasks related to alternatives evaluation, infrastructure requirements, and water management considerations.** He will utilize his recent and relevant experience working alongside Meredith on the Calleguas MWD Water Supply Alternatives Study, which has synergies with many of the District's considerations for water supplies. Tim will leverage his experience to lead the technical team in quickly developing cost-effective solutions to your project's challenges. He will work directly with Meredith to meet project milestones and budget goals.

### Value to Your Project

- Tim has collaborated closely with project team members Meredith, Dawn, and Connor on multiple water master planning projects, leveraging his expertise in Ventura and LA counties. His familiarity with the State Water Project enhances his ability to contribute valuable insights into water supply alternatives.
- Tim has 14 years of experience in the planning and design of pump stations and pipelines. He has conducted system hydraulic analyses for water and recycled water facilities, ensuring efficient and reliable operations.

**Years of Experience**  
14

**Education**  
BS, Civil Engineering,  
University of Nevada,  
Reno

**Registration**  
Professional Engineer,  
Civil, CA (86080)



## Dawn Taffler, PE, LEED AP Principal-In-Charge

**Dawn will execute the contract, oversee the project and its mission, and help define and track specific project goals and objectives for the needs of the District.** She will assign additional resources available through the firm, as necessary, to provide adequate staffing capacity for meeting your needs and achieving your desired schedule.

### Value to Your Project

- Bringing experience from over 60 water resource planning projects and analyzing over 200 alternatives to supplement supplies, Dawn provides invaluable expertise and knowledge.
- Specializes in recycled water and water supply planning; previously led KJ's Recycled Water Community of Practice from 2014 and the One Water Community of Practice from 2018 to 2022, and served as a board member WaterReuse California from 2016 to 2023.
- Successful track record implementing plans involving transparent screening approaches to prioritize projects and presenting complex information with the right level-of-detail.
- Deep understanding of water resource challenges and opportunities in Ventura, LA counties, and the State Water Project, demonstrated through projects like the Pure Water Las Virgenes Feasibility Study and United Water Conservation District's Water Resources Optimization Plan.

**Years of Experience**  
24

**Education**  
MS, Civil and  
Environmental  
Engineering, University  
of California, Berkeley

BS, Civil and  
Environmental  
Engineering, University  
of Illinois, Champaign-  
Urbana

**Registrations**  
Professional Engineer,  
Civil, CA (65754)

Leadership in Energy  
and Environmental  
Design (LEED)



**Years of Experience**  
34

**Education**  
BS, Civil and  
Environmental Engineer,  
California Polytechnic  
State University, San  
Luis Obispo

**Registration**  
Professional Engineer,  
Civil, CA (51156)

## Jeff Savard, PE, Assoc. DBIA QA/QC

**Jeff will implement Quality Assurance and Quality Control alongside David, working closely with Meredith.** Jeff is experienced through working on numerous water studies and recycled water systems within Los Angeles County.

### Value to Your Project

- Over 34 years managing and designing potable, recycled, and wastewater projects, including the Potable Water Master Plan for Calleguas MWD and the Water System Master Plan for Oxnard, ensuring adept handling of regional water challenges and regulations.
- Familiar with JPA facilities and Calleguas MWD's Salinity Management Pipeline requirements, demonstrated in roles such as Principal-in-Charge for the Potable Water Master Plan and the Las Posas Replacement Water Study, ensuring seamless integration and compliance.
- Proven ability to keep projects on schedule and within budget, highlighted by roles like QA/QC Reviewer for the Water Supply Reliability Study for Ventura and Principal-in-Charge for the Recycled Water Master Plan for Oxnard, ensuring efficient project management and problem-solving.



**Years of Experience**  
45

**Education**  
PhD, Executive  
Management, Claremont  
Graduate University

MS, Civil Engineering,  
University of  
Massachusetts

BS, Environmental  
Science  
BS, Civil Engineering,  
University of  
Massachusetts

**Registration**  
Professional Engineer,  
Civil, CA (34626)

Board Certified  
Environmental Engineer

## David Ferguson, PhD, PE, BCEE QA/QC

**David will lead Quality Assurance and Quality Control alongside Jeff, working directly with Meredith supporting technical staff and ensuring resources are properly allocated for efficient use of schedule and budget to best support the Study.**

### Value to Your Project

- Adds over 45 years of civil engineering experience, improving water master plans and diversification studies for Ventura and LA counties, and contributing to the State Water Project.
- Demonstrates leadership in numerous recycled and potable water master plans, such as those for Antelope Valley-East Kern Water Agency, Calleguas MWD, and City of Thousand Oaks, addressing regional water challenges.
- Provides expertise in technical reviews for water treatment and disinfection processes, highlighted by the successful Title XVI Feasibility Study, securing a Bureau of Reclamation WaterSMART Grant without alterations in collaboration with KJ.
- Specializes in water system planning, groundwater resource analysis, water quality evaluation, treatment process alternatives, technical feasibility, and financial analysis, ensuring comprehensive and effective project solutions.



## Sachi Itagaki, PE, QSD Regulatory and Water Rights Advisor

**Sachi will support Meredith and the technical team through advising on regulatory and water rights.** She will also provide insight into water resources planning considerations, including water demand projection methodologies, regulations, and supply reliability with her vast experience on Urban Water Management Plans, feasibility and recycled water planning services.

**Years of Experience**  
33

**Education**  
MS, Civil Engineering  
and Water Resources,  
Stanford University

BS, Ocean Engineering,  
Stanford University

**Registration**  
Professional Engineer,  
Civil, CA (50221)

### Value to Your Project

- Sachi and Meredith have consistently bridged the gap between technical teams and policymakers, assuring seamless implementation and permitting of integrated water planning studies. Their expertise in institutional and regulatory frameworks has been instrumental in facilitating the approval of numerous water resource projects.
- Has over a decade of experience working on five distinct projects with the District, providing deep insights into the intricacies of SWP operations and management, which have been crucial in addressing regional water supply challenges.
- Extensive work in Ventura and Los Angeles counties has involved detailed water resource planning and management, leveraging her deep understanding of local water issues to develop effective solutions tailored to these regions.



## Todd Reynolds, PE Desalination and Advanced Treatment

**Todd will advise on the desalination and advanced treatment alternatives to support the District's goal through the Study.** Providing technical expertise on brackish and ocean water desalination treatment technologies, intake/outtake considerations, and other advance treatment considerations

**Years of Experience**  
34

**Education**  
MS, Environmental  
Engineering, University  
of California, Berkeley

BS, Nuclear Engineering,  
University of California,  
Berkeley

**Registration**  
Professional Engineer,  
Civil, CA (48658)

### Value to Your Project

- Todd brings 34 years of hands-on experience in engineering and management for surface water, brackish, and seawater desalination membrane treatment.
- He's an expert in planning, feasibility studies, water quality evaluation, pilot testing, plant design, construction, and optimizing operations.
- He's led major water treatment projects in Ventura and Los Angeles counties, and with the California State Water Project. For example, he managed the Somis Desalter Feasibility Study for Calleguas Municipal Water District, delivering a reliable local water supply and improved water quality.
- Todd served as the Technical Advisor for the Santa Cruz Desalination Program, led a Bay Water Desalination Pilot for Marin Municipal Water District, and designed the Monterey One Water membrane treatment facility.
- Todd's membrane treatment expertise and advisory services on a number of desalination projects will help the District assess your ocean and brackish water desalination options.

**Years of Experience**

8

**Education**

MS, Civil and Environmental Engineering, Stanford University

BS, Civil Engineering, University of California, Los Angeles

**Registration**

Professional Engineer, Civil, CA (92734)

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**Connor Rutten** Modeling / Hydraulics

**Connor will perform hydraulic analysis related to conveyance and storage alternatives.** If deemed necessary by the District, Connor can utilize existing District hydraulic models to estimate current available capacities in existing systems.

## Value to Your Project

- Delivers comprehensive hydraulic modeling and master planning expertise, delivering accurate and effective project outcomes.
- Enhances project planning with over 10 completed water, wastewater, and recycled water studies, providing valuable insights and solutions.
- Strengthens project forecasting through precise population/demand projections and robust evaluation of Capital Improvement projects.
- Utilizes advanced tools like SewerGEMS and InfoSewer/InfoSWMM to develop, calibrate, and analyze wastewater models, ensuring optimal system performance.
- Streamlines project execution with detailed civil/mechanical design drawings, thorough contract documents, and precise construction inspection services.
- Combines large-scale system hydraulics understanding with practical implementation skills to deliver impactful project solutions.

**Years of Experience**

10

**Education**

MS, Civil and Environmental Engineering, University of California, Davis

BS, Chemical Engineering, Simon Bolivar University

**Registration**

Professional Engineer, Civil, CA (86734)

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**Claudia Llerandi, PE** Climate Change

**Claudia will lead project analysis related to climate vulnerabilities and risks for alternatives evaluation.** She will also consider the impact on new and existing District facilities due to extreme events such as droughts, floods, wildfires, power outages, high temperatures, and other climate change-associated risks.

## Value to Your Project

- Led the KJ team for the District Climate Action and Adaptation Plan, including climate risk assessment, vulnerability analysis, and infrastructure adaptation strategies for water, wastewater, and recycled water infrastructure.
- Managed the development of the Climate Change Readiness Study for Crescent City, assessing climate hazards and proposing mitigation actions for wastewater infrastructure resilience.
- Conducted multiple water reuse strategy and water supply alternative studies within California, including Ventura and LA counties, ensuring alignment with the State Water Project's goals.
- Extensive experience in planning, permitting, designing, and implementing recycled water projects, including the Westside Recycled Water Program for SFPUC, to enhance local sustainable water supplies.

**Las Virgenes Municipal Water District**  
Water Supply Reliability and Diversification Study

**3 | Qualifications and References**



## California Experience - A Solid Foundation of Successful Water Supply Projects Across the State

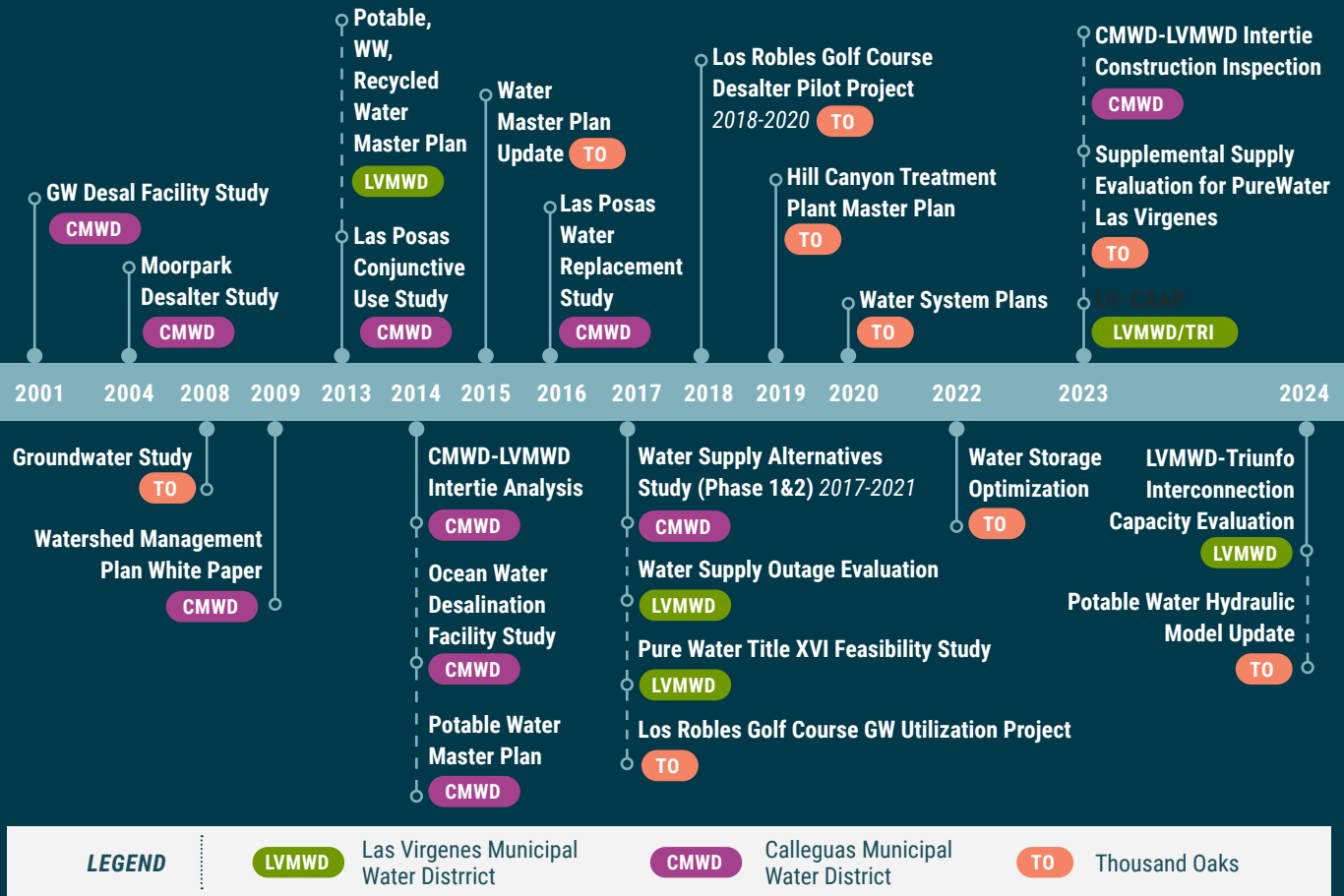
KJ is committed to delivering efficient, cost-effective, and sustainable water solutions customized to the District's specific requirements through our integrated approach. Figure 8 highlights planning work KJ has done for clients throughout California, assessing current systems and planning for future growth, by enhancing regional connectivity and reliability.



**▲ Figure 8.** KJ Water Resource Planning Study Experience throughout the state of California.

## Local Agency Expertise - Proven Ability to Collaborate with Local Agencies to Find Reliable Water Supply Alternatives Tailored to Your Needs

KJ has been providing planning, design, and construction management services for the District for over 35 years, completing over 40 projects. The timeline below demonstrates some of KJ's past and current projects that are relevant to this effort, for the District, Calleguas Municipal Water District, and the City of Thousand Oaks, demonstrating the wealth of knowledge the KJ Team can offer to evaluate options to diversify your water supplies and sources.



KJ's extensive work across California provides a solid foundation for identifying local, reliable, and resilient water supply projects that meet LVMWD's specific needs. With our proven track record of working closely with local agencies, KJ offers a comprehensive and tailored approach to water supply solutions. **KJ is committed to helping the District develop the right objectives and criteria to evaluate, screen, and prioritize projects, ensuring they meet both state-wide standards and local requirements effectively.**

Our wide-ranging experience enables us to meet your specific requirements, including:

- Projecting flow requirements through water supply and demand scenarios
- Considering hydrologic variability and climate change
- Conducting comprehensive alternative evaluation and portfolio development
- Defining project facilities with concept-level mapping and hydraulic analysis
- Identifying deficiencies and risks
- Developing capital improvement programs with risk-based prioritization
- Providing cost estimates and implementation schedules for projects
- Creating Urban Water Management Plans, Drought Management Plans, Groundwater Sustainability Plans, and Master Plans

## References and Showcase Project Descriptions

The following references and showcase projects demonstrate how our team’s experience and qualifications are responsive to the services requested for your Study.

### Planning for Alternative Water Supplies



#### Client Reference

Kristine McCaffery, PE | General Manager  
(805) 526-9323  
kmccaffrey@calleguas.com

#### Relevant Team Members

- Dawn Taffler
- Meredith Clement
- Paul Chau
- Janet Hoffman
- Marina Magaña
- Connor Rутten
- Jeff Savard
- Bill Yates

### Water Supply Alternatives Study | Calleguas Municipal Water District, Thousand Oaks, CA

KJ supported Calleguas through a multi-phased process to evaluate a comprehensive range of potential projects to provide emergency supply during an extended outage of imported water. Approximately 75 percent of the demands within the Calleguas service area are met with imported water; some areas, such as the Simi and Conejo Valleys, are nearly entirely dependent on imported water. Calleguas identified several points of vulnerability in the imported water system and determined that development of alternative water supplies that can be used if critical imported supplies are cut off for an extended period in an emergency, such as a seismic event, was needed.

- **Phase 1** of the study involved a reconnaissance-level evaluation of a comprehensive list of potential water supply projects through a series of interactive workshops conducted with the Calleguas board, staff and the public. The project team met with Calleguas purveyors and neighboring water agencies to identify specific potential projects. This extensive effort resulted in the identification of over 80 potential projects. The range of projects under evaluation included stormwater capture and reuse, indirect and direct potable reuse, groundwater desalination, seawater desalination, interconnections with neighboring water supplies, grey water reuse, reservoir expansion, crop fallowing, arundo removal, and demand management measures.
- **Phase 2.1** used the five proposed projects outlined in Phase 1 and developed the evaluation criteria and costing methodology to be used for the broader analysis in Phase 2.2. The intent of Phase 2.1 was to capture the range of different scenarios that would need to be evaluated, such as groundwater projects, water quality treatment, recycled water use, reservoir modifications, and water use efficiency. Projects also varied in that some would be within the purview of Calleguas MWD alone and others would require partnerships and other institutional arrangements.
- **Phase 2.2** involved coordinating with a broader array of stakeholders including mutual water agencies, city water departments, Groundwater Management Agencies, City and County planning departments, and Calleguas MWD. The analysis was challenged by evolving groundwater rules and pending changes in urban water demand from new legislation.

**Calleguas is currently in the process of implementing projects identified by KJ in the study.**

## Exploring and Implementing Groundwater Banking



### Client Reference

Matthew Knudson | General Manager  
(661) 349-7310  
mknudson@avek.org

### Relevant Team Members

Paul Chau  
Sachi Itagaki  
Meredith Clement  
David Ferguson  
Jeff Savard  
Bill Yates  
Karen Miller (prior to joining KJ)

## Groundwater Banking Program | Antelope Valley-East Kern Water Agency (AVEK), Palmdale, CA

AVEK implemented an \$80 million water banking program with a two-fold objective: (1) water supply stabilization, and (2) regulatory compliance with the Stage 2 Disinfectants/Disinfection ByProducts (D/DBP) Rule; specifically trihalomethane (THM) control with free chlorine as the distribution system secondary disinfectant. The program includes multiple phases for a large Westside Water Bank and a smaller Eastside Water Bank.

- **The Westside Water Bank** was constructed on a 1,475-acre agricultural property in west Lancaster, California. The water bank includes 500 acres of agricultural field flooding (low berm recharge basins) with a capacity to spread up to 50,000 af/year, and 11 potable recovery wells with a capacity of 20 to 30 mgd depending on aquifer water levels. AVEK completed construction of the Phase 1 wells in early 2014, with Phase 2 (the newest two wells) in 2017. KJ performed the Conceptual Design Report, blending water quality evaluation, groundwater modeling, and the well drilling design and field observation. AECOM designed the pipelines with KJ as a subconsultant for the design of well equipping and the treatment site facilities (including two 4.0 mg steel tanks).
- **The Eastside Water Bank** was constructed on an 80-acre site in Littlerock, California with 6 acres of recharge basins designed to recharge 3,000 af/year and 3 potable recovery wells with a capacity of 5 mgd. In addition to supplying AVEK's Eastside water treatment service area, the project has the capability to pump back to the East Branch of the State Water Project. KJ worked on the groundwater modeling and concept design for a substantial expansion.
- **The 4 MG Steel Tank** used to collect the Phase 1 recovery well production, disinfect, and meet DDW disinfection requirements, was bid as a separate bid package with results at less than \$0.40 per gallon. This approach was repeated for the second 4 MG Steel Tank in Phase 2 with nearly identical results.

**The Eastside and Westside water banks have captured low cost water for storage that has been recovered for regional benefit during drought and other outages.**



## Evaluation of Supplemental Supplies



### Relevant Team Members

Paul Chau  
Dawn Taffler  
David Ferguson  
Connor Rutten  
Jeff Savard

### Las Posas Replacement Water Study | Calleguas Municipal Water District, Thousand Oaks, CA

KJ worked with Calleguas Municipal Water District to identify and evaluate potential water supply projects that could be implemented to replenish the Basin and evaluate water conveyance options to facilitate direct delivery of supplemental supplies.

**Our approach utilized a weighted criteria ranking analysis to assess each project alternative, based on criteria developed from a stakeholders group comprised of public and private users of the Basin. The work performed included analysis of:**

- **Stormwater Supply** – three studies to evaluate stormwater as a supplemental water source: Beardsley Wash; Gabbert Canyon Channel Improvements; and Moorpark Wastewater Treatment Plant Percolation Basins.
- **Treated Brackish Water Supply** – four studies to evaluate treated brackish water from mutual water companies as a supplemental water source: Arroyo Las Posas, Berylwood Heights, Zone, and East Las Posas (conveying from Moorpark Desalter).
- **Imported Water Supply** – four studies to evaluate opportunities for imported water sources. The studies included limited-term supplies (transfers and leases), long term supplies (SWP Table A Purchase), various central and northern California water rights holders, and City of Oxnard Advanced Water Purification Facility water (via United Water Conservation District).
- **Recycled Water Supply** – two studies to evaluate Simi Valley recycled water as a supplemental water source: direct conveyance to Las Posas and downstream recharge from the water quality control plant.
- **Arundo Removal** – study to evaluate removal of an invasive plant species from Arroyo Las Posas and Arroyo Simi and its estimated effect on groundwater storage.

Results of the combined studies were presented using a portfolio approach based on a transparent decision model and ranking. **Overall, it was found that opportunities to diversify the Basin's water supply are regionally accessible with supply types including stormwater, treated brackish water, imported water, recycled water, as well as invasive vegetation removal.**



## Brackish, Bay, and Ocean Water Desalination

### Los Robles Brackish Groundwater Desalination Program and Pilot Testing | City of Thousand Oaks, Thousand Oaks, CA

The City of Thousand Oaks was seeking to increase local resiliency by desalting local groundwater, thereby reducing reliance on imported water. An Initial Study was prepared identifying:

- Feasible alternatives for water supply from local wells
- Feasible treatment alternatives including (i) conventional two-pass Reverse Osmosis (RO) vs. (ii) Closed Circuit Reverse Osmosis (CCRO); both with iron oxidation/filtration pretreatment
- A feasible alternative for handling the RO concentrate brine stream and filter backwash disposal to the City's sanitary sewer

KJ prepared a Preliminary Design Report (PDR) that identified design criteria for the proposed well, treatment and conveyance systems. Pilot testing results showed that CCRO could operate at a higher recovery of 83%, providing lower brine discharge and lower life cycle cost. Conventional RO was limited to a recovery of 76%.

### Emergency Desalination Feasibility Study | Marin Municipal Water District, Corte Madera, CA

In the summer of 2021, with their reservoirs at less than 30-percent capacity, MMWD reached out to KJ to lead a fast-paced emergency desalination water supply feasibility study. KJ assembled a team of experts and consultants that had worked together previously on the MMWD Seawater Desalination Pilot Program to quickly and efficiently conduct the study.

With the goal of providing water in less than 12-months, the emergency desalination feasibility study evaluated leased, containerized desalination systems, ship-based desalination systems, and skid-based equipment in temporary facilities. We summarized available capacity, costs, schedule and contracting mechanisms for the desalination equipment. Our team also developed preliminary design concepts for the intake, brine disposal, power supply, and treated water distribution systems. In parallel, KJ led presentations and discussions with the Division of Drinking Water and various regulatory permitting agencies to inform and lay the groundwork for potential permitting of an emergency water supply.

### Seawater Desalination Evaluation for Potable Water Master Plan | Calleguas Municipal Water District, Thousand Oaks, CA

As a part of the Potable Water Master Plan Update, KJ worked in collaboration with Calleguas MWD staff to develop a Technical Memorandum (TM) to provide a preliminary assessment of the requirements, feasibility, and cost of implementing a potential seawater desalination plant for Calleguas as an alternative water supply source. The TM identified alternatives for seawater desalination intake and brine discharge, along with treatment plant requirements. KJ developed conceptual layouts and criteria, established preliminary costs for implementation, and described the requirements for permitting and additional studies that would be required to move forward with implementation. The TM considered two desalination plant-treated water capacities: 15 cfs and 125 cfs. In accordance with the work performed as part of the master plan update, the actual plant requirement is estimated to be 110 cfs based on existing water supply and projected future demand.

## Regional Water Supply Planning Efforts

Kennedy Jenks has supported the City of San Buenaventura on a number of projects over the year to plan, design, and implement key facilities to develop a more resilient water supply. The follow efforts highlight projects that have similar components to the Study.

### State Water Project (SWP) Blending Station Siting Study | City of San Buenaventura, Ventura, CA

Kennedy Jenks conducted a siting study for City's proposed SWP Blending Station, building on an alignment study for the State Water Interconnection Pipeline, also prepared by KJ. The alignment study included a water quality assessment considering the different water qualities provided by Calleguas and the City, and a range of blended water qualities. The water quality assessment recommended conditioning the SWP water at the interconnect prior to blending to provide a stable and compatible water quality for the City's drinking water distribution system. The study evaluated the three alternative sites identified in the EIR and to recommend a preferred location based on cost and non-cost factors.

### Ventura-Oxnard Recycled Water Interconnection Feasibility Study | City of San

Buenaventura, Ventura, CA

This feasibility study explored the viability of discharging recycled water to the City of Oxnard's Advanced Water Purification Facility, accounting for the scenario that if treatment capacity is not available or if there is not enough demand, the flow would be discharged to either Oxnard's ocean outfall or CMWD's Salinity Management Pipeline. The alternative discharge scenario was compared to the three recycled water uses previously investigated (urban recycled water use, agricultural recycled water use, and groundwater recharge recycled water use). To effectively evaluate the feasibility of discharging effluent to the Oxnard, the study explored water quality compatibility between Ventura and Oxnard, pipeline and treatment capacity requirements, permitting requirements, additional recycled water customers along the pipeline alignment, and grant funding potential.

### West Ventura County Water Supply Reliability Study | City of San Buenaventura, Ventura, CA

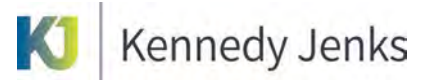
The objectives of the feasibility study were to evaluate the potential need for the intertie capacity based on the water supplies available to each city, evaluate potential constraints to the intertie, develop a recommended plan, identify permitting requirements, estimate the costs of the recommended plan, recommend a cost allocation plan, develop an implementation plan, and identify other potential opportunities for the potential intertie. Following completion of the feasibility study, Kennedy Jenks prepared preliminary design drawings and the required environmental documents. Subsequently, Kennedy Jenks assisted the City with evaluating short-term transfers of State Water including assessing the potential duration of any transfer and the impact on current and future holding costs; summarizing the transfer procedures, constraints and timeline for each potential buyer interested in the short-term lease option; and coordinating with DWR to accomplish the short-term lease option.

**Las Virgenes Municipal Water District**  
Water Supply Reliability and Diversification Study

**4 | Cost to Perform the Services**

4 | Cost to Perform the Services

January 1, 2024 Rates																																
Classification:	Eng-Sci-9 D. Ferguson, H. Glaser	Eng-Sci-8 D. Taitler, T. Reynolds	Eng-Sci-7 M. Clement, K. Miller, S. Itagaki	Eng-Sci-7 P. Chau, Z. Harris	Eng-Sci-6 T. Waters	Eng-Sci-6 J. Hoffman	Eng-Sci-6 C. Lierandi	Eng-Sci-5 C. Ruten, J. Stobaugh	Eng-Sci-4 R. Newman, Staff Engineer	Eng-Sci-3 Staff Engineer	Eng-Sci-2 Staff Engineer	GIS M. Ellen	Project Assistant	Administrative Assistant	Total Hours	Labor Fees	ODCs Fees	ODCs Markup 10%	Total Labor	Total Expenses	Total Labor + Subs + Expenses											
Hourly Rate:	\$335	\$320	\$300	\$300	\$275	\$275	\$275	\$250	\$230	\$210	\$190	\$165	\$145	\$130																		
<b>Task 1 – Data Collection, Compilation, and Review</b>																																
Task 1.1 Data Acquisition and Review		2	12	2	6		4	4		12					42	\$11,110		\$0	\$11,110	\$0	\$11,110											
<b>Task 1 - Subtotal</b>	<b>0</b>	<b>2</b>	<b>12</b>	<b>2</b>	<b>6</b>	<b>0</b>	<b>4</b>	<b>4</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>42</b>	<b>\$11,110</b>	<b>\$0</b>	<b>\$0</b>	<b>\$11,110</b>	<b>\$0</b>	<b>\$11,110</b>											
<b>Task 2 – Water Supply and Demand Outlook</b>																																
Task 2.1 Define Purpose of the Study			4						16	2		2			24	\$5,630		\$0	\$5,630	\$0	\$5,630											
Task 2.2 Future Demand Projections			4						18	2		2			26	\$6,090		\$0	\$6,090	\$0	\$6,090											
Task 2.3 Defining Screening Approach and Criteria		8	12		6					16					42	\$11,170		\$0	\$11,170	\$0	\$11,170											
Task 2.4 Perform Sensitivity Analysis and Variable Supply Portfolio			12						16						28	\$7,280		\$0	\$7,280	\$0	\$7,280											
<b>Task 2 - Subtotal</b>	<b>0</b>	<b>8</b>	<b>32</b>	<b>0</b>	<b>6</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>50</b>	<b>20</b>	<b>0</b>	<b>4</b>	<b>0</b>	<b>0</b>	<b>120</b>	<b>\$30,170</b>	<b>\$0</b>	<b>\$0</b>	<b>\$30,170</b>	<b>\$0</b>	<b>\$30,170</b>											
<b>Task 3 – Identify Concepts and Evaluate Projects</b>																																
Task 3.1 Identify Water Supply Concepts with Select Stakeholders			28		10				36	32		2			108	\$26,480		\$0	\$26,480	\$0	\$26,480											
Task 3.2 Refine Water Supply Concepts with Broad Stakeholder Group	8	4	18		12				12	40		2			96	\$24,150		\$0	\$24,150	\$0	\$24,150											
Task 3.3 Project Evaluation (incl. costs and fact sheets)	4	8	60	20	40	36	24	40	40	80		36	8		396	\$98,380		\$0	\$98,380	\$0	\$98,380											
<b>Task 3 - Subtotal</b>	<b>12</b>	<b>12</b>	<b>106</b>	<b>20</b>	<b>62</b>	<b>36</b>	<b>24</b>	<b>40</b>	<b>88</b>	<b>152</b>	<b>0</b>	<b>40</b>	<b>0</b>	<b>8</b>	<b>600</b>	<b>\$149,010</b>	<b>\$0</b>	<b>\$0</b>	<b>\$149,010</b>	<b>\$0</b>	<b>\$149,010</b>											
<b>Task 4 – Project Ranking and Portfolio Development</b>																																
Task 4.1 Project Ranking		4	24		12				24	24					88	\$22,340		\$0	\$22,340	\$0	\$22,340											
Task 4.2 Stakeholder Input to Project Ranking and Portfolio Development		2	12		8		2	4	8	24					60	\$14,870		\$0	\$14,870	\$0	\$14,870											
Task 4.3 Develop and Evaluate Portfolios	8	8	24	8	8	12	8	8	12	24		12	4		136	\$34,840		\$0	\$34,840	\$0	\$34,840											
<b>Task 4 - Subtotal</b>	<b>8</b>	<b>14</b>	<b>60</b>	<b>8</b>	<b>28</b>	<b>12</b>	<b>10</b>	<b>12</b>	<b>44</b>	<b>72</b>	<b>0</b>	<b>12</b>	<b>0</b>	<b>4</b>	<b>284</b>	<b>\$72,050</b>	<b>\$0</b>	<b>\$0</b>	<b>\$72,050</b>	<b>\$0</b>	<b>\$72,050</b>											
<b>Task 5 – Water Supply Diversification Study Report</b>																																
Task 5.1 Admin Draft Report	2	12	60		12				20	80		8	8		202	\$49,570		\$0	\$49,570	\$0	\$49,570											
Task 5.2 Draft Report	4	12	40		8				10	60		6	12		152	\$36,830		\$0	\$36,830	\$0	\$36,830											
Task 5.3 Final Report		6	16		4				4	30		4	4		68	\$16,220	\$60	\$6	\$16,220	\$66	\$16,286											
<b>Task 5 - Subtotal</b>	<b>6</b>	<b>30</b>	<b>116</b>	<b>0</b>	<b>24</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>34</b>	<b>170</b>	<b>0</b>	<b>18</b>	<b>0</b>	<b>24</b>	<b>422</b>	<b>\$102,620</b>	<b>\$60</b>	<b>\$6</b>	<b>\$102,620</b>	<b>\$66</b>	<b>\$102,686</b>											
<b>Task 6 – Meetings, Workshops, and Presentations</b>																																
Task 6.1 Project Team Meeting (8 mtgs, 1.5 hrs on ave, 3 attendees + agenda/summary)		4	16		12					28					60	\$15,260	\$650	\$65	\$15,260	\$715	\$15,975											
Task 6.2 Stakeholder Workshops (3 workshops, 2 hrs, 2 virtual/1 in person + agenda/slides/summary)		6	24		12					18					60	\$16,200	\$120	\$12	\$16,200	\$132	\$16,332											
Task 6.3 One-on-One Interviews (10 interviews, 1 hrs, 2 attendees + agenda/summary)		4	20		4					20					48	\$12,580	\$120	\$12	\$12,580	\$132	\$12,712											
Task 6.4 Board Presentation		2	8						4	4					18	\$4,800	\$60	\$6	\$4,800	\$66	\$4,866											
<b>Task 6 - Subtotal</b>	<b>0</b>	<b>16</b>	<b>68</b>	<b>0</b>	<b>28</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>4</b>	<b>70</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>186</b>	<b>\$48,840</b>	<b>\$950</b>	<b>\$95</b>	<b>\$48,840</b>	<b>\$1,045</b>	<b>\$49,885</b>											
<b>Task 7 – Project Management and QA/QC</b>																																
Task 7.1 Project Management			24										16		40	\$9,520		\$0	\$9,520	\$0	\$9,520											
Task 7.2 Coordination Calls (8 calls, 1 hr, 2-3 attendees + agenda/action items)			16		8					8					32	\$8,680		\$0	\$8,680	\$0	\$8,680											
Task 7.3 Quality Assurance and Quality Control (QA/QC)	24	6	36												66	\$20,760		\$0	\$20,760	\$0	\$20,760											
<b>Task 7 - Subtotal</b>	<b>24</b>	<b>6</b>	<b>76</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>16</b>	<b>0</b>	<b>138</b>	<b>\$38,960</b>	<b>\$0</b>	<b>\$0</b>	<b>\$38,960</b>	<b>\$0</b>	<b>\$38,960</b>											
<b>Tasks 1 - 7 Total</b>	<b>50</b>	<b>88</b>	<b>470</b>	<b>30</b>	<b>162</b>	<b>48</b>	<b>38</b>	<b>56</b>	<b>220</b>	<b>504</b>	<b>0</b>	<b>74</b>	<b>16</b>	<b>36</b>	<b>1792</b>	<b>\$452,760</b>	<b>\$1,010</b>	<b>\$101</b>	<b>\$452,760</b>	<b>\$1,111</b>	<b>\$453,871</b>											
<b>Task 8 (Optional) – As-Requested Support</b>																																
Contingency for additional services that can be provided on an as- requested basis															0	\$46,000		\$0	\$46,000	\$0	\$46,000											
<b>Task 8 - Subtotal</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>\$46,000</b>	<b>\$0</b>	<b>\$0</b>	<b>\$46,000</b>	<b>\$0</b>	<b>\$46,000</b>											
<b>Tasks 1 - 8 Total</b>	<b>50</b>	<b>88</b>	<b>470</b>	<b>30</b>	<b>162</b>	<b>48</b>	<b>38</b>	<b>56</b>	<b>220</b>	<b>504</b>	<b>0</b>	<b>74</b>	<b>16</b>	<b>36</b>	<b>1792</b>	<b>\$498,760</b>	<b>\$1,010</b>	<b>\$101</b>	<b>\$498,760</b>	<b>\$1,111</b>	<b>\$499,871</b>											



**Client/Address:** Las Virgenes Municipal Water District  
 4232 Las Virgenes Road  
 Calabasas, CA 91302

**Contract/Proposal Date:** Water Supply Reliability and Diversification Study (July 19, 2024)

## Schedule of Charges

January 1, 2024

### PERSONNEL COMPENSATION

<b>Classification</b>	<b>Hourly Rate</b>
Engineer-Scientist-Specialist 1 .....	\$155
Engineer-Scientist-Specialist 2 .....	\$190
Engineer-Scientist-Specialist 3 .....	\$210
Engineer-Scientist-Specialist 4 .....	\$230
Engineer-Scientist-Specialist 5 .....	\$250
Engineer-Scientist-Specialist 6 .....	\$275
Engineer-Scientist-Specialist 7 .....	\$300
Engineer-Scientist-Specialist 8 .....	\$320
Engineer-Scientist-Specialist 9 .....	\$335
Senior CAD-Designer .....	\$195
CAD-Designer .....	\$180
Senior CAD-Technician .....	\$165
CAD-Technician .....	\$145
Project Assistant .....	\$145
Administrative Assistant .....	\$130
Aide.....	\$105

### Direct Expenses

Reimbursement for direct expenses, as listed below, incurred in connection with the work, will be at cost plus ten percent for items such as:

- a. Maps, photographs, 3rd party reproductions, 3rd party printing, equipment rental, and special supplies related to the work.
- b. Consultants, soils engineers, surveyors, contractors, and other outside services.
- c. Rented vehicles, local public transportation and taxis, travel and subsistence.
- d. Project specific telecommunications and delivery charges.
- e. Special fees, insurance, permits, and licenses applicable to the work.
- f. Outside computer processing, computation, and proprietary programs purchased for the work.

Reimbursement for vehicles used in connection with the work will be at the federally approved mileage rates or at a negotiated monthly rate.

If prevailing wage rates apply, the above billing rates will be adjusted as appropriate.

Overtime for non-exempt employees will be billed at one and a half times the Hourly Rates specified above.

Rates for professional staff for legal proceedings or as expert witnesses will be at rates one and one-half times the Hourly Rates specified above.

Excise and gross receipts taxes, if any, will be added as a direct expense.

The foregoing Schedule of Charges is incorporated into the agreement for the services provided, effective January 1, 2024 through December 31, 2024. After December 31, 2024, invoices will reflect the Schedule of Charges currently in effect.



**Las Virgenes Municipal Water District**  
Water Supply Reliability and Diversification Study

**Appendix A | Resumes**

# Meredith E. Clement

Project Manager

## PROFESSIONAL SUMMARY

Meredith Clement has over 25 years of environmental consulting experience on projects throughout California. Meredith has special expertise with water planning projects, urban planning, grant and loan funding for infrastructure, and environmental compliance documentation, including the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA).

### TOTAL YEARS OF EXPERIENCE

26

### EDUCATION

MS, City and Regional Planning, California Polytechnic State University

MS, Transportation Engineering, California Polytechnic State University

BS, Environmental Policy, Analysis and Planning, University of California at Davis

### MEMBERSHIPS / AFFILIATIONS

American Public Works Association (APWA), Member

Association of Environmental Professionals, Member

American Water Works Association (AWWA), Member

## PROJECT EXPERIENCE

### Solano One Water Framework, County of Solano, Fairfield, CA | Deputy Project Manager

KJ supported the County of Solano and a broad stakeholder group in an integrated holistic approach to identifying regional programs and projects to address water, wastewater, and drainage issues. The intent of the planning effort is to achieve economies of scale and greater benefits than several individual uncoordinated projects. The outcome of the work is the first step in a County-wide Utilities Master Plan.

### Water Supply Alternatives Study, Calleguas Municipal Water District, Thousand Oaks, CA | Project Manager

KJ has supported Calleguas through a multi-phased process to evaluate a comprehensive range of potential projects to provide emergency supplies during an extended outage of imported water. The evaluation started with a comprehensive demand analysis to understand likely demands in an imported water outage. Phase 1 of the study involved a reconnaissance-level evaluation of an exhaustive list of potential supply projects through interactive workshops conducted with the Calleguas board, staff, and the public. Phase 2.1 took five proposed projects from Phase 1 and developed the evaluation criteria and costing methodology for the broader analysis. Phase 2.2 is nearing completion and has involved coordinating with various stakeholders, including mutual water agencies, city water departments, Groundwater Management Agencies, planning departments, and the Metropolitan Water District of Southern California. In total, 123 different water supply alternatives were evaluated: conservation, building new reservoirs, developing groundwater credits, drilling new wells, use of stormwater, advanced water treatment for direct and indirect potable reuse, and additional connections to the State Water Project. The project was the recipient of the American Public Works Association, Ventura County Chapter, Project of the Year Award.

### Water Resources Background Report for the General Plan Update, County of Ventura, Ventura, CA | Project Manager and Author

Prepared a detailed overview of the water resources in Ventura County, including surface water, groundwater, stormwater, recycled water, and seawater. Outlined how federal, state, and local laws frame water resources management. Described existing water supplies and water quality, estimated water demands, and mapped the 162 water suppliers in the County—prepared a description of the linkage between land use and water demand and water quality.

**Mojave Region Stormwater Resources Plan, Mojave Water Agency, Apple Valley, CA | Project Manager**

Project Manager for the preparation of a Stormwater Resources Plan for the Mojave Basin area. The Stormwater Resources Plan was prepared through extensive coordination with the local Integrated Regional Water Management group.

**Ventura-Calleguas State Water Project Interconnection Environmental Impact Report, Ventura, CA | Project Manager**

Preparation of an Environmental Impact Report evaluating the impacts of constructing an approximately seven mile pipeline to deliver State Water Project water to the City of Ventura. The same pipeline would serve as an emergency interconnection to the Calleguas Municipal Water District. Specific environmental and permitting issues related to agricultural protection policies, endangered species, conflict with oil and gas wells, construction noise, and traffic.

**Groundwater Basin Recharge Project, Big-Horn Desert View Water Agency, Yucca Valley, CA | Permitting Specialist**

Permit Specialist for the Bighorn-Desert View Water Agency groundwater recharge project. Identified necessary permits to build groundwater recharge basins and associated pipelines. Prepared permit applications and worked with trustee agencies to facilitate permit issuance. Permits were acquired from the US Army Corps of Engineers, US Fish and Wildlife Service, US Bureau of Land Management, the Colorado River Regional Water Quality Control Board, Mojave Desert Air Quality Management District, California Department of Fish and Wildlife, California Department of Public Health, and County of San Bernardino.

**Encina Wastewater Authority, Energy and Emissions Strategic Plan Projects, San Diego County, CA | Project Manager**

Mitigated negative declaration to support a waste-to-energy project in Carlsbad, California. The project will build a waste receiving station and a digester to produce biogas and then utilize the biogas to run internal combustion engines to power wastewater treatment. Particular issues of concern were the facility's proximity to the Pacific Ocean, truck traffic associated with food waste collection and drop-off, and greenhouse gas emissions.

**Peer Review of Water Supply Reliability and Water Demand Estimates, Los Angeles County Department of Public Works, Los Angeles, CA | Project Manager**

Technical Author and QA/QC reviewer for demand and supply assumptions for a 12,322-acre new town located in the northwest corner of Los Angeles County.

**Upper Santa Clara Integrated Resources Water Management Plan Including Climate Change Vulnerability Assessment, Castaic Lake Water Agency, Santa Clarita, CA | Project Manager**

Project manager for the preparation of an integrated water resources plan for the Upper Santa Clara River Region (Los Angeles County). The project involved assistance to and coordination of an eight-member management group and approximately 30 stakeholders. Developed materials for stakeholder education, assisted with the identification of water management objectives, development of screening criteria and metrics, and evaluation of projects put forth by stakeholders for consistency with objectives, financial feasibility, and compliance with State-mandated requirements. Have prepared two updates to the plan to meet changed State Guidelines. One update involved preparing a climate change vulnerability analysis and a Salt Nutrient Management Plan.

# Karen S. Miller, PG, CHG

Deputy Project Manager

## PROFESSIONAL SUMMARY

Karen Miller is a water resources and environmental professional with 28 years of experience, including 25 years working on specialized studies related to water resources & supply, groundwater, strategic planning, environmental studies, stormwater, feasibility study, adaptive management, sustainability, and climate change resilience. Her technical expertise is complemented by excellent communication, technical writing & analytical skills; successful grants writing and administration work; and she is an expert project manager of small and large multi-disciplinary projects.

**TOTAL YEARS OF EXPERIENCE**  
28

### EDUCATION

BS, Geology, Utah State University, 1995

MS, Geology, Duke University, 1993

### REGISTRATIONS

Professional Geologist - California (No. 7049)

Certified Hydrogeologist – California (No.719)

Professional Geologist - Washington (No. 2842)

Professional Geologist - Utah (No. 5282913-2250)

## PROJECT EXPERIENCE (Prior to Joining Kennedy Jenks in April 2024)

**Eastern Sierra Water Resources Management, Los Angeles Department of Water and Power (LADWP), Owens Valley, CA | Deputy Project Manager**

This long-term water resources program (20+ years) focused on helping LADWP manage & optimize its Eastern Sierra water resources and develop long-term management strategies that balance the City's need for a reliable drinking water supply with environmental protection. The project included groundwater modeling, feasibility study, planning, new wells, a groundwater management plan, evaluation of groundwater banking, environmental stewardship, operations optimization, stakeholder/inter-agency coordination, and more.

**Strategic Planning to Investigate the Feasibility of Developing the Santa Monica and Hollywood Basins as Sources of Supply, Los Angeles Department of Water and Power, Santa Monica, CA | Principal / Hydrogeologist**

This study evaluated the feasibility of developing the Santa Monica and Hollywood basins as potable groundwater supply sources for the City. Karen assisted with hydrogeologic characterization; evaluation of basin governance; review of groundwater quality & existing infrastructure; and development of alternatives. Alternatives were ranked with a preferred alternative identified.

**OneWater LA 2040 Plan, Los Angeles Bureau of Sanitation, Los Angeles, CA | Principal / Hydrogeologist**

The One Water LA 2040 Plan provides the implementation strategy to meet the Los Angeles region's water supply challenges by taking a holistic/collaborative approach to all the City's water resources (surface water, groundwater, potable water, wastewater, recycled water, stormwater) as "One Water." Karen assisted with development of the One Water LA Plan, with an emphasis on identifying and developing near- and long-term groundwater-related integration opportunities, including conjunctive use and recycled water projects.

**Owens Lake Groundwater Evaluation Project, Los Angeles Department of Water and Power, Owens Lake, CA | Deputy Project Manager**

The purpose of this study was to evaluate the feasibility of supplying groundwater for a portion of the dust control measures and the environmental sustainability of such a project. Karen worked on development of both an updated hydrogeologic conceptual and numerical

groundwater model. The project involved review and compilation of over 20 years of detailed hydrologic studies performed by others and construction of 28 deep monitoring wells. The groundwater model was utilized to evaluate the use of Owens Lake groundwater for dust control, with over 90 simulations completed. The project identified an alternative that meets both water supply and environmental goals.

**Stormwater Capture Master Plan, Los Angeles Department of Water and Power, Los Angeles, CA | *Principal***

Karen worked on development of the Stormwater Capture Master Plan to evaluate and analyze existing stormwater capture efforts and its role in the City of LA's water supply portfolio and to provide recommendations for future stormwater capture. This work included identification of ordinances and policies for stormwater capture and opportunities to increase capture and groundwater infiltration. Ultimately, the Plan identified a suite of centralized projects combined with distributed stormwater capture concepts that could result in an additional 68,000 – 114,000 acre-feet per year of stormwater for water supply.

**Groundwater System Improvement Study and Owner's Agency, Los Angeles Department of Water and Power, Los Angeles, CA | *Principal / Hydrogeologist***

This work focused on optimizing groundwater resources in the San Fernando Groundwater Basin and restoring the local water resources of the basin for beneficial use. Karen participated in both a Remedial Investigation and Feasibility Study to develop a comprehensive remediation and clean-up program. Follow-on work focused on additional RI/FS characterization of specific SFB wellfields and groundwater conditions (water quality, faulting, flow), with the objective to design groundwater remediation facilities. This project required risk assessment, site characterization, remedial feasibility study, and regulatory agency coordination. The next phase of the work was an Owner's Agent contract to assist the City with the design of remediation facilities to treat contaminated groundwater.

**Palmdale Regional Groundwater Recharge and Recovery Project, Palmdale Water District, Palmdale, CA | *Principal / Hydrogeologist***

The overarching goal of the initial feasibility study was to investigate the feasibility of a groundwater banking, storage, and extraction program along Littlerock Creek to help meet future water demands and improve water supply reliability. Karen was responsible for development of the final report, including assimilation and integration of multi-disciplinary information on groundwater, demand, infrastructure, constraints, engineering, economic evaluation, and more. The project conducted an alternative analysis and identified a selected/preferred alternative that optimized water resources and economic benefits while reducing applicable constraints. Next, a preliminary design report for the selected alternative was prepared with design specifications for infrastructure associated with the preferred alternative (i.e., wells, pipelines, and recharge basins).

**2015 and 2020 Urban Water Management Plans, LADWP, Los Angeles, CA | *Principal***

Karen assisted with the City's 2020 UWMP update, building upon her work on the 2015 update. She provided content development support to sections of the plan, including groundwater, sources of supply, conservation, and watershed management/stormwater. In addition, Karen prepared case studies highlighting instances of efficient water use. Karen also worked on demand/supply projections, including quantification of existing and planned sources of water available. Other plan elements include water service reliability, water shortage contingency plan, and climate change impacts. Results of this work resulted in an updated 2020 UWMP that not only incorporates local initiatives, but also complies with requirements of the UWMP Act.



# Timothy M. Waters, P.E.

Project Engineer

## PROFESSIONAL SUMMARY

Timothy is a registered professional civil engineer with 14 years of experience in civil and environmental engineering. He has experience in the planning, design, and construction management of water, wastewater, and recycled water projects. Timothy has assisted in the design of pump/lift stations, pipelines, and treatment facilities. In addition, he has experience in performing system hydraulic analyses for water, wastewater, and recycled water pumping facilities and pipelines. Timothy also has experience in groundwater sampling, soil sampling, and contaminated soil removal activities at sites throughout California and Nevada.

### TOTAL YEARS OF EXPERIENCE

14

### EDUCATION

BS, Civil Engineering,  
University of Nevada,  
Reno, 2010

### REGISTRATIONS

Professional Engineer -  
Civil - California  
(86080)

### CERTIFICATIONS

State of Nevada (OT6067)

### MEMBERSHIPS / AFFILIATIONS

American Society of Civil  
Engineers

## PROJECT EXPERIENCE

### **Water Supply Alternatives Study, Calleguas Municipal Water District, Thousand Oaks, CA / Deputy Project Manager**

Calleguas Municipal Water District (Calleguas) is a wholesale water provider that delivers drinking water to 19 retail water purveyors within Ventura County in Southern California, with a service area of 366 square miles and a population of approximately 660,000. Under normal operating conditions, Calleguas exclusively meets its potable water demands through imported water. This supply is vulnerable to outages because the many non-redundant conveyance facilities needed to deliver it can be impacted by corrosion, age, or other natural catastrophic events such as earthquakes, rising sea levels, and floods. In light of this, the KJ team helped Calleguas identify 123 alternative outage supply projects that could improve the reliability of outage water supply. The KJ team evaluated these 123 outages supply alternative projects in consideration of water source; estimated yield; required infrastructure; regulatory requirements; institutional arrangements needed; partnering opportunities with other local agencies; where the water supply would be available; technical complexity; schedule; risks, uncertainties, and vulnerabilities; and life cycle costs. Calleguas has already taken steps to implement some of the projects, and more projects will follow in the future. The Water Supply Alternatives Study won the 2021 Project of the Year from the Ventura County Chapter of the American Public Works Association.

### **East County Regional Water Reuse Program Facilities Planning Study, Full Advanced Water Treatment Demonstration Project, Padre Dam Municipal Water District, Santee, CA / Project Engineer**

Professional engineering services for this project included evaluating the feasibility of a regional potable reuse program, assessing treatment requirements for discharge and reuse, conducting a recycled water market survey, and quantitatively and qualitatively evaluating five program implementation alternatives. The project included data collection; conceptual design of sewer lift stations, pump stations, force mains, other pipelines, and expanding the wastewater treatment plant; and cost estimating.

### **Supplemental Water Supply Evaluation, Tesoro Viejo Master Mutual Water Company, Inc., Fresno, CA / Project Manager**

This project included professional engineering services for evaluating supplemental water supplies via a Groundwater Replenishment Reuse Project (GRRP). Ultimate buildout of the

Tesoro Viejo property is anticipated to generate up to 1,800 acre-feet per year (AFY) of recycled water. Tim and the KJ team were engaged to develop a strategy for implementing a GRRP that utilizes tertiary treated recycled water, an advanced water treatment facility, groundwater recharge ponds, and groundwater extraction wells. This project evaluated potential sites to conceptually determine their suitability for a GRRP while considering site-specific constraints, infiltration rates, infrastructure requirements (pipelines, pump stations, recharge ponds, wells, etc.), cost, and regulatory compliance.

**Advanced Water Purification Facility (AWPF) and Pump Station Project, Monterey One Water, Monterey, CA | Project Engineer**

Provided professional engineering services in the form of an analysis of alternative project delivery methods for the various project facilities, including pump stations, pipelines, diversion structures, AWP Facility, and treatment plant facilities to best meet project goals and needs. The analysis recommended a project delivery method for each facility based on schedule, established budget, resource requirements, owner input on design, and potential for cost savings. The Pure Water Monterey Groundwater Replenishment Project is an indirect potable reuse project that collects a variety of available source waters for advanced water treatment. The KJ team provided design, construction and startup services for the project. The 5-mgd AWP Facility treats secondary effluent with ozone, microfiltration, reverse osmosis and UV-advanced oxidation processes.

**East County Advanced Water Purification Program, Padre Dam Municipal Water District, Santee, CA | Deputy Project Manager**

This project included working with the East County AWP JPA (Padre Dam, the County of San Diego, and City of El Cajon) to help implement its over \$500M potable reuse project in collaboration with Helix Water District. Tim and the KJ team worked as an extension of staff for the four participating agencies to help develop the planning and preliminary design of the Project, governance structure, CEQA compliance and conceptual regulatory approval, project monitoring and reporting, public outreach, and progressive design-build implementation strategy, packaging and procurement support. Tim played a vital role in developing the project schedule and cash flow, financial proforma, and getting approval of and/or securing SRF and WIFIA grants and loans of over \$593M. These efforts have assisted in paving the way to bring the Project online in 2025 and provide 12,880 AFY of new, local, reliable, and drought-proof potable water supply via surface water augmentation to serve over 30% of the East County's water demands.

# Dawn T. Taffler, PE, LEED® AP

Principal-In-Charge

## PROFESSIONAL SUMMARY

During her 16 years at Kennedy/Jenks, Dawn's work has included a variety of projects that seek to diversify and optimize the way we use and reuse water. She is currently leading seven non-potable and potable reuse studies throughout California to maximize the use of local, sustainable, and reliable water supplies. She has contributed to or led the development of over a dozen Recycled Water Master Plans; many of which received grant funding through the SWRCB Water Recycling Funding Program or Bureau of Reclamation Title XVI Program. She served as the primary author on various Recycled Water White Papers and has led engineering evaluations for non-potable and potable reuse studies. Her current role, implementing recycled water programs and integrated water management studies, integrates water resource engineering expertise with conceptual-level planning to develop innovative solutions to complex multi-agency projects.

## CONTRIBUTIONS, INNOVATIONS, AND ACHIEVEMENTS

In addition to leading two of the firm's water practice groups, Dawn serves as an employee-nominated director to the KJ Board and is actively involved in the company's Diversity and Inclusion Council and Women's Network that focuses on opportunities to strengthen communications and activities related to diversity and inclusion initiatives. She has been an active member of WateReuse for over a decade; serving as the President/Vice President of the Northern California Chapter, chairing committees at many of the Annual conferences and participating on the legislative/regulatory committee for WateReuse. In recognition of her dedication to the organization and expertise in reuse, Dawn has served as a Board Member at Large for WateReuse California since 2017 and sits on the executive committee, as treasurer, and conference committee.

### TOTAL YEARS OF EXPERIENCE

24

### EDUCATION

BS, Civil and Environmental Engineering, University of Illinois, Champaign-Urbana, 1998

MS, Civil and Environmental Engineering, University of California, Berkeley, 2000

### REGISTRATIONS

Professional Engineer - Civil - California (65754)

### CERTIFICATIONS

## PROJECT EXPERIENCE

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

Led a Feasibility Study (FS) under at US Bureau of Reclamation WaterSMART grant for Pure Water Las Virgenes, a potable reuse project to further treat available recycled water from the Tapia Water Reclamation Facility at a new Advance Water Treatment Plant (AWP) and convey purified water to Las Virgenes Reservoir for later use as drinking water. The purpose of the Title XVI FS is to identify and investigate opportunities and determine the feasibility of the JPA in reusing wastewater. The focus of the study is to present the preferred alternative for the future potential indirect potable reuse (IPR) effort, describing the quantities, treatment processes, conveyance system, brine discharge, and reservoir augmentation system in accordance with the USBR reporting requirements.

### Recycled Water Master Plan, City of Santa Monica, Santa Monica, CA | *Project Manager*

Leading a team of engineers and modelers to develop a Recycled Water Master Plan (Master Plan) to connect the dots between the City's existing systems, facilities in construction and new facilities needed to achieve the water self-sufficiency goals by establishing a road map to optimize the use of the future recycled water resources and potentially exploring regional partnership opportunities. Effort includes a comprehensive assessment of supplies and demands for non-potable and potable reuse, development of a baseline hydraulic model and development of infrastructure design criteria. The outcome of the study will be a 10-year Capital Improvement Plan (CIP) to guide the planning of and capital investments in future recycled water infrastructure development. A construction financing plan and revenue program will be

Leadership in Energy and Environmental Design (LEED), US Green Building Council

#### MEMBERSHIPS / AFFILIATIONS

WaterReuse California (WRCA) – Board Member at Large 2017 - present. Board Treasurer/Executive Committee 2021 - present. Liaison to the Board 2015-2017; Conference Committee Board Liaison 2012 to 2022;

WaterReuse Association, Northern CA Chapter - President, 2013-2014; Vice President, 2011-2012; Program Co-Chair, 2009-2010

developed to identify pricing approaches and support the City's selection of a preferred policy for recycled water.

#### **Wastewater Reclamation Facility (WRF) Options Study, City of Scotts Valley, Scotts Valley, CA / Project Advisor**

Led a team of engineers to evaluate options to address recurring treatment process upsets at the City's Wastewater Reclamation Facility (WRF), which have hindered the City's ability to produce recycled water. This WRF Options Study (Study) evaluated options at a concept level that ranged from decommissioning the plant and discontinuing recycled water service, to optimizing the plant, adding a packaged plant, to converting existing facilities to a custom membrane bioreactor (MBR). Given the short timeline for this effort, and the wide range of options considered, a two-step approach was applied to vet the options: (1) Initial Concept-level Screening and (2) Options Evaluation and Comparison. Dawn presented the outcomes to the City Council, to support the next steps to further to vet short-term improvement concepts or move towards a more comprehensive long-term WRF upgrade. The City collaborated with their regional stakeholders, Scotts Valley Water District and the City of Santa Cruz, and considered existing agreements and regulatory requirements that would impact the future processes at the WRF.

#### **Alternatives Evaluation for Continued and Expanded Recycled Water Use, Scotts Valley Water District, Scotts Valley, CA / Project Advisor**

Provided strategic guidance and QA/QC for an engineering and planning study that evaluated local and regional alternatives for continued and expanded use of recycled water by the SVWD. The study considered local and regional solutions that may result if the treatment capabilities at the Scotts Valley WRF were to be limited/reduced, and/or the Santa Margarita Groundwater Agency determined a need for larger scale groundwater recharge projects in support of their Groundwater Sustainability Plan. The evaluation included developing conceptual schematics, defining the facilities required, estimating the treatment capacity, capital, and operational costs, and scoring and ranking the project alternatives based on a set of criteria and goals defined with SVWD. The proposed alternatives varied in complexity based on the source of effluent to be treated, the location of treatment facilities, conveyance pipelines, and pump stations required to move the effluent from one location to another, the agency's agreements required to implement an alternative, and seasonal limitations to treatment and purified water production. Potential partnership opportunities involving the District, the City of Scotts Valley, the City of Santa Cruz, the Soquel Creek Water District, and/or San Lorenzo Valley Water District were explored to provide the most practicable and viable water supply benefits for the region.

#### **Water Resources Optimization Plan, United Water Conservation District, Santa Paula, CA / Project Manager**

Led planning effort to support United's vision to develop a regional Comprehensive Water Resources Supply and Optimization Plan (Plan) that explores opportunities for United and its partners, stakeholders, and neighboring agencies to work together to understand challenges and opportunities to enhance water-supply planning at a regional scale through multi-beneficial cost-effective projects. Partnered with United staff in a collaborative process to build on priority water supply plans/projects, including coastal brackish water extraction and treatment, groundwater management, surface water diversions and State Water Project interconnections, transfers, and exchanges. Supported planning for Water Sustainability Summit #1 (2020) and #2 (2021) that brought together stakeholders throughout the region to solve challenges accelerated by drought and groundwater management challenges through collaboration on innovative projects.

# Jeffrey T. Savard, PE, Assoc. DBIA

## Quality Assurance / Quality Control

### PROFESSIONAL SUMMARY

Jeff Savard currently serves as Vice President of the firm and Office Leader for the Ventura County office. The majority of Jeff's experience has been with the planning and design of potable water, recycled water, and wastewater systems. This experience includes providing project management and engineering duties for concrete reservoirs (both conventional and prestressed), welded and bolted steel tanks, groundwater production wells, booster pumping stations, pipelines (including ductile iron, polyvinyl chloride, and welded steel), surface water treatment plants, groundwater treatment plants using pressure filtration and reverse osmosis, and water recycling facilities.

#### TOTAL YEARS OF EXPERIENCE

34

#### EDUCATION

BS, Civil Engineering,  
California Polytechnic  
State University, San  
Luis Obispo, 1990

#### REGISTRATIONS

Professional Engineer -  
Civil - California  
(51156)

#### MEMBERSHIPS / AFFILIATIONS

Association of Water  
Agencies of Ventura  
County

Channel Counties Water  
Utilities Committee

American Public Works  
Association

### PROJECT EXPERIENCE

#### Las Posas Replacement Water Study, Calleguas Municipal Water District, Moorpark, CA / *Principal-In-Charge*

KJ conducted a water supply study to evaluate 14 alternatives for supplying supplemental water (stormwater, recycled water, imported water, groundwater desalination with enhanced stormwater recharge, and/or arundo removal) to reduce overdraft in the 66-square-mile groundwater basin. Since over 70 percent of the groundwater pumping is for agriculture, the study evaluated interconnections among the seven mutual water companies that overlay the basin to facilitate the delivery of new supplies.

#### Water System Master Plan, City of Oxnard, Oxnard, CA / *Project Engineer*

The elements of the Master Plan include characterization of water demand projections, review of water supply resources, development of a distribution system model, recommendations for new infrastructure facilities, and formulation of a capital improvements program. Project consisted of evaluating impacts to the City's water system as a result of proposed developments.

#### Water Supply Reliability Study, City of San Buenaventura, Ventura, CA / *QA/QC Reviewer*

The study evaluated the technical, environmental, and economic issues associated with a potential intertie between the two water systems (City of Ventura and Calleguas Municipal Water District).

#### Recycled Water Master Plan, City of Oxnard, Planning and Environmental Services, Oxnard, CA / *Principal-In-Charge*

The project consisted of developing a recycled water system for the largest city in Ventura County. It also included preparing an implementation plan to serve as the 'road map' for the City, which addressed such institutional issues as: permitting; recycled water ordinance and administrative code revisions; rates and financing; staffing needs and training; and public outreach strategies; as well as preparing standard details for the City's use in enforcing recycled water requirement on developers.



**Potable Water Master Plan, Calleguas Municipal Water District, Thousand Oaks, CA /  
Principal-In-Charge**

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

**Water Master Plan Update, City of Thousand Oaks, Thousand Oaks, CA / Principal-In-Charge**

Project included updating the City's water master plan including updating and calibrating the hydraulic model, updating water demands, evaluating water supplies, addressing water quality/age issues, and preparing a master plan report and capital improvement plan.

**Reclaimed Water System, Santa Clarita Valley Water Agency, Santa Clarita, CA / Project Engineer**

The Master Plan included the preparation of the environmental documentation (CEQA), computer modeling (KYPPIPE2), facility site plans, cost estimates, and phasing plans for a new recycled water system serving golf courses, an amusement park, tree farms and nurseries, commercial landscaping, and street and highway landscaping, over a 50-square mile service area. Reclaimed Water Pump Station Design for the Reclaimed Water System for the Castaic Lake Water Agency. Ultimate capacity of this barrel-type pump station is 12,000 gallons per minute, with the initial phase being 2,500 gallons per minute. Four miles of 16 to 36-inch reclaimed water pipeline design for the Reclaimed Water System. The project included three different pipe materials and two bridge crossings. Responsibilities also included coordinating the acquisition of pipeline easements and the preparation of legal descriptions.

**Operations Strategic Water Master Plan, City of Oxnard, Planning and Environmental Services, Oxnard, CA / QA/QC Reviewer**

Project consisted of preparation of a Water Master Plan Update and a comprehensive review of the prior master plan hydraulic model.

**Las Virgenes-Digester Performance Evaluation, Las Virgenes Municipal Water District, Calabasas, CA / Principal-In-Charge**

KJ analyzed past performance data, estimated the potential impact if a third digester is added to the operation, and compiled available information on the effect of increased sludge retention time and other relevant parameters resulting from increased digester volume. The evaluation included analyses of solids reduction, biogas production, and other digester health parameters (pH, alkalinity, volatile fatty acids) as well as digested sludge dewatering and cake odor, based on available data from the plant and data collected from literature.

**New Third Digester, Rancho Las Virgenes Composting Facility, Las Virgenes Municipal Water District, Calabasas, CA / Principal-In-Charge**

Pre-design, design, and construction support services for the design of a new third digester and rehabilitation of the heating system for Digesters Nos. 1 and 2, along with planning of a new FOG and food waste digestion program and the receiving facilities.

# David W. Ferguson, PhD, PE, BCEE

## Quality Assurance / Quality Control

### PROFESSIONAL SUMMARY

David Ferguson, PhD, has extensive experience in the planning, design, construction, and operation of water supply, infrastructure, and treatment projects. He served as manager for an \$80 million water banking program for the Antelope Valley-East Kern Water Agency (AVEK) and has worked on a number of recharge and recovery water supply projects. David has been responsible for the evaluation and/or design of upgrades, rehabilitation, retrofit, and/or replacement for over 40 water treatment plants, 30 reservoirs, 20 pumping stations, and 20 wells for 25 different water utilities.

#### TOTAL YEARS OF EXPERIENCE

45

#### EDUCATION

BS, Civil Engineering,  
University of  
Massachusetts, 1980

BS, Environmental  
Science, University of  
Massachusetts, 1977

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

MS, Civil Engineering,  
University of  
Massachusetts, 1980

PHD, Executive  
Management,  
Claremont Graduate  
University, 1993

#### REGISTRATIONS

Professional Engineer -  
Civil - California  
(34626)

#### CERTIFICATIONS

Board Certified  
Environmental  
Engineer, American  
Academy of

### PROJECT EXPERIENCE

#### Las Posas Replacement Water Study, Calleguas Municipal Water District, Moorpark, CA / *Project Manager*

KJ provided CMWD and Fox Canyon Groundwater Management Agency engineering services to perform the Study, which comprised 14 individual studies each evaluating a water supply alternative. KJ developed key criteria to assess each project alternative. Results of this Study found that opportunities to diversify the Basin's water supply are regionally accessible within supply types including stormwater, treated brackish water, imported water, and recycled water, as well as invasive vegetation removal. Factors impacting the overall feasibility of an evaluated alternative include capacity and capital costs per project, and potential limitations on supply availability such as water rights, agency terms, hydrological availability, drought, and other limitations. The results also found advantages and disadvantages for each project, which are similar within a specific supply type. Use of recycled water was ranked as one of the three highest ranked projects for implementation.

#### Water Master Plan Update, City of Thousand Oaks, Thousand Oaks, CA / *Project Manager*

Served as a project manager for preparation of the 2015 Master Plan Update. The purpose of the project is to identify infrastructure improvements required for the City's water distribution system. In addition, the hydraulic model is utilized to perform a water age analysis of the system, in order to identify areas of the system that potentially can have low disinfection levels. The project resulted in the installation of several Reservoir Control Systems (RCSs), one in each of two 5 MG reservoirs, to provide continuous reservoir mixing and on-line disinfectant residual monitoring, chlorine and ammonia feed, and residual control.

#### Tuscany Hills/Wildomar Recycled Water System Design, Elsinore Valley Municipal Water District, Lake Elsinore, CA / *QA/QC Reviewer*

Design of a 3,300 gpm recycled water pump station, 0.9 MG tank, and approximately 36,000 linear feet of 6-inch to 18-inch diameter recycled water pipeline.

#### Recycled Water Master Plan, Inland Empire Utility Agency, Chino, CA / *Project Manager*

For the recycled water master plan for IEUA's Regional Recycled Water Program which will have an ultimate capacity to serve 100,000 acre-feet per year of recycled water to IEUA's seven

Environmental  
Engineers & Scientists  
(AAEES)

**MEMBERSHIPS /  
AFFILIATIONS**

Design-Build Institute of  
America (DBIA)

American Water Works  
Association (AWWA)

American Academy of  
Environmental  
Engineers & Scientists  
(AAEES)

member agencies and spreading basins within a 242 square mile service area. The ultimate system includes 6 pressure zones, 12 pumping stations, and 7 storage reservoirs.

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

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

**Water Supply Stabilization Program, Antelope Valley-East Kern Water Agency, AECOM Technology Corporation, Palmdale, CA / Project Manager**

For the design of 4 of 7 bid packages for the \$30 million Phase 1 groundwater banking and blending program that will provide both water supply stabilization through banking and compliance with the Stage 2 Disinfectants/Disinfection ByProducts Rule (D/DBP) for TTHM Control by providing potable groundwater as an alternative water supply source. The development of a sub-regional groundwater model in combination with water quality testing of various groundwater and treated surface water blends provided operational strategies for THM compliance. The design packages for well drilling, treatment/chlorination facilities, and storage tank construction have been successfully bid, with the well equipping design currently at 90% completion. The well drilling construction contract (seven 20-inch diameter wells with depths up to 600 feet) is currently 50% complete.

**Feasibility of Developing the Santa Monica and Hollywood Basins as Sources of Groundwater Supply, City of Los Angeles, Department of Water and Power, Los Angeles, CA / Project Manager**

For the feasibility of developing the Santa Monica and Hollywood groundwater basins as potable groundwater supply sources for the City of Los Angeles. For each groundwater basin, the study included: hydrogeologic characterization, basin governance, groundwater quality, treatment evaluations, and siting studies. Seven alternative sites and a total of 14 alternatives were identified. KJ recommended a treatment process of green sand pressure filters followed by granular activated carbon (GAC) for the Hollywood Basin, and reverse osmosis (RO) for the Santa Monica Coastal Subbasin.

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

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

**Groundwater Banking - Water Supply Stabilization Program, Antelope Valley-East Kern Wtr Agency, Palmdale, CA / Project Manager**

AVEK is implementing an \$80 million water banking program with two separate water banks, the 1,475-acre Westside Water Bank and the 240-acre Eastside Water Bank. The Westside site can recharge up to 50,000 ac-ft/year over 500 acres of agricultural land and currently can extract 25 mgd with 11 potable recovery wells. The Eastside site can recharge up to 1,500 ac-ft/year in three 2-acre recharge ponds and extract up to 4 mgd with 3 potable recovery wells. Over the course of 5 years, KJ managed seven subconsultants with 15 sub agreements, and prepared eight design packages for \$50 million in construction.

# Sachiko Itagaki, PE, QSD

## Regulatory and Water Rights Advisor

### PROFESSIONAL SUMMARY

Sachiko (Sachi) Itagaki has over 33 years of water resources and civil engineering experience, specifically in conducting integrated water resource planning and management programs, including surface water and groundwater quantity and quality investigations; utility (water, recycled water, wastewater, and stormwater) infrastructure management, master planning, modeling, and design studies and preparation of plans and specifications. She has worked extensively in groundwater sustainability and management planning as well as in water supply studies. She has worked in the Lake Tahoe Basin since 1985 and in the last 10 years has led KJ teams in projects for South Tahoe Public Utility District including the Regional Water Production Needs Estimation (Demand Study), Urban Water Management Plans, water system Risk and Resilience Assessment and Emergency Response Plan, South Y PCE Feasibility Study, Regional Fire Vulnerability and District Climate change analyses, Integrated Regional Water Management (IRWM) Plan and update; several compliance reports for Sustainable Groundwater Management Act (SGMA) and Alpine County permit and preparation of successful grant applications for stormwater feasibility studies, erosion control facilities.

#### TOTAL YEARS OF EXPERIENCE

33

#### EDUCATION

BS, Ocean Engineering,  
Stanford University,  
1984

MS, Civil Engineering,  
Water Resources,  
Stanford University,  
2001

#### REGISTRATIONS

Professional Engineer -  
Civil - California  
(50221)

#### CERTIFICATIONS

Qualified SWPPP  
Developer,

#### MEMBERSHIPS / AFFILIATIONS

California Stormwater  
Quality Association

Groundwater Resource  
Association of  
California

### PROJECT EXPERIENCE

**2020 Urban Water Management Plan, South Tahoe Public Utility District, South Lake Tahoe, CA | Project Manager**

The project included the incorporation of demand updates for the development of 20-year water demand projections; consideration of the Tahoe Valley South Subbasin Alternative Plan findings; assessment of reliability of available water supplies over dry year, multiple dry-year, and average conditions; consideration of water demand management measures including evaluation of SBx7-7 20% by 2020 demand reductions; water supply strategies to be employed to meet projected future demands, and water shortage contingency plan in the event of drought.

**Regional Water Production Needs Estimation. Confidential Clients (South Tahoe PUD, Tahoe City PUD, North Tahoe PUD), Lake Tahoe, CA | Project Manager**

**Project Manager for a focused effort to develop future water production projections for three water suppliers in support** of a water rights application. A range of data was synthesized in a geographic information system (GIS), including metered sales, sewer account information, assessors' parcel information, regional land use and land capability, and retired parcels. The GIS analysis and water production information were used to estimate unit water production needs that were used to project water production by land use. Additional analyses to evaluate a range of historical and future adjustments to water production needs that may be required to account for changes to occupancy, climate change variability, economic variability, and other factors were also conducted. Additional support has continued, including presentation to the District board and follow-on water rights application.

**South Y Groundwater Feasibility Study and South Y Proposition 1 Groundwater Grant Application, South Tahoe Public Utility District, South Lake Tahoe, CA | Project Manager**

Preparation of successful grant application and associated Feasibility Study for South Tahoe PUD and other water suppliers to address a legacy Tetrachloroethylene (PCE) groundwater contamination. KJ oversaw the drilling of an extraction well and conduct of aquifer pump tests to evaluate the potential for extraction and treatment. Supported groundwater model with

development and evaluation of alternatives, including use of groundwater and surface water supplies as well as evaluated the potential benefits of in-situ remediation. Alternative remedial measures include installation of a remedial extraction well with well-headed treatment and reuse or disposal and use of surface water supplies including installation of an intake structure, raw water pump station and pipeline, surface water treatment plant, and distribution of potable water. The project included extensive public outreach.

**Water System Risk and Resilience Assessment (RRA) and Emergency Response Plan (ERP) and District Emergency Response and Recovery Plan Update, South Tahoe Public Utility District, South Lake Tahoe, CA | *Project Manager***

The purpose of RRA was to assess the risk and resiliency of the District's water supply system and serve as a guide to prioritize modifications of operational procedures, policy change, and security upgrades to mitigate risk to critical assets. KJ conducted a series of collaborative and interactive workshops with District operations staff. The assessment identified the District's most vulnerable assets and made recommendations to mitigate the impact of the threats in compliance with USEPA requirements for the AWIA of 2018. KJ also used the RRA, existing documents, and discussions with operations staff to draw on the experiences of the Caldor Fire to develop an ERP, a comprehensive update of the District's Emergency Response and Recovery Plan.

**Fire Vulnerability Assessment for the Lake Tahoe Basin, South Tahoe Public Utility District, South Lake Tahoe, CA | *Project Manager***

Grant funding by the California Tahoe Conservancy allowed STPUD to provide a fire vulnerability assessment to focus on wildfire risk mitigation for Lake Tahoe Basin water and wastewater utilities. KJ used a Total Risk approach that integrates the three risk elements of Failure Consequence, Threat Likelihood, and System Vulnerability to identify the priority locations of infrastructure in the Lake Tahoe Basin. Project included a web-based GIS mapping tool with fire-related mapping information and a matrix tool that documents a utility's specific criteria and asset information which were presented in agency workshops.

**South Tahoe Public Utility District, Climate Adaptation Plan, South Lake Tahoe, CA | *Project Manager***

Included a high-level qualitative risk analysis for each STPUD asset category and proposed potential solutions for the highest risk items in concert with STPUD's existing Capital Improvement Plan.

**Solano Sub-basin GSP Preparation, Solano Collaborative, Solano County Water Agency, Vacaville, CA | *Project Manager***

As a sub-consultant, KJ led the preparation of the GSP, including supporting the Stakeholder Coordination and Engagement, leading the development, screening, and evaluation of Projects and Management Actions to achieve sustainability for an on-time and on-budget submittal of the GSP. The prior project included managing the preparation of a successful \$1 million Proposition 1 –GSP Grant Application, Solano Collaborative, Solano County Water Agency, including preparation of the Work Plan detailing 16 tasks.



# Todd K. Reynolds, PE, BCEE

## Desalination and Advanced Treatment

### PROFESSIONAL SUMMARY

Todd brings a successful record in designing and managing advanced water treatment plant projects, excellent communication and organization skills, in-depth knowledge of regional water issues, and experience with all phases of your project. Todd was the manager for the design and CMAR delivery approach for the San Elijo Advanced Treatment Facility and he was the Program Advisor for the Santa Cruz Desalination Program. He understands the big picture issues that are driving the Pure Water Monterey program, has technical expertise with ozone, MF, RO, and UV design, construction, and startup, and has practical experience in leading the design and construction of complex, multi-discipline treatment plant projects.

#### TOTAL YEARS OF EXPERIENCE

34

#### EDUCATION

BS, Nuclear Engineering,  
University of  
California, Berkeley,  
1989

MS, Environmental  
Engineering,  
University of  
California, Berkeley,  
1995

#### REGISTRATIONS

Professional Engineer -  
Oregon (97624PE)

Professional Engineer -  
Civil - Texas (142309)

Professional Engineer -  
Civil - California  
(59630)

Professional Engineer -  
Civil - Hawaii (PE-  
16828)

Professional Engineer -  
Colorado  
(PE.0059227)

#### CERTIFICATIONS

### PROJECT EXPERIENCE

#### Desalination Feasibility Study, DMB Saltworks CEQA Assistance, Hauge Brueck Associates, Redwood City, CA | *Project Manager*

Responsible for evaluation of alternative facility locations, treatment processes and surface water intakes for a proposed 2-mgd desalination facility treating San Francisco Bay seawater in Redwood City, CA. The study summarized regulatory requirements and marine organism protection features of the intakes and developed conceptual designs, layouts and costs for onshore and offshore infiltration gallery, and screened surface water intake alternatives. The geology of the project location limited the feasibility of sub-seafloor intake alternatives. The treatment processes proposed for the desalination facility included coagulation, MF filtration reverse osmosis, and post treatment systems. The study would be used to support the environmental permitting for the overall project.

#### Somis Desalter Feasibility Study, Calleguas Municipal Water District, Somis, CA | *Project Manager*

Responsible for the evaluation and conceptual design of an 8.5 mgd reverse osmosis (RO) membrane groundwater desalination facility for the Calleguas Municipal Water District (CMWD). The facility would include iron and manganese pre-treatment ahead of the RO system and desalt groundwater to provide a local, reliable water supply to help reduce the importing of surface water and to improve basin water quality. Concentrate from the desalter would be discharged to the ocean through the CMWD Salinity Management Pipeline.

#### Pasatiempo Golf Course Recycled Water Feasibility Report, Scotts Valley Water District, Scotts Valley, CA | *Project Engineer*

Provided engineering services for the conceptual design of a 0.5-mgd capacity dual membrane satellite treatment facility to provide recycled water for the Pasatiempo Golf Course. The facility would treat secondary effluent with package MF membrane filters and RO desalination system to meet Title 22 requirements and meet the TDS goals of the golf course.

Board Certified  
Environmental  
Engineer, American  
Academy of  
Environmental  
Engineers

**MEMBERSHIPS /  
AFFILIATIONS**

American Water Works  
Association

California Water Reuse  
Association

American Society of Civil  
Engineers

American Membrane  
Technology  
Association

American Academy of  
Environmental  
Engineers

**Seawater Desalination Intake Feasibility Study, Santa Cruz Water Department, Santa Cruz,  
CA | Project Manager**

Responsible for evaluation of alternative sub-seafloor and surface water intakes for the City of Santa Cruz and Soquel Creek Water District's (scwd2) 2.5-mgd Seawater Desalination Program. The evaluation incorporated the results of an Offshore Geophysical Study related to the sub-seafloor intake alternatives and a year-long pilot test of a wedge-wire screen intake related to surface water intake alternatives. The study summarized regulatory requirements and marine organism protection features of the intakes and developed conceptual designs, layouts, and costs for vertical wells, slant wells, radial collector wells, infiltration galleries, and screened surface water intake alternatives. The study was used to support the environmental permitting for the overall project.

**Supplemental Supply Evaluation Study, Soquel Creek Water District, Santa Cruz, CA | Project  
Manager**

Responsible for conceptualizing and evaluating six backup supplemental supply options, including desalination, recycled water for potable reuse, and surface water transfer alternatives. The study developed conceptual-level project components, capital and operating costs, and an alternatives screening and ranking process. Groundwater replenishment with recycled water was identified for further evaluation. Presented project information to the public and answered questions from the District Board.

**Chrome-6 Blending and Permitting Project, San Francisco Public Utilities Commission, San  
Francisco, CA | Project Manager**

Responsible for approach, analysis, and permitting of Chrome-6 and Nitrate blending treatment for the San Francisco Regional and City Groundwater Programs. SFPUC is adding GW to their surface water system groundwater to provide a local, reliable water supply to diversify their water portfolio. Developed overall system control strategies, Water Quality Monitoring Plans, Operations Plans, and Engineering Plans to support DDW permitting for the City and Regional systems. Prepared standard operating procedures and assisted with well station startup.

**Advanced Water Purification Facility (AWPF) and Pump Station Project, Monterey One Water,  
Monterey, CA | Project Manager**

Design, construction, and startup for an advanced water purification facility for indirect potable reuse. The 5-mgd AWPF treats secondary effluent with ozone, microfiltration, reverse osmosis, and UV-advanced oxidation processes. Led a fast-paced design with multiple subconsultants. Competitively bid the ozone, MF, RO and UV/AOP equipment during 30-percent design to help accelerate the overall program schedule and meet Monterey One Water's objectives. The project also includes the design of a pump station and injection wells for groundwater recharge of the purified water. Prepared an online O&M Manual and provided startup and training support.

**Avenue Water Treatment Plant-Foster Park Master Plan, City of San Buenaventura, Ventura,  
CA | Project Engineer**

Evaluated improvement alternatives for 15-mgd Avenue WTP, including ozone, direct filtration, and membrane filtration to meet existing and proposed state and federal water quality regulations. Studied alternatives for wash water handling and recovery, alternative disinfection strategies and TOC and taste and odor reduction.

# Claudia Llerandi, PE

## Climate Change

### PROFESSIONAL SUMMARY

Claudia Llerandi is a Professional Civil Engineer in California with 10 years of consulting experience in climate change considerations, planning, permitting, designing, and constructing water and wastewater treatment systems, pump stations, and conveyance systems. Claudia focuses on planning, permitting, designing, and implementing recycled water projects to develop local, sustainable water supply alternatives that are adaptable to climate change. Claudia has worked on significant recycled water programs, including the Westside Recycled Water Program for the San Francisco Public Utilities Commission (SFPUC). Claudia has been a lead member of WateReuse for over 7 years.

#### TOTAL YEARS OF EXPERIENCE

10

#### EDUCATION

BS, Chemical Engineering, Simon Bolivar University, 2010

MS, Civil and Environmental Engineering, University of California, Davis, 2013

#### REGISTRATIONS

Professional Engineer - Civil - California (86734)

### PROJECT EXPERIENCE

#### City of Crescent City Climate Change Readiness (as a subconsultant), Stover Engineering, Crescent City, CA | *Project Manager*

Led the development of a Climate Change Readiness Study Plan to meet the requirements of the National Pollutant Discharge Elimination System (NPDES) permit for Crescent City. The study evaluated historical climate conditions and future climate hazards that may affect the City's wastewater collection, conveyance, and treatment facilities, identified assets that might be vulnerable to future climate hazards, and proposed actions the City could implement to mitigate climate hazard vulnerability and increase the resiliency of the City's wastewater infrastructure. The analysis utilized GIS tools to map the extents that the impacts (i.e. sea level rise, flooding) would have on the City's wastewater assets to determine potentially vulnerable assets. The assessment of the vulnerabilities included developing a climate risk assessment matrix to correlate short-term and long-term climate-driven potential impacts with the wastewater system assets and develop a heat map to determine which assets were most critical in the short-term and long-term. The heat map results allowed the City to plan for potential solutions and improvements based on asset risk prioritization.

#### Water Supply Alternatives Study, Calleguas Municipal Water District, Thousand Oaks, CA | *Staff Engineer*

Calleguas has identified several points of vulnerability in the imported water system and determined that it is necessary to develop alternative water supplies that can be used if critical imported supplies are cut off for an extended period, such as a seismic event.

#### On-Site Non-Potable Water Reuse Strategy, City of Sacramento, Sacramento, CA | *Project Engineer*

Evaluated the feasibility of implementing dual plumbing systems as part of the City's non-potable water reuse strategy. Work included support for preparing an ordinance to pre-plumb new commercial (non-residential) developments with dual plumbing for future installation of onsite non-potable water reuse systems. KJ assessed facilities (e.g. pipelines, appurtenances, and treatment), costs, permitting requirements, staff resources, and other considerations to implement an onsite water reuse strategy. Included a workshop series to develop a scope, vision, and objectives for the City's Onsite Water Reuse Strategy in the context of the City's broader One Water Vision. The findings will be summarized in an Onsite Water Reuse Dual-

Plumbing Study (Study) for the City to use to support the development of a new dual plumbing ordinance.

**City of Crescent City Feasibility Study for Recycled Water (as a subconsultant), Stover Engineering, Crescent City, CA | Project Manager**

Prepared a Recycled Water Feasibility study to evaluate feasible alternatives for the City of Crescent City to produce and use recycled water as an alternative water supply. Alternatives to be evaluated included non-potable recycled water reuse for irrigation and industrial effluent reuse for irrigation. The evaluation included developing conceptual schematics, defining the facilities required, estimating the treatment capacity, capital, and operational costs, and scoring and ranking the project alternatives based on a set of criteria and goals defined with the City.

**Alternatives Evaluation for Continued and Expanded Recycled Water Use, Scotts Valley Water District, Pasadena, CA | Project Engineer**

Developed a feasibility study for Scotts Valley Water District to compare alternatives for recycled water use. The alternatives evaluated included three local and three regional projects. Alternatives included options to supply the District customers with recycled water for nonpotable demands or to develop an advanced water treatment facility to produce purified water for groundwater augmentation. The evaluation included developing conceptual schematics, defining the facilities required, estimating the treatment capacity, capital, and operational costs, and scoring and ranking the project alternatives based on a set of criteria and goals defined with SVWD.

**Santa Cruz Regional Recycled Water Facilities Planning Study (RWFPS) Phase 2, Santa Cruz Water Department, Santa Cruz, CA | Project Engineer**

Responsible for developing a Water Supply Augmentation Implementation Plan to evaluate the feasibility for the City Water Department to use alternative water sources to augment their existing water supply portfolio to increase the City's resiliency to drought and future impacts on water availability. Alternate sources considered include excess surface water used for aquifer storage recharge, recycled water, purified water, and desalination. Recycled water alternatives evaluated included non-potable recycled water reuse for irrigation, potable purified water reuse for surface augmentation, groundwater augmentation or direct potable reuse. Evaluation included defining treatment and conveyance infrastructure requirements, estimating the treatment capacity, capital and operational costs, energy use, and greenhouse gas emissions, and scoring and ranking the project alternatives based on a set of criteria and goals defined with the stakeholders. Alternatives were evaluated based on capacity to reliably augment the City's water supply portfolio under changing climate conditions and multiyear drought events.

# Connor J. Rutten, PE

## Modeling / Hydraulics

### PROFESSIONAL SUMMARY

Connor Rutten is a civil engineer with project experience in master planning, resiliency planning, hydraulic modeling, wastewater lift station design, rehabilitation, and construction. His planning experience includes developing population and demand projections, identifying and evaluating Capital Improvement Program (CIP) projects, and developing budgetary cost estimates. He has also developed, calibrated, and analyzed several wastewater models using SewerGEMS as well as InfoSewer/InfoSWMM. His lift station experience includes developing civil/mechanical design drawings, preparing contract documents and specifications, and providing inspection services during construction. Connor's range of project experience from hydraulic modeling to design/construction provides a unique skillset capable of understanding system hydraulics on a larger scale as well as knowing how to tangibly construct and implement proposed solutions.

#### TOTAL YEARS OF EXPERIENCE

8

#### EDUCATION

BS, Civil Engineering,  
University of  
California, Los  
Angeles, 2016

MS, Civil and  
Environmental  
Engineering, Stanford  
University, 2017

#### REGISTRATIONS

Professional Engineer -  
Virginia (0402060970)

Professional Engineer -  
Civil - California  
(92734)

#### MEMBERSHIPS / AFFILIATIONS

American Water Works  
Association Water  
Environment  
Federation

### PROJECT EXPERIENCE

#### Las Posas Replacement Water Study, Calleguas Municipal Water District, Moorpark, CA / *Project Engineer*

KJ provided CMWD and Fox Canyon Groundwater Management Agency engineering services to perform the Study, which comprised fourteen individual studies, each evaluating a water supply alternative. Kennedy Jenks developed key criteria to assess each project alternative. Results of this Study found that opportunities to diversify the Basin's water supply are regionally accessible within supply types, including stormwater, treated brackish water, imported water, and recycled water, as well as invasive vegetation removal. Factors impacting the overall feasibility of an evaluated alternative include capacity and capital costs per project, and potential limitations on supply availability such as water rights, agency terms, hydrological availability, drought, and other limitations. The results also found advantages and disadvantages for each project, which are similar within a specific supply type.

#### 2023 Wastewater Master Plan, Crescenta Valley Water District, La Crescenta, CA / *Deputy Project Manager*

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

#### Feasibility Study for Recycled Water (as a subconsultant), Stover Engineering, Crescent City, CA / *Hydraulic Modeling*

KJ updated Crescent City's Infowater hydraulic model to be an all-pipe hydraulic model, and Connor was the task lead for updating the model, which includes water meter geocoding, demand allocation, and model calibration based on available SCADA data. The updated model was used to inform the City on how to optimally operate their system to minimize wear and tear on the City's facilities. A storage evaluation of the system was also performed to verify that the



City has adequate fire flow storage and peak hour storage. Based on discussions with City staff and the findings of the hydraulic and storage analyses, KJ developed CIP projects for the City to improve system performance and reduce operational risk.

**Alternatives Feasibility Study, Elsinore Valley Municipal Water District, Canyon Lake, CA /  
Project Team Member**

KJ was tasked by Elsinore Valley Municipal Water District (EVMWD) to perform a feasibility study to evaluate planning level alternatives for the proposed Phase 1 Master Plan improvements to the Canyon Lake Water Treatment Plant (CLWTP or plant) due to the subsequent detection of per- and polyfluoroalkyl substances (PFAS) in Canyon Lake. This feasibility study assisted with verifying that the recommended improvements to the CLWTP are advanced in a cost-effective and timely manner while ensuring that PFAS treatment can be effectively included in the treatment facilities at the CLWTP. The study included evaluating existing and future water supply sources versus projected demands, evaluating various water treatment processes, and developing high level cost estimates for each of the proposed alternatives.

**Water, Recycled Water, and Sewer Master Plans, City of South Gate, South Gate, CA /  
Hydraulic Modeling Lead**

KJ is an on-call water and wastewater hydraulic modeling consultant for the City of South Gate Public Works (CSGPW). Currently working on several analyses derived from the CSGPW's Water and Sewer Master Plans. These analyses include the Hawkins Reservoir Analysis, aimed at evaluating CSGPW's capacity to keep one of their key potable water distribution system reservoirs full without two of their main production wells active. Also performed an extended period simulation examining a "brown event" that occurred during a main break in CSGPW's system. Performed sewer capacity studies for new developments being constructed within CSGPW's sewer service area using the City's current InfoSewer hydraulic model, which was constructed and is maintained by KJ. Responsible for reviewing sewer capacity calculations done by developers to ensure that there is adequate system capacity to support the new development and beyond.

**Recycled Water Strategic Plan and Facilities Master Plan, Eastern Municipal Water District,  
Riverside County, CA / Project Engineer**

Performed facility siting analysis for possible locations of the Eastern Municipal Water District's water and wastewater treatment plants. Generated GIS maps for spatial analysis. Worked closely with the engineering team to evaluate conveyance alternatives for each treatment site.

**Fluvanna County Water and Sewer Master Plan / Modeler**

Connor developed population and demand data for the year 2040 planning horizon and constructed a WaterGEMS model of the County's existing water system, as well as a SewerGEMS model of their existing wastewater system. The existing systems' capacities were evaluated based on the projected increases in demand, and required infrastructure improvements were identified and modeled. Due to environmental concerns and regulations set by the Virginia Department of Environmental Quality, the remaining capacity of both the County's water supply withdrawal permits, and wastewater discharge permits were evaluated, informing the County as to how much additional capacity their system had under their current permits.

# Jack Stobaugh, PE

## Conveyance

### PROFESSIONAL SUMMARY

Jack is a Registered Professional Engineer with over 2 years of water and wastewater design experience. He has experience in the planning, design, and construction management of both water and wastewater systems, with a focus on pump station design, pipelines, and wastewater treatment and disposal.

#### TOTAL YEARS OF EXPERIENCE

2

#### REGISTRATIONS

Professional Engineer -  
Civil - California  
(95203)

#### MEMBERSHIPS / AFFILIATIONS

Bachelor of Science,  
California Polytechnic  
University, 2019

### PROJECT EXPERIENCE

#### Ventura-571 Booster Pump Station, Ventura County Public Works Agency, Oxnard, CA | *Lead Project Engineer*

Acted as the lead project engineer for the 30% design package for the new Ventura 571 Booster Pump Station. The design includes three new vertical turbine pumps, a new concrete pad, new pipelines to connect from the reservoir to the pump station, and a new retaining wall and shade structure adjacent to the new pump station.

#### Day Road Water Booster Pump Station Relocation, City of San Buenaventura, Ventura, CA | *Project Engineer*

The City's Day Road Pump Station, originally designed in 1958, is in need of replacement. The July 2022 Preliminary Design Report prepared by the City noted various issues with the facility (submersible pumps are difficult to service, the pump station is below grade and difficult to access, spare parts are not available, etc.) and recommended replacement of the facility with a new pump station to be located at the Bailey Water Conditioning Facility (WCF). Acted as the lead project engineer for the 60% design package. Jack's duties included coordinating across the different disciplines on the team and leading the design of the pipelines. Involved approximately 1,000 LF of 12" pipeline for the suction and discharge lines off of the new pump station, along with demolition plans to remove the existing submersible pump station.

#### Eastside to Westside Interconnection Water Transmission Line, City of San Buenaventura, Oxnard, CA | *Project Engineer*

Assisted with developing 60% plan set documents that cover the clients plan of converting one of the water pressure zones in the City of Ventura to a higher water pressure. Including connection details and plan and profile for a range of pipe sizes and materials.

#### Reservoir Replacement, City of San Fernando, Pasadena, CA | *Project Engineer*

The City had an existing 1.0 MG circular concrete reservoir, originally built in the 1960s, that had reached the end of its useful life with a history of leakage and a lack of structural integrity to provide reliable water service to the City in the event of an earthquake. KJ is evaluating different reservoir configurations and reservoir construction materials to obtain the most cost-effective and valuable reservoir replacement configuration. KJ evaluated both a strand-wound, circular, pre-stressed concrete tank designed and constructed in accordance with AWWA D110 would consist of a Type I cast-in-place concrete core wall with vertical pre-stressed reinforcement and circumferential strand pre-stressing and a conventionally reinforced rectangular concrete tank

designed and constructed in accordance with ACI 350. As a result of site constraints associated with existing structures and confined areas for excavation, a conventionally reinforced rectangular concrete tank was selected. Acted as the primary facilitator for responding to submittals and RFIs for engineering during construction services. This involved coordinating amongst the KJ design team members, the contractor, and the client to ensure that the demolition of the existing tank, construction of the new tank, and a series of pipeline modifications were completed as shown in the contract documents.

**Tesoro Viejo Interim Water Supply Projects, Tesoro Viejo, Inc., Madera County, CA / Staff Engineer**

Compiled conceptual cost estimates for excess recycled water scenarios in Tesoro Viejo. Includes cost analysis of pump stations, 4" to 10" PVC pipelines, evaporation and percolation ponds, wellhead treatment systems, and extraction and injection wells for groundwater recharge.

**UWCD-Prelim Design PTP Sys Relocation, United Water Conservation District, Oxnard, CA / Team Member**

UWCD is preparing for potential pipeline connections to the Pumping Trough Pipeline for the delivery of recycled water. The new Laguna Road Pipeline will support the delivery of recycled water into the Pumping Trough Pipeline. Jack was tasked with collecting cost estimates for 24" pipeline, associated valves, meters, and TDS/Chlorine analyzers.

**Memorial Park Wastewater Collection, San Mateo County Parks, Loma Mar, California / Design Engineer**

Upgraded the wastewater gravity collection system at Memorial Park in Loma Mar, San Mateo. Required horizontal directional drilling to install roughly 5,500 feet of pipe through dense redwoods, across a suspended bridge over Pescadero Creek, and underneath a large ridge to maximize pipe slopes and connect to a treatment system.

**Lake Camanche Wastewater System, East Bay Municipal Utility District, Wallace, California / Design Engineer**

Replacement of the wastewater collection system at Lake Camanche. Re-designed six wastewater lift stations that utilized grinder pumps and replaced them with brand new aboveground solids handling pumps. Project required wet well design, replacing 18,000 feet of gravity pipe and 4,000 feet of force main pipe, and hydraulic calculations to ensure necessary pump flow and pressure to handle peak park flows.

# William C. Yates, P.E.

## Constructability

### PROFESSIONAL SUMMARY

William (Bill) Yates has a wide variety of experience in the water resources/civil engineering field. As Project Manager/Project Engineer, he has been responsible for many projects, including water treatment, pipeline and pump station design, water storage facilities construction inspection, hydrological and geological studies, water well systems, hydrological analysis testing, storm sewer design, residential land development, airport site selection, and drainage basin, irrigation, and river modeling. In his career, Bill has designed more than 150,000 linear feet of large-diameter pipelines.

#### TOTAL YEARS OF EXPERIENCE

40

#### EDUCATION

BS, Civil Engineering,  
Colorado State  
University, 1982

MS, Water Resources  
Planning and  
Management,  
Colorado State  
University, 1987

#### REGISTRATIONS

Professional Engineer -  
Civil - Oregon  
(85271PE)

Professional Engineer -  
Civil - California  
(48658)

### PROJECT EXPERIENCE

#### Environmental Services, Oxnard, CA | Project / Construction Manager

The City of Oxnard (City) has implemented the Groundwater Recovery Enhancement and Treatment (GREAT) Program – a comprehensive water resources effort to increase local water supply reliability and to meet the needs of a fast-growing population. The Phase 2 (Segment A) Recycled Water Backbone System (RWBS) is a major component of the GREAT Program. The Phase 2 RWBS will include a pipe distribution system that can convey recycled water from the Advanced Water Purification Facility (AWPF) to potential users throughout the City and vicinity areas. The RWBS is located near the Oxnard shoreline with a high groundwater table; therefore, groundwater dewatering is a significant part of the construction. Served as the project and construction manager.

#### Reclamation Water System Design, Santa Clarita Valley Water Agency, Santa Clarita, CA / Project Engineer

Reclaimed Water Project. Responsible for project management, coordination, and design of a 12,000 gpm reclaimed water pump station and a 2,500 gpm booster pump station. The project included hydraulic analysis and pump selection, pipeline and wet well/can layout and design, and coordination with the Los Angeles County Sanitation District and Magic Mountain staff.

#### Water System Master Plan Update, City of Chino, Chino, CA | Project Engineer

Responsible for outlining land uses and developing demands and flow rates. Performed analysis and modeled the current and future water distribution network utilizing the University of Kentucky program KYPIPE. Developed future storage, supply, and transmission requirements. The project included 4 reservoirs, 9 wells, 2 booster stations, 2 pressure zones, and over 70 miles of pipeline ranging from 8 to 36-inch in diameter.

#### Final Design of Recycled Water Pond Pump Station, Eastern Municipal Water District, Perris, CA | Technical Advisor

For the design of three recycled water pond pump stations to convey recycled water from seasonal storage ponds to the recycled water distribution system. Total capacity of the three pump stations was 13,000 gpm with seven 200 to 250 HP pumps.

**Groundwater Banking - Water Supply Stabilization Program, Antelope Valley-East Kern Wtr Agency, Palmdale, CA** / *Technical Advisor*

AVEK is implementing an \$80 million water banking program with two separate water banks, the 1,475-acre Westside Water Bank and the 80-acre Eastside Water Bank. The Westside site can recharge up to 50,000 ac-ft/year over 500 acres of agricultural land and currently can extract 25 mgd with 11 potable recovery wells. The Eastside site can recharge up to 5,000 ac-ft/year in three 2-acre recharge ponds and extract up to 6 mgd with 3 potable recovery wells. Over the course of 5 years, Kennedy Jenks managed seven subconsultants with 15 sub-agreements, and prepared eight design packages for \$34 million in construction.

**Recycled Water Reservoir, Santa Clarita Valley Water Agency, Santa Clarita, CA** / *Project Manager*

Responsible for project management, coordination, and design of a 1.5 mg welded steel recycled water storage reservoir. The project also included cathodic protection and specialized coatings, electrical and instrumentation, and site work including AC paving, fencing and gates, and drainage facilities.

**Calabasas Road 10-Inch Emergency Waterline Replacement, Las Virgenes Municipal Water District, Calabasas, CA** / *Project Manager / Project Engineer*

Responsible for project management, coordination, and design of approximately 2,400 feet of 8-inch HDPE slip-lined inside and existing 10-inch steel pipeline. In a period of just three weeks, repair alternatives were evaluated, the site was surveyed, hydraulic modeling was performed, and final design specifications and drawings were completed and submitted. The project was constructed during the night to minimize disruption to motorists and businesses.

**Construction Management Services, City of Santa Monica, Santa Monica, CA** / *Project Manager*

Responsible for construction management services for the improvements to the existing Riviera Reservoir, including replacement of valves, the addition of a recirculation pumping system, HDPE inlet and outlet manifold system, railings, grating, air vents, hose bibb system, and concrete repair on the reservoir interior.

**Preliminary Design PTP Sys Relocation, United Water Conservation District, Oxnard, CA** / *Technical Advisor/QA/QC*

Design of a new 24-inch diameter pipeline to deliver recycled water from the City of Oxnard's Advanced Water Purification Facility through Pleasant Valley County Water District's connection to reduce pumping in the Pumping Trough Pipeline (PTP) service area. Preliminary design was performed at a 30% design level, incorporating geotechnical boring information, desktop utility surveys, and integration of available topographic, water quality and hydraulic information. Two alignments were developed, for the right-of-way and on private landowner property. Trenchless installation or bridging of the Revolon Slough was also considered. Cost estimates were developed at a Class IV level.



# Drajhan Kalafatic, ENV SP

## Local Groundwater

### PROFESSIONAL SUMMARY

Drajhan Kalafatic has developed strong skills in creating detailed and sustainable master plans. He gathers important data, such as infrastructure details and environmental factors. He communicates effectively with authorities, utility companies, and the community to help shape effective plans that meet our clients' needs. Drajhan supports wastewater treatment projects using planning software like WaterCAD and InfoSWMM. Drajhan brings experience in project financing, design, and risk prioritization. He is flexible and proactively collaborates with engineering professionals and clients.

#### TOTAL YEARS OF EXPERIENCE

2

#### CERTIFICATIONS

Envision Sustainability Professionals (ENV SP)

### PROJECT EXPERIENCE

#### District 01 Trunk Sewers Rehabilitation (Group 1 & 2), Los Angeles County Sanitation District, Whittier, CA | *Project Engineer*

Developed a Construction Bid Package for the rehabilitation of approximately 17,128 linear feet of existing 10- to 21-inch diameter non-reinforced concrete pipe (NRCP) of Alameda Street Extension Trunk, Crockett Boulevard-Glen Avenue Trunk, Wilcox Avenue Trunk, and Wilcox Avenue Trunk (Extension #1) and 71 manholes. Consisted of site walks, record drawings review, CIPP liner calculations, hydraulic calculations, specification write-ups, exhibits development for contractor use, and communication with different cities and Los Angeles county.

#### Groundwater Utilization Project, City of Thousand Oaks, Thousand Oaks, CA | *Project Engineer*

Developed a conceptual design to transport effluent water from the Hill Canyon Treatment Plant across the city to the Los Robles Golf Course in order to mix the effluent with contaminated salt water from one of their well and be able to irrigate the golf course. The remainder of the treated water will be sent over to an AWWP for tertiary treatment. Designed three lift stations and 14.5 miles of pipeline varying from 10 inches up to 16 inches in diameter. Also developed multiple Class 5 cost estimates and life cycle analyses along with updating a 30% design that KJ developed back in 2019 and was updated in 2021.

#### Water Storage Optimization, City of Thousand Oaks, Thousand Oaks, CA | *Staff Engineer*

Supported the development of a Technical Memo focused on improving the City's current water storage. Focused on fire flow criteria requirements and improvements, water storage analysis, data presentation, model review, facilities overview, and recommendations to improve quality and overall performance.

#### 2023 Wastewater Master Plan, Crescenta Valley Water District, La Crescenta, CA | *Staff Engineer*

Developed population and flow projections, and engineering analyses to support model development and CIP generation. KJ is currently working with Crescenta Valley Water District (District) to develop their 2023 Wastewater Master Plan. KJ performed an in-depth Business Risk and Vulnerabilities Assessment for each component of the District's wastewater collection

system, developing a complete asset register, and prioritized system improvement projects based on the criticality of the asset and the likelihood of failure. Connor built and calibrated the wastewater hydraulic model and used the model to corroborate both known and unknown system deficiencies to help inform project prioritization. Connor developed project costs for each identified system improvement and compiled the results of the study into the 2023 Wastewater Master Plan.

**West Lake Tahoe Regional Water Treatment Plant (WLTRWTP) Engineering Services during Construction, Tahoe City Public Utility District, Tahoe City, CA | Staff Engineer**

Support for KJ's engineering services during construction (ESDC) and construction management (CM) services. KJ is supporting the site representative and TCPUD managers and leading the design team input during the construction process. CM services include contract administration, document management, change order review and negotiation, inspection, special inspection management, and subconsultant inspection management.

**Three Reservoir Management Systems, City of Beverly Hills, Beverly Hills, CA | Staff Engineer**

KJ is providing project management services, design services, and support during the bidding and construction phases for the Three Reservoir Management Systems.

**Fire Life Safety Engineering Services During Construction (SO6), City of San Jose, Water Pollution Control, San Jose, CA | Staff Engineer**

Provided ESDC document control, processing, and communication with the client and KJ's Subcontractor. The project will standardize and upgrade fire life safety systems in six newly constructed buildings and seven existing buildings at the San José-Santa Clara Regional Wastewater Facility (RWF) and install a new centralized fire alarm monitoring system to comply with current building and fire codes. Unused fire alarm equipment will be removed. The updated fire alarm systems and centralized fire alarm notification monitoring system will ensure the safety of the occupants of each building and improve RWF reliability.

**Critical Repair and Rehabilitation of Tertiary Filtration System, City of San Jose, Water Pollution Control, San Jose, CA | Staff Engineer**

Engineering support for the Filter Rehabilitation Project will repair and rehabilitate the largest tertiary wastewater filtration system in the western U.S., which currently produces 94 mgd average daily flow effluent water complying with the RWF's NPDES Permit and Title 22 Permit to produce recycled water. The facility was designed to treat an average of 167 mgd and a peak of 271 mgd. This \$33M improvement will deliver \$4.95M of services encompassing condition assessment, design, and construction-phased services to extend the useful service life of the entire tertiary system comprising the filter influent pump station (FIPS), secondary FIPS, 16 dual-media filtration batteries, filter building, backwash storage and treatment, chlorine contact basins for disinfection, and auxiliary equipment and systems. Provided ESDC document control, distribution and processing, and submittal reviews.

**CIP Public Works Project, City of Corona, Corona, CA | Engineering Intern**

R-3 Potable Water Tank Ring Drain and Pavement Repair. Using documentation of work completed, created invoices, balance change orders, and a notice of completion for the project.

# Paul H. Chau, PE

## Groundwater Banking

### PROFESSIONAL SUMMARY

Paul Chau is a civil engineer with a diverse background in master planning, hydraulic water modeling, and infrastructure design. He has developed over 20 master plans for potable water, sewer, and recycled water systems. Paul has built, developed, calibrated, and analyzed hydraulic water models using both InnoVizy and Bentley software. He has also provided engineering analyses such as demand development, pipe and pump station sizing, and CIP development. In addition, Paul has extensive experience in water, recycled water, and sewer pipeline design.

#### TOTAL YEARS OF EXPERIENCE

17

#### EDUCATION

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

MS, Civil and Environmental Engineering, Stanford University, 2007

#### REGISTRATIONS

Professional Engineer - Civil - California (75784)

### PROJECT EXPERIENCE

#### High Desert Water Bank Program Management Services, Antelope Valley-East Kern Water Agency, Palmdale, CA | *Project Manager*

The project's objectives are to store up to 280,000 AF of Metropolitan's SWP water supply with water recovery of up to 70,000 AFY over four consecutive years. The project includes 27 production wells. The project is located on a 1,500-acre site in unincorporated Los Angeles County, adjacent to the East Branch of the California Aqueduct. KJ provides program management services for AVEK, including support with implementation strategies, value engineering, technical oversight and support, cost and schedule management, and field testing.

#### UWCD-Coastal Brackish GW Extraction & Treatment Project Alternatives Analysis, United Water Conservation District, Pasadena, CA | *Technical Advisor*

The alternatives analysis is intended to be a high-level screening analysis to evaluate five potential projects for distributing coastal brackish groundwater. The analysis includes an assessment of new pipelines and existing pipelines to convey produced water from a Coastal Brackish Water Treatment Plant to meet demands in the District's service area.

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

Developed the District's 2023 Wastewater Master Plan. Performed an in-depth Business Risk and Vulnerability Assessment for each component of the District's wastewater collection system, developed a complete asset register, and prioritized system improvement projects based on the asset's criticality and the likelihood of failure.

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

The Las Virgenes - Triunfo Joint Powers Authority (JPA) is implementing the Pure Water Program, which will provide a new water supply for the region with a surface water augmentation project that will provide advanced water treatment of recycled water with a 6-mgd treatment plant. The product water will supplement the Las Virgenes Reservoir. As part of the feasibility study, Paul confirmed sizing requirements for the advanced water treatment plant with a monthly analysis of recycled water supplies and demands, developed pipeline alignments, evaluated supplemental supply from stormwater and brine concentration, and provided updated

cost estimates. The project was funded by the Bureau of Reclamation and was approved without comment, a rare feat.

**Water Master Plan Update, City of Thousand Oaks, Thousand Oaks, CA / *Project Engineer***

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

**East County Regional Water Reuse Program Facilities Planning Study, Full Advanced Water Treatment Demonstration Project, Padre Dam Municipal Water District, Santee, CA / *Project Engineer***

Provided engineering services for a feasibility study evaluating several options to develop a potable reuse water supply. Five project alternatives were considered, including various facility sites and conveyance options for distribution network expansion, indirect potable reuse via groundwater recharge and recovery in the Santee Basin, and lake augmentation potable reuse. Proposed facilities included a new wastewater treatment plant, advanced water treatment plant, and conveyance facilities, including pumps, pipes, diversion structures, and injection wells. Responsible for developing project concepts, performing treatment process analysis, evaluating facility sizing and layout requirements, estimating costs, and performing alternatives analysis.

**Las Posas Replacement Water Study, Calleguas Municipal Water District, Moorpark, CA / *Project Engineer***

Led all technical analysis and life cycle cost development for the project alternatives. KJ provided CMWD and Fox Canyon Groundwater Management Agency engineering services to perform the Study, which comprised fourteen individual studies, each evaluating a water supply alternative. KJ developed key criteria to assess each project alternative. Results of this Study found that opportunities to diversify the Basin's water supply are regionally accessible within supply types, including stormwater, treated brackish water, imported water, and recycled water, as well as invasive vegetation removal. Factors impacting the overall feasibility of an evaluated alternative include capacity and capital costs per project, and potential limitations on supply availability such as water rights, agency terms, hydrological availability, drought, and other limitations. Project also included stakeholder engagement for criteria development and analysis review, and found advantages and disadvantages for each project, which are similar within a specific supply type.

**Recycled Water Master Planning, Santa Clarita Valley Water Agency, Santa Clarita, CA / *Project Engineer***

Led the engineering team for Prop 84-funded Recycled Water Plan to investigate non-potable reuse, groundwater recharge, surface water augmentation, and direct potable reuse for CLWA and the four retailers in the region. Responsibilities included leading project oversight and QA/QC of the hydraulic modeling development. Included alternative analysis and facility siting considerations for 14 sub-alternatives, including evaluation of conveyance requirements and costs.

# Janet L. Hoffman, PE, CEP

## Cost Estimating

### PROFESSIONAL SUMMARY

Janet Hoffman is a mechanical engineer and Certified Estimating Professional (CEP) with experience in the design and construction of public, industrial, and institutional facilities. She regularly provides detailed construction cost estimates at the planning level, conceptual, preliminary, interim, and final design levels design for municipal and industrial wastewater, stormwater, and railroad fueling projects. She can provide a clear Basis of Estimate reports and assessments and include the appropriate level of detail for allowances and contingency factors at differing design levels. Janet also has extensive experience in the construction industry, leading mechanical work on various building, process, and industrial projects. Her construction experience includes preparing bids, scheduling, budgeting, and cost forecasting, piping layouts, coordinating subcontractors, preparing submittals and O&M manuals, negotiating change orders and disputes, and starting up and commissioning systems using both the traditional design-bid-build and GC/CM contracting methods. She has the unique perspective of having experience working both on the contractor's side and as the engineer.

#### TOTAL YEARS OF EXPERIENCE

28

#### EDUCATION

BS, Mechanical Engineering,  
University of Southern California, 1994

#### REGISTRATIONS

Professional Engineer - Mechanical - Washington (36133)

#### CERTIFICATIONS

AACE International / Certified Estimating Professional (CEP), AACE International (257340)

#### MEMBERSHIPS / AFFILIATIONS

Association for the Advancement of Cost Engineering International, Member

### PROJECT EXPERIENCE

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

Project involves performing a Feasibility Study (FS) under at US Bureau of Reclamation WaterSMART grant for Pure Water Las Virgenes, a potable reuse project to further treat available recycled water from the Tapia Water Reclamation Facility at a new Advance Water Treatment Plant (AWP) and convey purified water to Las Virgenes Reservoir for later use as drinking water. The purpose of the Title XVI FS is to identify and investigate opportunities and determine the feasibility for the JPA to reuse wastewater. The focus of the study is to present the preferred alternative for the future potential indirect potable reuse (IPR) effort describing the quantities, treatment processes, conveyance system, brine discharge and reservoir augmentation system in accordance with the USBR reporting requirements.

#### Integrated Wastewater Master Plan Phase 2, Las Gallinas Valley Sanitary District, San Rafael, CA | *Cost Engineer/Estimator*

Prepared detailed cost estimates for the Las Gallinas Valley Sanitary District's Integrated Wastewater Master Plan, which included an evaluation of all aspects of the wastewater system from collection system, treatment plant to discharge against a broad range of risks including those associated with climate change. The IWMP is an essential tool for LGVSD to prioritize critical near-term needs while defining long-term opportunities for sustainable levels of service under a range of risks.

#### Retrofit Perris Desalter Wells Feasibility Study, Eastern Municipal Water District, Perris, CA | *Cost Engineer/Estimator*

Prepared concept-level cost estimates for recycled water distribution system expansion to identify capital needs and funding requirements. Work included estimates for pipeline alignment ranging from 8-inch to 24-inch diameter.



**Lindero Pump Station, Calleguas Municipal Water District, Westlake Village, CA / Cost Estimator**

Prepared cost estimates for the rehabilitation of a 50 cfs pump station. Preliminary design efforts on the project include a seismic evaluation of the pump station building and surge tanks, hydraulic evaluation to determine pumping capacity and pump configuration, and an evaluation of standby power alternatives. Final design will include replacement of electrical and mechanical equipment and various structural and architectural improvements.

**Recycled Water Tank Final Design for Recycled Water Vista Canyon Project, Santa Clarita Valley Water Agency, Santa Clarita, CA / Cost Estimator**

Prepared cost estimates for constructing two 0.5 MG steel water storage tanks, associated site work, overflow basin, inlet and outlet piping, driveway, fencing, electrical, and control.

**Backbone Improvement Program: Calabasas and Agoura Hills Alignments Project, Las Virgenes Municipal Water District, Calabasas, CA / Cost Engineer/Estimator**

Prepared detailed construction cost estimates at the preliminary, interim, and final design stages for installation of a 30-inch diameter welded steel water pipeline installed in city streets via open cut and jack and boring methods.

**Advanced Water Purification Facility (AWPF) and Pump Station Project, Monterey One Water, Monterey, CA / Cost Engineer/Estimator**

Prepared detailed construction cost estimates at the preliminary, interim, and final design stages for the Advanced Water Purification Facility, injection wells, and conveyance pipelines.

**Temecula Valley Recycled Water Pipeline, Eastern Municipal Water District, Temecula, CA / Cost Engineer/Estimator**

Assisted in the preparation of the preliminary design for 19,200-LF of new 36-inch diameter recycled water pipeline to help the District maintain zero creek discharge and increase capacity in their recycled water transmission system. The project included an assessment of project area soil corrosivity to establish design criteria, analysis of alignment alternatives, geotechnical investigations for the final selected pipeline alignment, system hydraulic evaluation, surge analysis, traffic control study, and CEQA/NEPA support. Kennedy Jenks led the alternatives analysis through a series of workshops with District staff. The team also assessed bypass alignment options to connect an existing 24-inch diameter recycled waterline to an existing 36-inch diameter recycled waterline.

**Westside Recycled Water Project at Golden Gate Park (GGP) and Lincoln Park Golf Course (LPGC) Irrigation Retrofits, San Francisco Public Utilities Commission, San Francisco, CA / Cost Engineer/Estimator**

Under our As-Needed Recycled Water contract, KJ synthesized and evaluated conveyance alternatives to deliver up to 3,500 gpm of recycled water from the City's Oceanside Water Pollution Control Plant to several large customers, including Golden Gate Park, the Presidio, and the National Cemetery.

# Marina Magaña

## Funding

### PROFESSIONAL SUMMARY

Marina has over 9 years of experience providing grant application and grant administration support to water agencies in California. She has developed funding proposals that received over \$120 million in grant funding and managed over \$200 million in grant and loan funding. Marina's experience includes water resources planning, such as urban water management plans, Annual Water Supply and Demand Assessments, and Water Master Plans. She has extensive knowledge of environmental laws, policies, permits, water quality compliance, and regulations.

#### TOTAL YEARS OF EXPERIENCE

9

#### EDUCATION

BA, Environmental Studies, minor in G.I.S. University of California, Los Angeles

#### MEMBERSHIPS / AFFILIATIONS

American Water Works Association, Member

American Public Works Association

WaterReuse Association

### PROJECT EXPERIENCE

#### 2020 Water Efficiency Plan, Ventura Water, Ventura, CA | *Planning Support*

Served as the primary author of the 2020 Urban Water Management Plan for Palmdale Water District. Updated, revised, and developed plan sections based on collected data and discussion with the district, including but not limited to water supply and demand projections, water supply reliability, recycled water, demand management measures, and water shortage contingency plan. Presented the UWMP and findings at Public Hearing. Conducted final UWMP submittal and assisted with the distribution to neighboring agencies.

#### Water Supply Alternatives Study, Calleguas Municipal Water District, Thousand Oaks, CA | *Planning Support*

Provided planning support for the development of the Calleguas Water Supply Alternatives Study, including GIS assistance.

#### Water Supply Assessment, Santa Clarita Valley Water Agency | *Planning Support*

Prepared a water supply assessment for two development projects in the Santa Clarita Valley.

#### Bureau of Reclamation WaterSMART Grant Application, City of Thousand Oaks, Thousand Oaks, CA | *Grant Support*

Prepared a successful WaterSMART grant application for a groundwater desalination facility in the City of Thousand Oaks.

#### SEWD Grant Writing and Administrative Services, Stockton East Water District, Stockton, CA | *Grant Support*

Prepared a CDFW grant application for the Bellota Weir Fish Passage Improvements Project.

#### MMWD - RW Permitting Assistance, Marin Municipal Water District, Corte Madera, CA | *Engineering Support*

Prepared an Addendum to Marin Water's Title 22 Engineering Report for distribution and use of recycled water for an emergency recycled water truck fill station.

**Casitas-USBR WaterSMART Grant Application-, Casitas Municipal Water District, Oak View, CA | Grant Support**

Prepared a WaterSMART Drought Resiliency grant application for construction of an intertie pipeline that will provide drinking water to Lake Casitas and/or Casitas Water customers during drought emergencies.

**SimiValleyWWD-2020 UWMP, Ventura County Waterworks District No. 9, Simi Valley, CA / Planning Support**

Prepared the 2020 update to the City of Simi Valley's Urban Water Management Plan. Tasks included developing demand projections based on land-use changes, evaluating future water supply projections based on forecasts from the Metropolitan Water District of Southern California, and preparing demand management, climate change, and long-term supply reliability sections. Drafted and conducted analyses for primary report sections including but not limited to demand management measures and water efficiency plan.

**2020 Urban Water Management Plan Update, City of San Buenaventura, Ventura, CA / Engineering Support**

Collected and analyzed water quality and managed compliance with state and federal laws. Prepared planning and policy documents and implemented water resources programs for water system planning, wellhead protection, water conservation, wastewater system planning, water quality, and emergency management. Managed water supply demand/forecasting and well infrastructure efficiency through SCADA system. Liaison and coordinate with regulatory agencies, neighboring cities, and local jurisdictions, and represent the City at all drinking water, wastewater, and recycled water committees and regional groups. Wrote proposals, project reports, informational brochures, and other water resource-related documents. Provided technical expertise internally and externally and provided guidance in interpreting and applying local, state, and water-related issues.

**Santa Cruz Regional Recycled Water Facilities Planning Study (RWFPS) Phase 2, Santa Cruz Water Department, Santa Cruz, CA | Planning Support**

Provided planning support for developing the Santa Cruz Water Supply Augmentation Implementation Plan, a culmination of efforts to evaluate alternative water supply sources to meet an estimated water shortage gap.

**RWM Grant Application, San Bernardino Valley Municipal Water District, San Bernardino, CA | Grant Support**

Prepared 10 grant applications under the Department of Water Resources Integrated Regional Water Management Implementation Grant Program.

**Sustainable Groundwater Management Act Planning Grant Administration, Sierra Valley Groundwater Management District, Sierra Valley, CA | Grant Administration**

Assisted with the management of a planning grant for the development of the Sierra Valley Groundwater Sustainability Plan under the California Department of Water Resources SGMA Grant Program. Prepared project progress reports and ensures timely submittal of grant deliverables to ensure prompt grant disbursements.

**Las Virgenes Municipal Water District**  
Water Supply Reliability and Diversification Study

**Appendix B | Proof of Professional Registration**

Dawn Taffler, **Principal-In-Charge**, Licensed Professional Engineer (PE) in California



**TAFFLER, DAWN T**

**LICENSE NUMBER:** [65754](#) **LICENSE TYPE:** CIVIL ENGINEER

**LICENSE STATUS:** CLEAR **EXPIRATION DATE:** SEPTEMBER 30, 2025

**SECONDARY STATUS:** N/A

**CITY:** BELLEVUE **STATE:** WASHINGTON **COUNTY:** OUT OF STATE **ZIP:** 98006

Karen Miller, **Deputy Project Manager**, Licensed Geologist (PG) and Hydrogeologist (CHG) in California



**MILLER, KAREN**

**LICENSE NUMBER:** [7049](#) **LICENSE TYPE:** GEOLOGIST

**LICENSE STATUS:** CLEAR **EXPIRATION DATE:** MAY 31, 2025

**SECONDARY STATUS:** N/A

**CITY:** GIG HARBOR **STATE:** WASHINGTON **COUNTY:** OUT OF STATE **ZIP:** 98332



**MILLER, KAREN**

**LICENSE NUMBER:** [719](#) **LICENSE TYPE:** HYDROGEOLOGIST

**LICENSE STATUS:** CLEAR **EXPIRATION DATE:** MAY 31, 2025

**SECONDARY STATUS:** N/A

**CITY:** GIG HARBOR **STATE:** WASHINGTON **COUNTY:** OUT OF STATE **ZIP:** 98332

Tim Waters, **Project Engineer**, Licensed Professional Engineer in California



**WATERS, TIMOTHY**

**LICENSE NUMBER:** [86080](#) **LICENSE TYPE:** CIVIL ENGINEER

**LICENSE STATUS:** CLEAR **EXPIRATION DATE:** SEPTEMBER 30, 2024

**SECONDARY STATUS:** N/A

**CITY:** CARLSBAD **STATE:** CALIFORNIA **COUNTY:** SAN DIEGO **ZIP:** 92009

Jeff Savard, **QA/QC**, Licensed Professional Engineer in California



**SAVARD, JEFFREY TODD**

**LICENSE NUMBER:** [51156](#) **LICENSE TYPE:** CIVIL ENGINEER

**LICENSE STATUS:** CLEAR **EXPIRATION DATE:** SEPTEMBER 30, 2025

**SECONDARY STATUS:** N/A

**CITY:** VENTURA **STATE:** CALIFORNIA **COUNTY:** VENTURA **ZIP:** 93004



David Ferguson, **QA/QC**, Licensed Professional Engineer in California



**FERGUSON, DAVID WESLEY**

**LICENSE NUMBER:** [34626](#) **LICENSE TYPE:** CIVIL ENGINEER

**LICENSE STATUS:** CLEAR ⓘ **EXPIRATION DATE:** SEPTEMBER 30, 2025

**SECONDARY STATUS:** N/A

**CITY:** FONTANA **STATE:** CALIFORNIA **COUNTY:** SAN BERNARDINO **ZIP:** 92336

Sachi Itagaki, **Regulatory & Water Rights Advisor**, Licensed Professional Engineer in California



**ITAGAKI, SACHIKO**

**LICENSE NUMBER:** [50221](#) **LICENSE TYPE:** CIVIL ENGINEER

**LICENSE STATUS:** CLEAR ⓘ **EXPIRATION DATE:** JUNE 30, 2025

**SECONDARY STATUS:** N/A

**CITY:** CORTE MADERA **STATE:** CALIFORNIA **COUNTY:** MARIN **ZIP:** 94925

Connor Rutten, **Modeling/Hydraulics**, Licensed Professional Engineer in California



**RUTTEN, CONNOR**

**LICENSE NUMBER:** [92734](#) **LICENSE TYPE:** CIVIL ENGINEER

**LICENSE STATUS:** CLEAR ⓘ **EXPIRATION DATE:** DECEMBER 31, 2025

**SECONDARY STATUS:** N/A

**CITY:** RANCHO SANTA MARGARITA **STATE:** CALIFORNIA **COUNTY:** ORANGE **ZIP:** 92688

Todd Reynolds, **Project Engineer**, Licensed Professional Engineer in California



**REYNOLDS, TODD KENDLE**

**LICENSE NUMBER:** [59630](#) **LICENSE TYPE:** CIVIL ENGINEER

**LICENSE STATUS:** CLEAR ⓘ **EXPIRATION DATE:** DECEMBER 31, 2025

**SECONDARY STATUS:** N/A

**CITY:** PIEDMONT **STATE:** CALIFORNIA **COUNTY:** ALAMEDA **ZIP:** 94611

Bill Yates, **Constructibility**, Licensed Professional Engineer in California



**YATES, WILLIAM CARLYSLE**

**LICENSE NUMBER:** [48658](#) **LICENSE TYPE:** CIVIL ENGINEER

**LICENSE STATUS:** CLEAR ⓘ **EXPIRATION DATE:** JUNE 30, 2026

**SECONDARY STATUS:** N/A

**CITY:** VENTURA **STATE:** CALIFORNIA **COUNTY:** VENTURA **ZIP:** 93003



## Contact Information

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**Dawn Taffler, PE, LEED AP**  
Principal  
(626) 568-4323

**Meredith Clement**  
Project Manager  
(805) 973-5718

**Oxnard Office**  
2775 North Ventura Rd, Ste 202  
Oxnard, CA 93036



**DATE:** September 3, 2024  
**TO:** Board of Directors  
**FROM:** External Affairs

---

**SUBJECT: LVUSD Science Team Water-Related Curriculum for 4th and 5th Grade Education Program: Grant Agreement**

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**SUMMARY:**

For many years and on an annual basis, the District has awarded funding to the Las Virgenes Unified School District (LVUSD) for its 4th and 5th grade science classes to include educational curriculum on water and its sources, reliability, District facilities and systems, general water education, climate change, conservation practices, and sustainability efforts.

Students garner an early knowledge base on water and its significance to life, the environment, and its hidden uses. The objective is to highlight how precious the resource is while showcasing what the District does to provide the resource to homes and businesses. Students also learn what they can do at their homes to use less water and implement conservation practices at home.

The partnership between the District and LVUSD has been very successful, and the positive impact on the region's students is undeniable. Staff proposes to continue the partnership for an additional two years including Fiscal Years 2024-25 and 2025-26.

**RECOMMENDATION(S):**

Authorize the General Manager to execute a two-year agreement with Las Virgenes Unified School District, in the amount of \$214,000 with separate annual payments of \$107,000, for the Science Team Water-Related Curriculum for 4th and 5th Grade Education Program.

**FISCAL IMPACT:**

Yes

**ITEM BUDGETED:**

Yes

**FINANCIAL IMPACT:**

The total cost of this grant is \$214,000. The amount of \$107,000 is available in the adopted Fiscal Year 2024-25 Budget. The balance of \$107,000 is scheduled to be included in the Fiscal Year 2025-2026 Budget.

**DISCUSSION:**

The District has influenced and educated, along with a motivated and highly trained science staff, thousands of students throughout the LVUSD service area. District staff have performed auditorium presentations, in-class presentations, outdoor education classes, succulent activities, and tours of LVMWD/JPA facilities for years.

Additionally, the District pays for a company called “Shows that Teach” that is a live “show” that educates students on water related issues and for the buses required to bring students on District tours for transportation needs. These additional outreach/education initiatives are independent of the past and proposed agreement with LVUSD.

The District has annually awarded the Las Virgenes Unified School District (LVUSD) a grant, in the amount of \$107,000, to fund its 4th and 5th grade water education curriculum. This new agreement will reflect a two-year term to encapsulate funds to be awarded for the calendar years 2024 and 2025. This agreement has been enhanced to ensure transparent reporting of how grant funds are spent in relation to water education.

Students are often considered one of the District’s best ambassadors as they will take their educational experience and share that knowledge in their homes. In essence, the students are educating the parents, guardians, and families about water and conservation practices.

The water curriculum is critical and unique to the educational experience of the students who learn at an early age the significance of water, its value as a limited natural resource, long-term water reliability, and the importance of serving as stewards of the environment. The District has invited LVUSD representatives to provide a brief presentation to showcase the activities of the students and summarize the accomplishments of the program.

**GOALS:**

Ensure Effective Utilization of the Public's Assets and Money

Prepared by: Riki Clark, Public Affairs Associate II

**ATTACHMENTS:**

[Proposed LVUSD Grant Agreement](#)

**LAS VIRGENES MUNICIPAL WATER DISTRICT**

**SCIENCE TEAM WATER RELATED CURRICULUM FOR 4<sup>TH</sup> AND 5<sup>TH</sup> GRADES  
EDUCATION GRANT AGREEMENT**

The Science Team Water Related Curriculum for 4<sup>th</sup> and 5<sup>th</sup> Grades Education Grant Agreement (“Agreement”), entered by and between the LAS VIRGENES MUNICIPAL WATER DISTRICT (“District”), and LAS VIRGENES UNIFIED SCHOOL DISTRICT (“Grantee”), is made with reference to the following:

**RECITALS:**

A. The District’s mission is to provide high-quality water service in a cost-effective and environmentally sensitive manner.

B. One of the District’s strategic objectives is to “Support customers to meet water-use efficiency standards.” To address this strategic objective, the District is committed to targeted outreach and education.

C. The District desires to fund a range of educational activities for the Science Team Water Related Curriculum for 4<sup>th</sup> and 5<sup>th</sup> grades to benefit the District’s water use efficiency goals.

NOW, THEREFORE, it is mutually agreed by and between the undersigned parties as follows:

**1. RECITALS.**

The above recitals are true and correct and are incorporated by this reference.

**2. TERM OF AGREEMENT.**

The term of this Agreement shall be from September 3, 2024 to July1, 2026, unless a shorter term is specified in the Special Grant Conditions (Exhibit A) attached hereto and made part hereof by reference.

District may terminate this contract at any time for any reason within its sole discretion.

**3. SERVICES TO BE PERFORMED BY GRANTEE.**

A. Grantee shall in a proper and satisfactory manner as determined by District, implement, operate, conduct and perform services as specified in this Agreement and Exhibit A.

B. The General Manager, or his/her designee, may modify or amend Exhibit A if the modification:

1. does not change the program concept as approved by the Las Virgenes



Municipal Water District board;

2. will not change the essential purpose of this Agreement.

#### **4. DISTRICT REVIEW OF GRANTEE'S PERFORMANCE.**

A. The District shall have the right to monitor, evaluate, and provide guidance to Grantee to ensure proper performance of this Agreement, and Grantee shall fully cooperate in such activities. District's provision of guidance shall not limit or diminish Grantee's responsibilities.

B. Grantee shall allow duly authorized agents or employees of the District to inspect or receive proof of service, during normal business hours, those records, books, accounts, documents, papers and other items of property of Grantee in order to evaluate Grantee's performance.

C. The District may interview or otherwise communicate with any employee or agent of Grantee during normal business hours or at other mutually agreed upon times regarding Grantee's performance. Grantee agrees to cooperate with District in arranging the communications.

#### **5. GRANT AMOUNT, COMPENSATION AND METHOD OF PAYMENT.**

A. The District shall pay Grantee the grant award as specified in Exhibit B, Budget and Payment Schedule, attached to this Agreement and incorporated by reference, for services performed and/or in advancement of services as specified in this Agreement.

B. The District will disburse grant funds to Grantee in two (2) installments as follows:

1. Fifty percent (50%) of total grant funds (\$107,000) upon execution of this Agreement.
2. Fifty percent (50%) of total grant funds (\$107,000) in July 2025.

C. The District may, at its sole discretion, seek reimbursement of grant awards at any time if Grantee violates this Agreement.

D. The District may, at its sole discretion, adjust the grant award if the period of program services pursuant to this Agreement is less than the term specified in this Agreement, if the program purpose is significantly changed, or if Grantee ceases to exist.

E. Within thirty (30) calendar days upon completion of services under this Agreement, Grantee shall provide complete and accurate documentation that accounts for all labor/instruction, material and equipment provided to perform the services listed. Should the total dollar amount of eligible expenses be less than the amount of disbursed funds, Grantee shall reimburse the District the difference within sixty (60) days of written notification by the District.

F. Grantee agrees to appropriate and disburse the grant funds and incur costs and expenses according to this Agreement and Exhibit A, and any modifications thereto.

**6. FISCAL ACCOUNTABILITY AND REVIEW.**

A. Grantee shall implement an accounting system that is in accordance with generally accepted accounting principles and standards. All expenditures shall be supported by properly executed payroll, time records, invoices, contracts, vouchers, orders or other accounting documents pertaining in whole or in part to this Agreement and shall be clearly identified and readily accessible to District personnel or agents.

a. Grantee shall ensure that funds expended to supplement program overhead are solely allocated for the time teachers spent on the proposed objectives outlined in Exhibit A. Grantee agrees to accurately track time spent on objectives, burdened rate, and provide detailed accounting as part of end-of-the-year reporting.

B. The District or its agent may conduct such fiscal reviews as District, at its sole discretion, may deem necessary to ascertain Grantee's fiscal integrity and compliance with this Agreement and all applicable laws, regulations and funding requirements. Grantee agrees to fully cooperate with District or its agent in any fiscal review and shall, upon request, make Grantee's business and financial records available for inspection, review and copying by District or its agent.

IN WITNESS WHEREOF, the parties have caused this Agreement to be executed the day and year first above written.

LAS VIRGENES MUNICIPAL WATER DISTRICT

By: \_\_\_\_\_  
DAVID W. PEDERSEN P.E.  
GENERAL MANAGER

Grantee: LAS VIRGENES UNIFIED SCHOOL DISTRICT

By: \_\_\_\_\_  
DR. RYAN GLEASON  
ASSISTANT SUPERINTENDENT,  
BUSINESS SERVICES

**EXHIBIT A**  
**SPECIAL GRANT CONDITIONS**

Grantee: Las Virgenes Unified School District

Grant Award: \$107,000.00 per year for two (2) years: \$214,000 total

The grant funds shall be utilized for the basic operational expenses, including labor/teacher instruction costs directly associated with Science Team Water Related Curriculum, of the grantee as set forth in its Proposal and approved by the Las Virgenes Municipal Water District. Below are the proposed objectives the funds may be used all or partially for:

4<sup>th</sup> Grade:

- Pre-test LVMWD water test or Water Gameboard
- Conservation of water
- Water awareness art contest
- Environmental Stewardship
- Every Drop Counts
- California Aqueduct
- Backwards map: Water from tap to mountain - The Journey your Water Takes  
Hydropower and energy transfer
- Water Erosion/Watershed
- Eco-Science - watershed/conservation, pH analysis, organisms in pond water
- Water Reuse
- Post-test LVMWD water test

5<sup>th</sup> Grade:

- Pre-test LVMWD water test or Water Gameboard
- Properties of water
- Chemistry of solubility, water compound and particles & states of matter
- Substance of survival.
- Hydroponic seed growth
- Water in the ecosystem
- The Water Cycle
- The Water on Our Planet - Every Drop Counts
- Water Reuse
- Interaction of Hydrosphere, geosphere, atmosphere, biosphere
- Graphing water distribution

- Recognizing water as a limited resource
- Effects of climate change on water supply availability
- Conservation of water
- California Aqueduct Virtual Tour by LAMWD

**EXHIBIT B**

**BUDGET AND PAYMENT SCHEDULE**

Grantee: Las Virgenes Unified School District

**TOTAL TO GRANTEE: \$107,000.00 per calendar year for (2) years totaling \$214,000.00 for the term of the Agreement.**

Payments will be made in accordance with the following schedule:

100% of calendar year 2024 funds awarded upon execution of Agreement by District and Grantee and delivery of an invoice with adequate documentation of services performed.

100% of calendar year 2025 funds awarded following District initiatives and delivery of an invoice with adequate documentation of services performed in July 2025.





**DATE:** September 3, 2024  
**TO:** Board of Directors  
**FROM:** Finance and Administration

---

**SUBJECT: GFOA Certificate of Achievement for Excellence in Financial Reporting**

---

**SUMMARY:**

The Government Finance Officers Association of the United States and Canada (GFOA) awarded the District the Certificate of Achievement for Excellence in Financial Reporting for its Annual Comprehensive Financial Report for the fiscal year ending on June 30, 2023. This was the 26th consecutive year that the District has received the prestigious award. The award is provided to agencies that fulfill the requirements of the program and demonstrate a commitment to the highest standards of government finance.

**DISCUSSION:**

The District's Annual Comprehensive Financial Report for the year ending on June 30, 2023, was awarded the Certificate of Achievement for Excellence in Financial Reporting by Government Finance Officers Association of the United States and Canada (GFOA). The Certificate of Achievement is the highest form of recognition for excellence in state and local government financial reporting. To be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized annual comprehensive financial report. This report must satisfy both generally accepted accounting principles and applicable legal requirements.

The GFOA established the Certificate of Achievement for Excellence in Financial Reporting in 1945 to encourage and assist state and local governments to go beyond the minimum requirements of Generally Accepted Accounting Principles and prepare financial reporting that evidenced the spirit of transparency and full disclosure.

**GOALS:**

Ensure Effective Utilization of the Public's Assets and Money

Prepared by: Brian Richie, Finance Manager

**ATTACHMENTS:**

Certificate of Achievement for Excellence in Financial Reporting



Government Finance Officers Association

Certificate of  
Achievement  
for Excellence  
in Financial  
Reporting

Presented to

**Las Virgenes Municipal Water District  
California**

For its Annual Comprehensive  
Financial Report  
For the Fiscal Year Ended

June 30, 2023

*Christopher P. Morill*

Executive Director/CEO



**DATE:** September 3, 2024  
**TO:** Board of Directors  
**FROM:** Finance and Administration

---

**SUBJECT: Fiscal Year 2023-24 Capacity Fee Report**

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**SUMMARY:**

The District's capacity fees recover the costs associated with providing water and sanitation services to new and existing users requiring additional capacity. Pursuant to Las Virgenes Municipal Water District Code (Code) Section 3-2.207, the District is to post a report of the balance and uses of capacity fees for the preceding fiscal year by September 1st and transmit the report to the Board for review. The report is posted on the District's website.

In Fiscal Year 2024, there were approximately 100 connections to the water and sewer systems, 90 percent of which were in the Deerlake development, which made up the majority of capital costs funded by Capacity and Developer Fees.

**DISCUSSION:**

During Fiscal Year 2023-24, the District collected \$1,701,325 in total fees (capacity fees and developer fees) and earned \$140,573 in interest, for total available fees of \$1,841,898. Expenses, which were primarily related to capital projects, resulted in the use of \$5,303,106 in fees. A total of \$2,091 in fees were refunded. As a result, the fee account balance decreased by \$3,461,208, from \$5,567,375 to \$2,106,166.

The attached report summarizes the balances and uses of the District's capacity fees for Fiscal Year 2023-24. The information will also be provided in the District's Annual Comprehensive Financial Report.

**GOALS:**

Ensure Effective Utilization of the Public's Assets and Money

Prepared by: Debbie Rosales, Financial Analyst II

**ATTACHMENTS:**

[Fiscal Year 2023-24 Capacity Fee Report](#)

**LAS VIRGENES MUNICIPAL WATER DISTRICT**  
**Annual Water & Sewer Capacity Fee Deposits Report**  
Per Government Code Section 66013 (d) and (e)  
Fiscal Year Ended June 30, 2024

Beginning Balance:			
Capacity Fees		\$ 5,114,417	
Developer Fees		120,423	
Interest		<u>332,534</u>	
Total Beginning Balance			\$ 5,567,374
Fees Collected:			
Capacity Fees	1,330,252		
Developer Fees	<u>371,073</u>		
Total Fees Collected		\$ 1,701,325	
Interest Earned		<u>140,573</u>	
Fees Available		\$ 1,841,898	
Applied to:			
Capital Costs Funded by:			
Capacity Fees	\$ 4,425,372		
Meter Installation	38,594		
Developer Fees	442,823		
Interest Earned	<u>394,226</u>		
Total Capital Costs		\$ 5,301,015	
Refunds		<u>2,091</u>	
Total Funds Applied		\$ 5,303,106	
Net Changes for the Year			(3,461,208)
Ending Balance:			
Capacity Fees		\$ 1,978,612	
Developer Fees		48,673	
Interest (1)		<u>78,881</u>	
Total Ending Balance			<u>\$ 2,106,166</u>

(1): Interest earned is not reflected as liability on the Statement of Net Position.





**DATE:** September 3, 2024  
**TO:** Board of Directors  
**FROM:** Finance and Administration

---

**SUBJECT:** Fiscal Year 2024-25 Budget in Brief

---

**SUMMARY:**

The District has a tradition of ensuring the transparency of its operations and has consistently sought ways to improve the dissemination of information to its customers and stakeholders. As part of this effort, the District produces a “Budget in Brief” each fiscal year to provide highlights of the District’s financial plan for the year.

**DISCUSSION:**

The “Budget in Brief” is part of the District’s efforts to increase transparency by creating easy-to-understand financial documents. The Budget in Brief, along with the Popular Annual Financial Report, provide simple, high-level information about the District’s finances to stakeholders and customers. The Budget in Brief is attached and can be found on the District’s website: [LVMWD Adopted-budget-and-annual-financial-reports](#).

**GOALS:**

Sustain Community Awareness and Support

Prepared by: Debbie Rosales, Financial Analyst II

**ATTACHMENTS:**

[Fiscal Year 2024-25 Budget in Brief](#)

# BUDGET IN BRIEF

FISCAL YEAR  
2024-25



LAS VIRGENES MUNICIPAL  
WATER DISTRICT



**OUR COMMITMENTS**

- High level of Customer Satisfaction
- Transparency and Community Engagement
- Highly Effective Workforce
- Maximum Reuse and Resource Recovery
- Sound financial Management
- Reliable Water Supply and Service
- Sound planning and appropriate investment
- Innovative and Efficient Operations
- Protection of Public Health and the Environment
- Safe, High Quality Water



**Las Virgenes Municipal Water District  
Fiscal Year 2024-25 / 2025-26  
Board of Directors**



Jay Lewitt  
President  
Director,  
Division 5



Leonard E. Polan  
Vice President  
Director,  
Division 4



Andy Coradeschi  
Treasurer  
Director,  
Division 2



Gary Burns  
Secretary  
Director  
Division 3



Charles Caspary  
Director,  
Division 1

**Executive Team**

David Pedersen, P.E. - General Manager  
W. Keith Lemieux - Counsel  
Joe McDermott, P.E. - Assistant General Manager  
Eric Schlageter, P.E. - Interim Director, Facilities and Operations  
Donald Patterson, CPFO CCMT - Director, Finance and Administration

**Management Team**

**Engineering and External Affairs**

Ursula Bosson, Customer Service Manager  
Mike McNutt, Public Affairs & Communications Manager  
Craig Jones, Resource Conservation Manager

**Facilities and Operations**

Veronica Hurtado, Water Reclamation Manager  
Darrell Johnson, Water Systems Manager  
Jim Korkosz, Facilities Operations Manager

**Finance and Administration**

Sophia Crocker, Human Resource Manager  
Ivo Nkwenji, Information Systems Manager  
Brian Richie, Finance Manager

**Customer Service - 818.251.2200**  
**After hours emergency - 818.251.2100**  
**Construction & Drought Hotline - 818.251.2180**

**Rancho Las Virgenes Composting Facility**  
**Free Compost & Recycled Water Pickup**  
**Saturdays 8 a.m. to 1 p.m.**

Board meetings are scheduled at  
9 a.m. on the first and third Tuesday  
of each month.

Las Virgenes - Triunfo JPA meets  
first Monday of the month at 5 p.m.

Check the website for meeting and  
agenda information.

You may direct  
communications to LVMWD  
Board members  
by sending an e-mail to:  
board@LVMWD.com

## Who Are We?

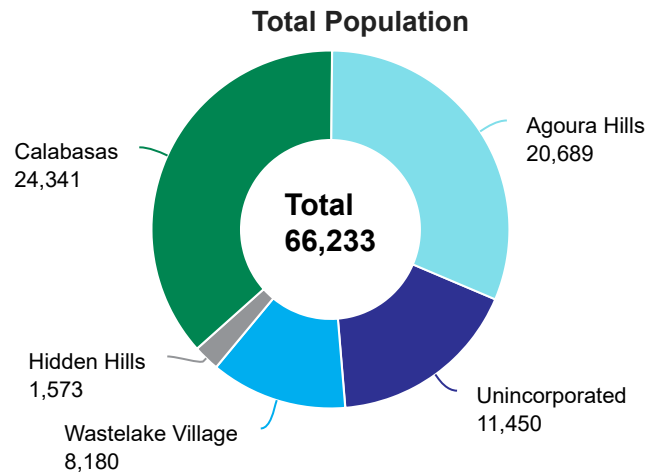
Las Virgenes Municipal Water District (LVMWD) is a California Special District formed by local residents in 1958 to secure a reliable source of high-quality water for the portion of Los Angeles County located between the City of Los Angeles boundary at the west end of the San Fernando Valley, to the Ventura County line to the west and north, and south to the Malibu city limit. The District was created during a drought that saw local wells run dry. LVMWD rose from a grassroots effort to find a water supply without annexing to the City of Los Angeles. Upon its creation by voters, the District sought, and ultimately achieved annexation to the Metropolitan Water District of Southern California, which is currently the only source of potable water to LVMWD's 122 square-mile service area.



## DEMOGRAPHICS



Median Age  
**45.6**



## EDUCATION



High School Graduates  
**95.9%**



College Degrees  
**67.8%**



## EMPLOYMENT & ECONOMY



Total Personal Income (in thousands)  
**\$4,510,983**



Per Capita Income  
**\$99,733**

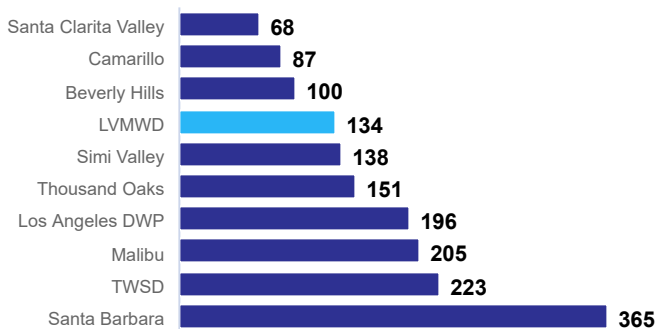


Unemployed  
**5.4%**

## HOW DO WE COMPARE?

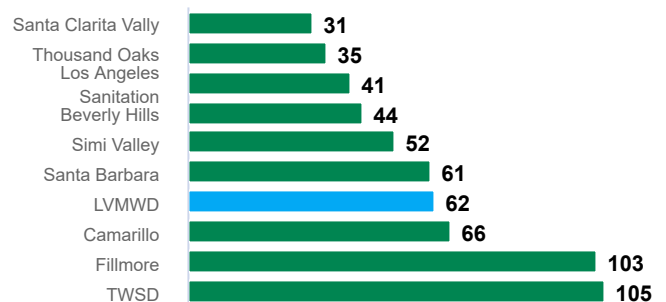
### Water Rates Comparison with Neighboring Communities

(Monthly bills based on LVMWD average water consumption = 26 hcf/month)



### Sanitation Rates Comparison with Neighboring Communities

(Monthly bill based on LVMWD average of 3 residents/household and similar indoor water consumption estimates)

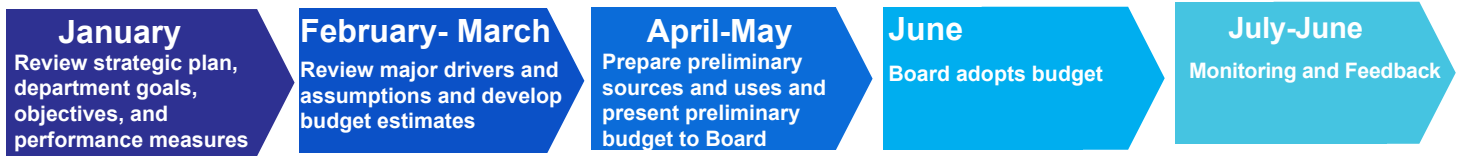




## What is the Agency's Budget?

LVMWD's budget sets forth a strategic resource allocation plan to fund services and infrastructure. The budget is comprised of an operating budget, which forecasts the Agency's expenditures and revenues for the upcoming year, and a capital improvement plan, which shows the financial plans for long-term capital improvements, facilities, and equipment. The fiscal year of LVMWD begins on July 1st of each year and ends on June 30th of the following year.

## What is the Annual Budget Timeline?



## Las Virgenes Municipal Water District Strategic Plan

Developed in 2016, the Strategic Plan describes LVMWD's strategy to address the opportunities, challenges and needed investments likely to arise in the next 20 years. The plan provides the basis for making decisions and allocating resources to ensure consistent direction moving forward. The Strategic Plan is intended to be a high level document containing broad goals.

Specifically, the Strategic Plan is designed to meet the following objectives:

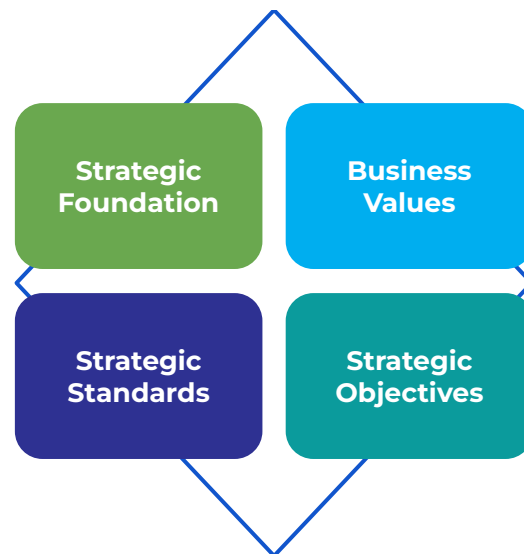
- ▶ Set a clear path forward for LVMWD, building on its mission and vision.
- ▶ Identify and address the opportunities, challenges and needed investments likely to arise during the next 20 years.
- ▶ Provide a high-level framework for making decisions on the allocation of resources.
- ▶ Prepare LVMWD for the future.
- ▶ Establish service commitments for LVMWD's customers.
- ▶ Implement a standards-based approach to meet service commitments.
- ▶ Establish values for conducting LVMWD's business and interacting with others.
- ▶ Identify strategic objectives for action.
- ▶ Describe a process for reviewing and updating

**Strategic Foundation** – The strategic foundation consists of LVMWD's mission, vision and behavioral values. The mission describes our purpose or what we do. The vision describes what we want to be, or be known for, in the future. The behavioral values describe how we conduct our business and interact with others. Together, the mission, vision and behavioral values provide the foundation for all of LVMWD's activities, both now and well into the future.

**Business Values** – The business values describe the commitments LVMWD makes to its customers. Examples include transparency and community engagement, reliable water supplies and service, and sound financial management. Business values provide fundamental focus areas for the organization.

**Strategic Objectives** – The strategic objectives describe the major undertakings planned to address the significant opportunities, challenges or needed investments likely to arise in the next 20 years. Strategic objectives are not intended to address tasks that are part of normal utility operations.

**Strategic Standards** – Standards are simply rules or service levels that put the business values in operational terms.



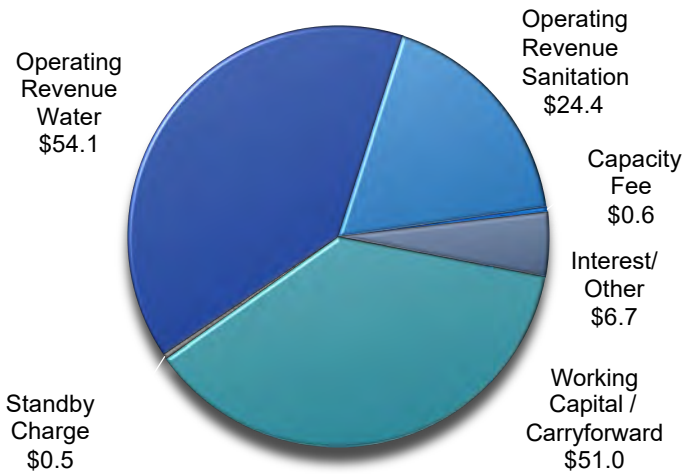
## Budget Overview

Las Virgenes Municipal Water District is fiscally strong and positioned to cope well with fluctuations in the economy and to provide greater flexibility on budgetary issues. The District resolves to be ready to balance revenues and expenses and continue to maintain the high level of service expected by the citizens it serves. The Fiscal Year (FY) 2024-2025 budget presents a responsible financial strategy. The priority for this fiscal years budget is to maintain quality service while observing prudent spending practices.

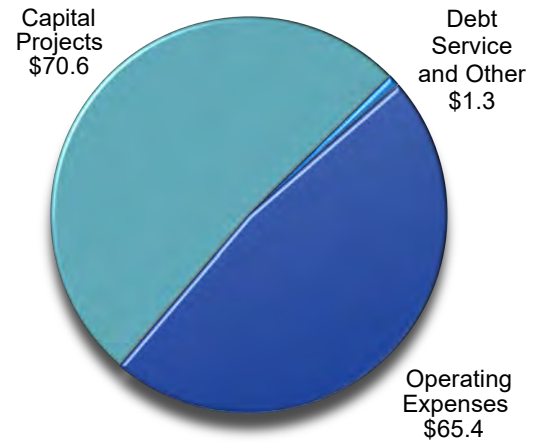
The adopted budget includes \$137.3 million for Fiscal Year (FY) 2024-25, an increase of \$41.4 million or 43.2% over FY 2023-24 budget of \$95.9 million.

The total operating budget for FY 2024-25 is \$65.4 million, an increase of \$7.03 million or 12.0% over FY 2023-24. FY 2024-25 Budgeted Capital Improvements total \$70.6 million.

**Fiscal Year 2024-25  
Sources of Funds  
\$137.3 million**



**Fiscal Year 2024-25  
Uses of Funds  
\$137.3 million**



***The Budget in Brief is meant to provide a simplified overview of LVMWD's complete budget document; it includes highlights and breakdown of revenue and expenditures.***

## Operating Budget

	FY22-23 Actual	FY23-24 Budget	FY23-24 Est Actual	FY24-25 Budget
<b>OPERATING REVENUES</b>	<b>\$ 64,685,981</b>	<b>\$ 71,491,074</b>	<b>\$ 67,327,982</b>	<b>\$ 78,585,568</b>
Source of Supply	19,428,146	25,847,612	21,236,247	25,444,586
Purchased Services	15,189,089	15,767,334	15,152,514	16,405,102
Operating Expenses	3,081,599	3,352,184	3,086,648	3,384,824
Maintenance Expenses	1,623,884	1,818,337	1,331,146	2,794,884
Specialty Expenses	409,249	591,879	433,216	509,876
Resource Conservation	620,891	1,111,000	506,234	1,164,357
Administrative Expenses	12,764,237	14,704,580	11,373,006	15,735,285
<b>TOTAL OPERATING EXPENSES</b>	<b>\$ 53,117,095</b>	<b>\$ 63,192,926</b>	<b>\$ 53,119,011</b>	<b>\$ 65,438,915</b>
<b>NET OPERATING INCOME (LOSS)</b>	<b>\$ 11,568,886</b>	<b>\$ 8,298,148</b>	<b>\$ 14,208,971</b>	<b>\$ 13,123,353</b>

## Capital Improvement Projects



**Pure Water Project Las Virgenes – Triunfo** - The Pure Water Project relies on indirect potable reuse, a water supply strategy now adopted by many cities and water agencies in California and across the United States to provide local, reliable water. The ultimate, full-scale project will minimize the discharging of usable recycled water into Malibu Creek and instead will convert this resource into a viable source for potable, locally-produced water. The full-scale project involves the construction of several pipelines and an advanced treatment plant that will convert recycled water into pure drinking water. The Pure Water Project creates an affordable and reliable local water supply that will be cost-competitive with imported water, help stabilize water rates, safeguard the local economy and significantly reduce the uncertainty of supply associated with importing water due to climate change and long-term and reoccurring drought conditions. The project will require public participation and acceptance, regional leadership, and the funding to move from concept to reality.

**Cornell Pump Station Upgrades** - Pump station improvements to provide additional reliability and redundancy at a critical facility in the District's backbone potable water system. The improvements will replace the existing natural gas engine, electric motor, two pumps and emergency generator. This project will address deteriorating equipment, install a bypass line, plus update electrical and HVAC components in the pump station. These upgrades collectively provide added security that the pump station will deliver water in both the west-east or east-west directions, during planned and unplanned water system outages.

**Tapia Flow Equalization** - This project consists of the development of a preliminary design report to evaluate the storage and conveyance of Tapia primary effluent to help store and equalize the diurnal peak flows that Tapia sees between dry and wet weather events. This maximizes effluent available for the AWT and also improves and provides consistent water quality for the feed water to the AWT.

**Jed Smith/McCoy Water Tanks** - Condition assessment, inspection, and rehabilitation of the Jed Smith and McCoy Potable Tanks. Rehabilitation work will include any upgrades needed to the steel tanks, deteriorated valves, piping, and other items associated with the tanks. The interior and exterior coating will be rehabilitated as needed.

**Lindero Canyon/Agoura Road Potable Main Relocation** Environmental investigation of extent of soil contamination within the intersection of Lindero Canyon Road & Agoura Road, and its potential effects on the District's potable main. Relocate and/or replace the potable main as needed.

**Twin Lakes Pump Station Pipeline Project** - The new pipeline is part of the District's strategy to increase water reliability by providing additional water supply to the Twin Lakes service area. The Twin Lakes Pump Station is currently supplied via the District's LV-3 interconnection with Metropolitan Water District of Southern California (MWD) West Valley Feeder No.2. Once design and easements are complete, a new 16-inch pipeline will be installed to connect to an existing 30 inch water transmission main, which is supplied by MWD's West Valley Feeder No.2 via LV-1. The pipeline will be used to provide additional capacity to the pump station.

Enterprise Fund	FY24-25 Budget
Potable Water	\$ 25,165,744
Recycled Water	\$ 2,290,944
Sanitation	\$ 43,179,147
<b>Total CIP</b>	<b>\$ 70,635,835</b>

