



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

AGENDA
LVMWD BOARD OF DIRECTORS - REGULAR MEETING
TUESDAY, APRIL 16, 2024 – 9:00 AM

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:

Webinar ID: <https://us06web.zoom.us/j/85322590707>

To join by telephone, please dial (669) 900-6833 or (346) 248-7799 and enter Webinar ID:
853 2259 0707

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

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

ACCESSIBILITY: If requested, the agenda and backup materials will be made available in appropriate alternative formats to persons with a disability, as required by Section 202 of the Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 12132), and the federal rules and regulations adopted in 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 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 agenda 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.

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: April 16, 2024 (Pg. 6)**

Receive and file.

4.B **Minutes: Regular Meetings of March 19, 2024 and April 2, 2024 (Pg. 67)**

Approve.

4.C **Directors' Per Diem: March 2024 (Pg. 82)**

Ratify.

4.D **Statement of Revenues, Expenses and Changes in Net Position: February 2024 (Pg. 89)**

Receive and file the Statement of Revenues, Expenses and Changes in Net Position for the period ending on February 29, 2024.

4.E **Fiscal Year 2022-23 Single Audit Report on Federal Awards (Pg. 91)**

Receive and file the Fiscal Year 2022-23 Single Audit Report on Federal Awards.

4.F **Tyler Technologies Software and Maintenance Agreement: Renewal (Pg. 108)**

Authorize the General Manager to execute a one-year agreement, in the amount of \$240,000, with Tyler Technologies with four one-year renewal options based on an annual escalator not to exceed five percent; and authorize an additional one-time fee, in the amount of \$33,219, for implementation of the Accounts Receivable module of the Tyler Enterprise ERP System.

4.G **Water Main Breaks at 5745 Parkmor Road and Valley Circle Boulevard near Dorie Drive: Continuation of Emergency Declaration (Pg. 111)**

Approve the continuation of an emergency declaration due to a 12-inch water main break at 5745 Parkmor Road in the City of Calabasas and a 30-inch water main break along Valley Circle Boulevard near Dorie Drive in West Hills.

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

5.A **Presentation by MWD Board Chair Adán Ortega, General Manager Adel Hagekhalil and Executive Officer/Assistant General Manager Deven Upadhyay on MWD's Climate Adaptation Master Plan for Water (CAMP4W) and related Water Supply and Affordability Issues**

5.B **MWD Representative Report (Pg. 112)**

5.C **Legislative and Regulatory Updates**

5.D **2024 Rate Comparison Study (Pg. 119)**

6. **TREASURER**

7. **BOARD OF DIRECTORS**

7.A **Los Angeles County Water Plan: Adoption (Pg. 121)**

Pass, approve, and adopt proposed Resolution No. 2637, adopting the Los Angeles

County Water Plan.

RESOLUTION NO. 2637

A RESOLUTION OF THE BOARD OF DIRECTORS OF LAS VIRGENES MUNICIPAL WATER DISTRICT ADOPTING THE LOS ANGELES COUNTY WATER PLAN

(Reference is hereby made to Resolution No. 2637 on file in the District's Resolution Book and by this reference the same is incorporated herein.)

8. **FINANCE AND ADMINISTRATION**

8.A **Annual Review of the District's Investment, Financial and Debt Management Policies (Pg. 157)**

Review and provide feedback on the District's Investment, Financial and Debt Management Policies.

9. **ENGINEERING AND EXTERNAL AFFAIRS**

9.A **Potable Water Pipeline Condition Assessment, Rehabilitation and Replacement Study: Award (Pg. 205)**

Accept the proposal from HDR Engineering, Inc., and authorize the General Manager to execute a professional services agreement, in the amount of \$263,940, for the Potable Water Pipeline Condition Assessment, Rehabilitation and Replacement Study.

9.B **Cornell Pump Station Improvement Project: Construction Award (Pg. 294)**

Award a construction contract to Pacific Hydrotech Corporation, in the amount of \$5,464,100, and reject all remaining bids upon receipt of duly executed documents for the Cornell Pump Station Improvement Project; re-appropriate funding from CIP Job No. 10556 – Interconnection with Calleguas Municipal Water District in the amount of \$1,500,000, CIP Job No. 10672 – Stationary Emergency Generators in the amount of \$500,000, and CIP Job No. 10430 – Twin Lakes Pump Station Pipeline in the amount of \$976,918, to CIP Job No. 10655 – Cornell Pump Station Improvement Project; authorize the General Manager to execute Contract Amendment No. 2 with Cannon Corporation, in the amount of \$66,106, for additional design services associated with the pump station building upgrades; and authorize the General Manager to execute a Memorandum of Agreement with the City of Agoura Hills, in an amount not to exceed \$220,000, for reimbursement of the water main relocation, hardscaping and exterior building upgrade costs associated with the City's Ladyface Greenway Project.

9.C **Taxpayer Protection and Government Accountability Act: Oppose (Pg. 299)**

Oppose the Taxpayer Protection and Government Accountability Act.

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)): Two Items**

Tort claims by Paul and Susy Blair, and Sean and Angie Murphy

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

San Diego County Water Authority v. Metropolitan Water District of Southern California (Lead Case No. CPF-14-514004 consolidated with Case Nos. CPF-16-515282 and CPF-18-516389)

14. **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 : April 16, 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

Checks Nos. 109439-109544; ACH/ACI Nos. 45-46, 49-51, 53-58 were issued in the total amount of: \$ 991,776.52

Payments through direct disbursements as follows:

3/19/2024 Direct Disbursement payment number 24178-24191: \$ 1,533.23

Payments through wire transfers as follows:

3/19/2024 Metropolitan Water District payment for water deliveries in the month of February 2024 \$ 1,343,818.60

3/26/2024 IOSight LTD 2024 Annual License Fee & Implementation \$ 29,000.00

\$ 1,372,818.60

Total Payments \$ 2,366,128.35

(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
4/16/2024**

Company Name	Company No.	Check No. 109439-109505; 45-46, 49-51 03/19/24	Check No. 109506-109544; 53-58 03/26/24	Total
		Amount	Amount	
Potable Water Operations	101	44,904.28	24,715.15	69,619.43
Recycled Water Operations	102			-
Sanitation Operations	130	189,516.71	523.00	190,039.71
Potable Water Construction	201	3,195.00		3,195.00
Water Conservation Construction	203			-
Sanitation Construction	230			-
Potable Water Replacement	301	43,614.03	64,615.92	108,229.95
Recycled Water Replacement	302		5,189.14	5,189.14
Sanitation Replacement	330	36,033.62		36,033.62
Internal Service	701	123,765.32	54,786.11	178,551.43
JPA Operations	751	253,179.67	26,685.87	279,865.54
JPA Construction	752			-
JPA Replacement	754	6,067.75	114,984.95	121,052.70
Total Printed		700,276.38	291,500.14	991,776.52
Voided Checks/payment stopped:				
				-
				-
				-
				-
				-
Total Voids		-	-	-
Net Total		700,276.38	291,500.14	991,776.52

**DIRECT DISBURSEMENTS LISTING FOR BOARD MEETING
4/16/2024**

		Direct Disb. No. 24192-24199 03/19/24	
Company Name	Company No.	Amount	Total
Potable Water Operations	101	878.90	878.90
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	581.77	581.77
JPA Operations	751	72.56	72.56
JPA Construction	752		-
JPA Replacement	754		-
	Total Printed	1,533.23	1,533.23
Voided Direct Disbursements:			
			-
		-	-
	Total Voids	-	-
	Totals	1,533.23	1,533.23

**WIRE LISTING FOR BOARD MEETING
4/16/2024**

Company Name	Company No.	Wire No. 40 03/19/24 Amount	Wire No. 52 03/26/24 Amount	Total
Potable Water Operations	101	1,343,818.60		1,343,818.60
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		29,000.00	29,000.00
JPA Construction	752			-
JPA Replacement	754			-
	Total Printed	<u>1,343,818.60</u>	<u>29,000.00</u>	<u>1,372,818.60</u>
Voided Wires:		-	-	-
	Total Voids	<u>-</u>	<u>-</u>	<u>-</u>
	Totals	<u>1,343,818.60</u>	<u>29,000.00</u>	<u>1,372,818.60</u>

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	
49	03/19/2024	PRTD	2317 ACORN NEWSPAPER	2024-80095	03/01/2024		031224	555.00	
Invoice: 2024-80095				555.00	101900	660400	1/4 DISPLAY AD - FLAME TO THE OCEAN 3/1/24 Public Education Programs		
							CHECK	49 TOTAL:	555.00
109439	03/19/2024	PRTD	3836 ADDICTION MEDICINE CONSULTANTS, I 12M25		12/30/2023		031224	840.00	
Invoice: 12M25				840.00	701430	684000	DOT 2024 FEE - 6 EE DOT Testing		
Invoice: 1001				30.00	701430	684000	12/30/2023 FMCSA 2024 FEES - 6 EE DOT Testing	30.00	
							CHECK	109439 TOTAL:	870.00
109440	03/19/2024	PRTD	30485 ADS CORP	22085-0224	02/17/2024		031224	3,486.00	
Invoice: 22085-0224				871.50	130100	551500	SEWER FLOW MONITORING FEBRUARY 2024 Outside Services		
				2,614.50	751800	551500	Outside Services		
							CHECK	109440 TOTAL:	3,486.00
109441	03/19/2024	PRTD	30083 AQUATIC GARDENS LLC	13722	02/28/2024		031224	217.85	
Invoice: 13722				217.85	701001	551500	POND MAINT FEBRUARY 2024 Outside Services		
							CHECK	109441 TOTAL:	217.85
109442	03/19/2024	PRTD	2869 AT&T	21506905/022024	02/20/2024		031224	53.58	
Invoice: 21506905/022024				53.58	101106	540520	SVCS 2/20-3/19/24 Telephone		
							CHECK	109442 TOTAL:	53.58
109443	03/19/2024	PRTD	30119 ATS COMMUNICATIONS	2-2024	03/04/2024		031224	2,727.50	
Invoice: 2-2024				2,727.50	701310	552500	FEBRUARY 2024 CELL SITE MGMT Consulting Services		
							CHECK	109443 TOTAL:	2,727.50
109444	03/19/2024	PRTD	21426 BRIGHTVIEW LANDSCAPE SERVICES, IN 8787052		02/29/2024		031224	14,245.75	
Invoice: 8787052				3,271.37	701001	551500	LANDSCAPE SRVCS FEBRUARY 2024 Outside Services		
				1,837.13	751820	551800	Building Maintenance		
				3,843.60	751810	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				
				4,191.15 101600	551800			
				336.50 101200	551500			
				301.00 130100	551500			
				390.00 751200	541500			
				75.00 751200	541500			
						CHECK	109444 TOTAL:	14,245.75
109445	03/19/2024	PRTD	30353 BUILDING BLOCK ENTERTAINMENT	3683-3	02/29/2024		031224	2,190.00
			Invoice: 3683-3				SCHOOL WATER EDUCATION SHOWS 1/18-2/12/24	
				2,190.00 701230	660400		Public Education Programs	
						CHECK	109445 TOTAL:	2,190.00
109446	03/19/2024	PRTD	20655 CANNON CORPORATION	87176	01/15/2024		031224	18,414.71
			Invoice: 87176				LIFT STATION NO.1 REHABILITATION DECEMBER 2023	
				18,414.71 330440	900000		Capital Asset Expenses	
			CANNON CORPORATION	87537	02/16/2024		031224	17,618.91
			Invoice: 87537				LIFT STATION NO.1 REHABILITATION JANUARY 2024	
				17,618.91 330440	900000		Capital Asset Expenses	
						CHECK	109446 TOTAL:	36,033.62
109447	03/19/2024	PRTD	30793 CHAMPION PAVING INC	086845/022624	02/26/2024		031224	110.52
			Invoice: 086845/022624				RFND FINAL CR BAL 0010001911-086845	
				110.52 101	230500		Deposit Refd Clearing-Billing	
						CHECK	109447 TOTAL:	110.52
109448	03/19/2024	PRTD	30794 CHARLES AMMANN	005900/022624	02/26/2024		031224	85.63
			Invoice: 005900/022624				RFND FINAL CR BAL 0000510690-005900	
				85.63 101	230500		Deposit Refd Clearing-Billing	
						CHECK	109448 TOTAL:	85.63
109449	03/19/2024	PRTD	2536 CITY OF LOS ANGELES	WP240000052	01/22/2024		031224	86,150.00
			Invoice: WP240000052				ASSSC FY 21-22 WW CAP RECON	
				86,150.00 130100	574000		Purch Svc-City Of LA	
			CITY OF LOS ANGELES	WP240000051	01/22/2024		031224	101,988.00
			Invoice: WP240000051				ASSSC FY 21-22 WW O&M RECON	
				101,988.00 130100	574000		Purch Svc-City Of LA	
						CHECK	109449 TOTAL:	188,138.00

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
109450	03/19/2024	PRTD	2539 CITY OF SIMI VALLEY	70745506	02/21/2024		031224	7,310.13
			Invoice: 70745506					
				7,310.13	101001	511000	PURCH WATER 12/18-2/20/24 Purch Water-Simi Dist#8	
							CHECK 109450 TOTAL:	7,310.13
109451	03/19/2024	PRTD	20685 DOCUMENT SYSTEMS INC	IN4007118	02/26/2024		031224	147.92
			Invoice: IN4007118					
				147.92	701420	621500	CANON OVRG 1/24-2/23/24 System Support and Maintenance	
							CHECK 109451 TOTAL:	147.92
109452	03/19/2024	PRTD	30795 FAR WEST FARMS	051846/022624	02/26/2024		031224	570.69
			Invoice: 051846/022624					
				570.69	101	230500	RFND FINAL CR BAL 0002090373-051846 Deposit Refd Clearing-Billing	
							CHECK 109452 TOTAL:	570.69
109453	03/19/2024	PRTD	6770 G.I. INDUSTRIES	0046761-0283-5	02/01/2024		031224	799.27
			Invoice: 0046761-0283-5					
				799.27	751810	551800	DISP TAPIA 2/1-2/29/24 Building Maintenance	
			G.I. INDUSTRIES	0047104-0283-7	03/01/2024		031224	861.52
			Invoice: 0047104-0283-7					
				861.52	751810	551800	DISP TAPIA 3/1-3/31/34 Building Maintenance	
			G.I. INDUSTRIES	3106586-0283-7	03/01/2024		031224	111.12
			Invoice: 3106586-0283-7					
				111.12	751820	551800	DIS RLV FARM 3/1-3/31/24 Building Maintenance	
			G.I. INDUSTRIES	3106587-0283-5	03/01/2024		031224	111.12
			Invoice: 3106587-0283-5					
				111.12	751830	551500	DISP RLV FARM 3/1-3/31/24 Outside Services	
			G.I. INDUSTRIES	3106588-0283-3	03/01/2024		031224	920.89
			Invoice: 3106588-0283-3					
				303.89	701001	551500	DISP HQ & SHOP 3/1-3/31/24 Outside Services	
				617.00	701002	551500	Outside Services	
			G.I. INDUSTRIES	2552056-0283-2	02/01/2024		031224	217.38
			Invoice: 2552056-0283-2					
				217.38	101600	551800	DISP WLK 2/1-2/29/24 Building Maintenance	
			G.I. INDUSTRIES	2552395-0283-4	03/01/2024		031224	217.38
			Invoice: 2552395-0283-4					
				217.38	101600	551800	DISP WLK 3/1-3/31/24 Building Maintenance	
			G.I. INDUSTRIES	0046773-0283-0	02/01/2024		031224	821.25

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: 0046773-0283-0				821.25 751810 541500	DISP TAPIA GRIT 2/1-2/29/24			
					Outside Services			
Invoice: 0047116-0283-1			G.I. INDUSTRIES	0047116-0283-1	03/01/2024		031224	864.25
				864.25 751810 541500	DISP TAPIA GRIT 3/1-3/31/24			
					Outside Services			
CHECK 109453 TOTAL:								4,924.18
109454	03/19/2024	PRTD	18646 HDR ENGINEERING, INC.	1200601204	03/04/2024		031224	6,067.75
			Invoice: 1200601204					
				6,067.75 754440 900000	MALIBOU SIPHON FEBRUARY 2024			
					Capital Asset Expenses			
CHECK 109454 TOTAL:								6,067.75
109455	03/19/2024	PRTD	30792 IGNACIO RAMIREZ	093397/022624	02/26/2024		031224	2,370.96
			Invoice: 093397/022624					
				2,370.96 101 230500	RFND FINAL CR BAL 0010002321-093397			
					Deposit Refd Clearing-Billing			
CHECK 109455 TOTAL:								2,370.96
109456	03/19/2024	PRTD	20823 INVOICE CLOUD INC.	964-2024_2	02/29/2024		031224	7,877.02
			Invoice: 964-2024_2					
				7,877.02 701221 622000	INVOICE CLOUD FEES FEBRUARY 2024			
					Outside Services			
CHECK 109456 TOTAL:								7,877.02
109457	03/19/2024	PRTD	2789 LIEBERT CASSIDY WHITMORE	261010	01/31/2024		031224	7,446.00
			Invoice: 261010					
				7,446.00 701430 650000	LEGAL SERVICES			
					Legal Services			
Invoice: 261011			LIEBERT CASSIDY WHITMORE	261011	01/31/2024		031224	652.50
				652.50 701430 650000	LEGAL SERVICES			
					Legal Services			
Invoice: 256338			LIEBERT CASSIDY WHITMORE	256338	11/30/2023		031224	87.00
				87.00 701430 650000	LEGAL SERVICES			
					Legal Services			
Invoice: 256157			LIEBERT CASSIDY WHITMORE	256157	11/30/2023		031224	1,468.50
				1,468.50 701430 650000	LEGAL SERVICES			
					Legal Services			
CHECK 109457 TOTAL:								9,654.00

A/P CASH DISBURSEMENTS JOURNAL

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 CHECK NO CHK DATE TYPE VENDOR NAME

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
109458	03/19/2024	PRTD	8484 LINDE GAS AND EQUIPMENT, INC	41410720	02/28/2024		031224	139.19
			Invoice: 41410720					
				139.19 751820 551000				
							MIXED GAS FOR WELDER Supplies/Material	
							CHECK 109458 TOTAL:	139.19
109459	03/19/2024	PRTD	2814 MCMaster-CARR SUPPLY CO	22887389	02/28/2024		031224	339.60
			Invoice: 22887389					
				339.60 751810 551000				
							ALUMINUM SHEET, LOCKNUT, HEX & SILICONE POTTING Supplies/Material	
			Invoice: 22887427					
				342.12 701326 572500				
							DISPENSING GUN & ELECTRONIC CALIPER Genl Supplies/Small Tools	342.12
			Invoice: 22825992					
				2,484.98 101600 541000				
							PIPE FITTINGS, JET PUMP & PVC PIPE NIPPLES Supplies/Material	2,484.98
							CHECK 109459 TOTAL:	3,166.70
109460	03/19/2024	PRTD	30713 MOSS ADAMS LLP	102555642	02/28/2024		031224	13,250.00
			Invoice: 102555642					
				13,250.00 701430 651600				
							ORGANIZATIONAL & STAFFING JANUARY 2024 Other Professional serv	
							CHECK 109460 TOTAL:	13,250.00
109461	03/19/2024	PRTD	16687 NEWBURY PARK TREE SERVICE, INC.	15788	02/29/2024		031224	1,350.83
			Invoice: 15788					
				1,350.83 701223 551500				
							TREE SERVICE LAS VIRGENES RD 2/28/24 Outside Services	
							CHECK 109461 TOTAL:	1,350.83
109462	03/19/2024	PRTD	2914 ROADSIDE LUMBER/HARDWARE	2402-830753	02/06/2024	2240123	031224	1,129.47
			Invoice: 2402-830753					
				1,129.47 701 132000				
							CONCRETE MIX & ASPHALT PATCH Storeroom & Truck Inventory	
							CHECK 109462 TOTAL:	1,129.47
109463	03/19/2024	PRTD	30797 SO CAL RESIDENTIAL HOMES LLC	092208/022624	02/26/2024		031224	110.65
			Invoice: 092208/022624					
				110.65 101 230500				
							RFND FINAL CR BAL 0000650312-092208 Deposit Refd Clearing-Billing	
							CHECK 109463 TOTAL:	110.65

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								
109464	03/19/2024	PRTD	20412 STERICYCLE, INC.	8006444221	02/29/2024		031224	360.72
			Invoice: 8006444221					
				360.72 701121 623500	FEBRUARY 2024 DOC SHREDDING			
					Records Management			
					CHECK	109464	TOTAL:	360.72
109465	03/19/2024	PRTD	3789 T & T TRUCK & CRANE SERVICE	0166483-IN	02/21/2024		031224	4,817.50
			Invoice: 0166483-IN					
				4,817.50 751820 551500	90 TON CRANE SRV 2/20/24			
					Outside Services			
					CHECK	109465	TOTAL:	4,817.50
109466	03/19/2024	PRTD	30061 THE NELAC INSTITUTE	6430	02/23/2024		031224	400.00
			Invoice: 6430					
				400.00 701121 710500	ANNL MBRSHIP 4/23/24-4/22/25			
					Dues, Subsc & Memberships			
					CHECK	109466	TOTAL:	400.00
109467	03/19/2024	PRTD	19135 TRANSUNION RISK AND ALTERNATIVE D	974571-202402-1	03/01/2024		031224	160.00
			Invoice: 974571-202402-1					
				160.00 701221 620000	FEBRUARY 2024 BAD DEBT SRV			
					Forms, Supplies And Postage			
					CHECK	109467	TOTAL:	160.00
109468	03/19/2024	PRTD	30056 VERIZON WIRELESS	9957680248	02/26/2024		031224	536.14
			Invoice: 9957680248					
				536.14 701224 540520	WIRELESS SVC 2/27-3/26/24			
					Telephone			
					CHECK	109468	TOTAL:	536.14
109469	03/19/2024	PRTD	30796 VILAYPHONE HWANG	091490/022624	02/26/2024		031224	44.78
			Invoice: 091490/022624					
				44.78 101 230500	RFND FINAL CR BAL 0000640142-091490			
					Deposit Refd Clearing-Billing			
					CHECK	109469	TOTAL:	44.78
109470	03/19/2024	PRTD	3025 WATER & SANITATION SRV./VENTURA C	2738596	02/28/2024		031224	21,395.32
			Invoice: 2738596					
				21,395.32 101001 510500	PCH WATER 1/16-2/20/24			
					Purch Water-Ventura County			
					CHECK	109470	TOTAL:	21,395.32

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								
109471	03/19/2024	PRTD	30420 WEST YOST & ASSOCIATES, INC	2057050	03/04/2024		031224	1,996.50
	Invoice: 2057050				GRANT MANAGEMENT SERVICES 1/6-2/9/24			
				1,996.50	701210	651600	Other Professional Serv	
							CHECK 109471 TOTAL:	1,996.50
				NUMBER OF CHECKS	34	*** CASH ACCOUNT TOTAL ***		336,493.90
				TOTAL PRINTED CHECKS		COUNT	AMOUNT	
						34	336,493.90	
							*** GRAND TOTAL ***	336,493.90

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				
2024	9	249													
APP	101-200000			03/19/2024	031224		031924				Accounts Payable			40,054.65	
											AP CASH DISBURSEMENTS JOURNAL				
APP	999-100100			03/19/2024	031224		031924				Cash-General				336,493.90
											AP CASH DISBURSEMENTS JOURNAL				
APP	701-200000			03/19/2024	031224		031924				Accounts Payable			47,402.33	
											AP CASH DISBURSEMENTS JOURNAL				
APP	130-200000			03/19/2024	031224		031924				Accounts Payable			189,310.50	
											AP CASH DISBURSEMENTS JOURNAL				
APP	751-200000			03/19/2024	031224		031924				Accounts Payable			17,625.05	
											AP CASH DISBURSEMENTS JOURNAL				
APP	330-200000			03/19/2024	031224		031924				Accounts Payable			36,033.62	
											AP CASH DISBURSEMENTS JOURNAL				
APP	754-200000			03/19/2024	031224		031924				Accounts Payable			6,067.75	
											AP CASH DISBURSEMENTS JOURNAL				
											GENERAL LEDGER TOTAL			336,493.90	336,493.90
APP	999-201010			03/19/2024	031224		031924				Due to/Due Frm Potable Wtr Ops			40,054.65	
											Cash-General				40,054.65
APP	101-100100			03/19/2024	031224		031924				Due to/Due FromInternal Svs			47,402.33	
											Cash-General				47,402.33
APP	999-207010			03/19/2024	031224		031924				Due to/Due FrmSanitation Ops			189,310.50	
											Cash-General				189,310.50
APP	701-100100			03/19/2024	031224		031924				Due to/Due FromJPA Operations			17,625.05	
											Cash-General				17,625.05
APP	999-207510			03/19/2024	031224		031924				Due to/Due FrmSanitat Replace			36,033.62	
											Cash-General				36,033.62
APP	751-100100			03/19/2024	031224		031924				Due to/Due FromJPA Replacement			6,067.75	
											Cash-General				6,067.75
APP	999-203300			03/19/2024	031224		031924				Due to/Due FromJPA Replacement			6,067.75	
											Cash-General				6,067.75
APP	330-100100			03/19/2024	031224		031924				Due to/Due FromJPA Replacement			6,067.75	
											Cash-General				6,067.75
APP	999-207540			03/19/2024	031224		031924				Due to/Due FromJPA Replacement			6,067.75	
											Cash-General				6,067.75
APP	754-100100			03/19/2024	031224		031924				Due to/Due FromJPA Replacement			6,067.75	
											Cash-General				6,067.75
											SYSTEM GENERATED ENTRIES TOTAL			336,493.90	336,493.90
											JOURNAL 2024/09/249	TOTAL		672,987.80	672,987.80

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	2024 9	249	03/19/2024	Cash-General Accounts Payable	40,054.65	40,054.65
FUND TOTAL					40,054.65	40,054.65
130 Sanitation Operations 130-100100 130-200000	2024 9	249	03/19/2024	Cash-General Accounts Payable	189,310.50	189,310.50
FUND TOTAL					189,310.50	189,310.50
330 Sanitation Replacement 330-100100 330-200000	2024 9	249	03/19/2024	Cash-General Accounts Payable	36,033.62	36,033.62
FUND TOTAL					36,033.62	36,033.62
701 Internal Service Fund 701-100100 701-200000	2024 9	249	03/19/2024	Cash-General Accounts Payable	47,402.33	47,402.33
FUND TOTAL					47,402.33	47,402.33
751 JPA Operations 751-100100 751-200000	2024 9	249	03/19/2024	Cash-General Accounts Payable	17,625.05	17,625.05
FUND TOTAL					17,625.05	17,625.05
754 JPA Replacement 754-100100 754-200000	2024 9	249	03/19/2024	Cash-General Accounts Payable	6,067.75	6,067.75
FUND TOTAL					6,067.75	6,067.75
999 Pooled Cash 999-100100 999-201010 999-201300 999-203300 999-207010 999-207510 999-207540	2024 9	249	03/19/2024	Cash-General Due to/Due Frm Potable Wtr Ops Due to/Due Frm Sanitation Ops Due to/Due Frm Sanitat Replace Due to/Due From Internal Svcs Due to/Due From JPA Operations Due to/Due From JPA Replacement	40,054.65 189,310.50 36,033.62 47,402.33 17,625.05 6,067.75	336,493.90
FUND TOTAL					336,493.90	336,493.90

A/P CASH DISBURSEMENTS JOURNAL
 JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FR
101	Potable water Operations		40,054.65
130	Sanitation Operations		189,310.50
330	Sanitation Replacement		36,033.62
701	Internal Service Fund		47,402.33
751	JPA Operations		17,625.05
754	JPA Replacement		6,067.75
999	Pooled Cash		
		336,493.90	
TOTAL		336,493.90	336,493.90

** 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
INVOICE DTL DESC								
109473	03/19/2024	PRTD	30729 AMAZON CAPITAL SERVICES, INC.	1NFJ-MPVR-KQCP	03/01/2024		031924	1,333.72
			Invoice: 1NFJ-MPVR-KQCP	1,333.72 701222 572500	MAGNETIC LOCATORS Genl Supplies/Small Tools			
			Invoice: 1G61-Y1PT-4MLG	23.13 701420 543000	03/05/2024 ETHERNET SPLITTER Capital Outlay		031924	23.13
			Invoice: 1T1D-PRHW-6LYF	268.20 701420 620000	03/05/2024 10 IPHONE CASES Forms, Supplies And Postage		031924	268.20
			Invoice: 1KYC-Q1JK-1XXN	45.96 701325 551000	03/04/2024 UPHOLSTERY CLEANING KIT & CLOTH Supplies/Material		031924	45.96
			Invoice: 1DRP-THDJ-94CH	97.11 101600 541000	03/06/2024 MECHANICAL PENCIL & HANDLE EXTENDS Supplies/Material		031924	97.11
						CHECK	109473 TOTAL:	1,768.12
109474	03/19/2024	PRTD	20695 AT&T A/C -0051	00515552/030524	03/05/2024		031924	1,995.73
			Invoice: 00515552/030524		SRV 3/5-4/4/24			
				106.57 101600 540520	Telephone			
				53.58 130100 540520	Telephone			
				67.21 130100 540520	Telephone			
				813.72 751810 540520	Telephone			
				372.68 701002 540520	Telephone			
				42.30 701001 540520	Telephone			
				111.03 751820 540520	Telephone			
				53.58 101107 540520	Telephone			
				53.58 101107 540520	Telephone			
				53.58 101104 540520	Telephone			
				53.58 101108 540520	Telephone			
				53.58 101117 540520	Telephone			
				53.58 101110 540520	Telephone			
				53.58 101121 540520	Telephone			
				53.58 101123 540520	Telephone			
						CHECK	109474 TOTAL:	1,995.73
109475	03/19/2024	PRTD	2869 AT&T	90545245/030524	03/05/2024		031924	233.22
			Invoice: 90545245/030524	233.22 101122 540520	SVCS 3/5-4/4/24 Telephone			
						CHECK	109475 TOTAL:	233.22

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						
109476	03/19/2024	PRTD 9631 AT&T LONG DISTANCE	806368136/030424	03/04/2024	031924	16.11
		Invoice: 806368136/030424		LONG DIST SRV 2/1-2/29/24		
		4.59 701002 540520		Telephone		
		4.61 701420 540520		Telephone		
		6.30 751810 540520		Telephone		
		.61 101300 540520		Telephone		
				CHECK 109476 TOTAL:		16.11
109477	03/19/2024	PRTD 16253 AT&T MOBILITY	992789332X03112024	03/03/2024	031924	3,125.59
		Invoice: 992789332X03112024		WIRELESS SRV 02/04-03/03/24		
		43.23 101300 540520		Telephone		
		66.57 701122 540520		Telephone		
		62.22 701220 540520		Telephone		
		126.78 701221 540520		Telephone		
		216.22 701222 540520		Telephone		
		475.53 701224 540520		Telephone		
		43.23 701230 540520		Telephone		
		97.10 701320 540520		Telephone		
		384.82 701321 540520		Telephone		
		69.53 701322 540520		Telephone		
		103.86 701326 540520		Telephone		
		63.24 701330 540520		Telephone		
		940.05 701331 540520		Telephone		
		17.87 701350 540520		Telephone		
		210.89 701420 540520		Telephone		
		141.87 751810 540520		Telephone		
		62.58 751820 540520		Telephone		
				CHECK 109477 TOTAL:		3,125.59
109478	03/19/2024	PRTD 21515 CALIFORNIA ASSOC OF MUTUAL WATER	00059	03/01/2024	031924	10,000.00
		Invoice: 00059		CWSA SPONSOR 2024		
		10,000.00 701122 710500		Dues, Subsc & Memberships		
				CHECK 109478 TOTAL:		10,000.00
109479	03/19/2024	PRTD 30387 CINTAS CORPORATION NO. 3	4181850029	01/31/2024	031924	251.53
		Invoice: 4181850029		JANUARY 2024 UNIFORMS/MATS/TOWELS		
		109.32 751810 551000		Supplies/Material		
		142.21 701999 731600		Uniforms		
				CINTAS CORPORATION NO. 3		
		Invoice: 4183287849	4183287849	02/14/2024	031924	590.63
				FEBRUARY 2024 UNIFORMS/MATS/TOWELS		
		143.29 701002 551000		Supplies/Material		
		447.34 701999 731600		Uniforms		
				CINTAS CORPORATION NO. 3		
			4182568541	02/07/2024	031924	586.59

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: 4182568541				143.29 701002 551000					
				443.30 701999 731600					
					FEBRUARY 2024 UNIFORMS/MATS/TOWELS				
					Supplies/Material				
					Uniforms				
Invoice: 4184727291			CINTAS CORPORATION NO. 3	4184727291	02/28/2024		031924	622.41	
				143.29 701002 551000					
				479.12 701999 731600					
					FEBRUARY 2024 UNIFORMS/MATS/TOWELS				
					Supplies/Material				
					Uniforms				
Invoice: 4181849927			CINTAS CORPORATION NO. 3	4181849927	01/31/2024		031924	170.37	
				83.66 751820 551000					
				86.71 701999 731600					
					JANUARY 2024 UNIFORMS/MATS/TOWELS				
					Supplies/Material				
					Uniforms				
Invoice: 4182568097			CINTAS CORPORATION NO. 3	4182568097	02/07/2024		031924	170.37	
				83.66 751820 551000					
				86.71 701999 731600					
					FEBRUARY 2024 UNIFORMS/MATS/TOWELS				
					Supplies/Material				
					Uniforms				
Invoice: 4183287489			CINTAS CORPORATION NO. 3	4183287489	02/14/2024		031924	170.37	
				83.66 751820 551000					
				86.71 701999 731600					
					FEBRUARY 2024 UNIFORMS/MATS/TOWELS				
					Supplies/Material				
					Uniforms				
Invoice: 4183126074			CINTAS CORPORATION NO. 3	4183126074	02/13/2024		031924	79.81	
				15.72 101600 551000					
				64.09 701999 731600					
					FEBRUARY 2024 UNIFORMS/MATS				
					Supplies/Material				
					Uniforms				
Invoice: 4182405714			CINTAS CORPORATION NO. 3	4182405714	02/06/2024		031924	93.56	
				29.47 101600 551000					
				64.09 701999 731600					
					FEBRUARY 2024 UNIFORMS/MATS/TOWELS				
					Supplies/Material				
					Uniforms				
							CHECK	109479 TOTAL:	2,735.64
109480	03/19/2024	PRTD	3498 DEPT. OF WATER & POWER - CITY OF	GA82282	03/07/2024		031924	41.67	
			Invoice: GA82282	41.67 130100 542000					
					SEWER PERMIT APRIL 2024				
					Permits and Fees				
Invoice: GA82280			DEPT. OF WATER & POWER - CITY OF	GA82280	03/07/2024		031924	43.75	
				43.75 130100 542000					
					SEWER PERMIT APRIL 2024				
					Permits and Fees				
							CHECK	109480 TOTAL:	85.42
109481	03/19/2024	PRTD	7257 DIRECTV, INC.	013810616X240306	03/06/2024		031924	14.25	
			Invoice: 013810616X240306	14.25 101600 551500					
					TV ACCESS FEE 3/5-4/4/24				
					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 109481 TOTAL:	14.25
109482	03/19/2024	PRTD	2655 FERGUSON ENTERPRISES	0023831	02/28/2024	2240129	031924	677.06
			Invoice: 0023831					
			677.06 701	132000				
							CHECK 109482 TOTAL:	677.06
109483	03/19/2024	PRTD	30364 GEOTAB USA, INC	IN374021	02/29/2024		031924	1,483.64
			Invoice: IN374021					
			1,483.64 701326	622500				
							CHECK 109483 TOTAL:	1,483.64
109484	03/19/2024	PRTD	19548 GRM INFORMATION MANAGEMENT SERVIC	0498881	02/29/2024		031924	438.70
			Invoice: 0498881					
			438.70 701121	623500				
							CHECK 109484 TOTAL:	438.70
109485	03/19/2024	PRTD	7421 HAMNER, JEWELL AND ASSOCIATES	203297	02/07/2024		031924	3,195.00
			Invoice: 203297					
			3,195.00 201440	900000				
							CHECK 109485 TOTAL:	3,195.00
109486	03/19/2024	PRTD	30543 JEREMY WOLF	121323	12/13/2023		031924	172.50
			Invoice: 121323					
			172.50 701210	683000				
							CHECK 109486 TOTAL:	172.50
109487	03/19/2024	PRTD	2547 LOS ANGELES COUNTY SANITATION DIS	48892/022924	02/29/2024		031924	1,761.94
			Invoice: 48892/022924					
			1,761.94 751810	541500				
							CHECK 109487 TOTAL:	1,761.94
109488	03/19/2024	PRTD	30744 MCKENNA BOILER WORKS, INC.	PS-INV108213	02/20/2024		031924	3,402.09
			Invoice: PS-INV108213					
			3,402.09 751820	551500				
							CHECK 109488 TOTAL:	3,402.09

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
109492	03/19/2024	PRTD	30458 PIONEER AMERICAS, LLC 10728	900389145	03/07/2024		031924	10,581.31
			Invoice: 900389145	10,581.31 751810 541014	4,926 GAL SODIUM HYPOCHLORITE Sodium Hypochlorite			
			Invoice: 900388443	9,713.50 751810 541014	4,522 GAL SODIUM HYPOCHLORITE Sodium Hypochlorite			
						CHECK	109492 TOTAL:	20,294.81
109493	03/19/2024	PRTD	21594 RECYCLED WOOD PRODUCTS	253280	02/27/2024		031924	1,924.00
			Invoice: 253280	1,924.00 751820 541080	130 YD WOODCHIPS Amendment			
						CHECK	109493 TOTAL:	1,924.00
109494	03/19/2024	PRTD	30117 SOUTHERN CALIFORNIA NEWS GROUP	0000584110	02/29/2024		031924	175.00
			Invoice: 0000584110	175.00 101900 660400	DIGITAL AD - FEBRUARY 2024 Public Education Programs			
						CHECK	109494 TOTAL:	175.00
109495	03/19/2024	PRTD	2957 SOUTHERN CALIFORNIA EDISON ATT. E	45743/022924	02/29/2024		031924	7,981.16
			Invoice: 45743/022924	3,990.58 751127 540510	RW P/S 1/30-2/28/24 49,079 KH Energy			
				3,990.58 751128 540510	Energy			
			Invoice: 75690/022624	1,377.31 751750 540510	BLDG1 HM-PWP 1/23-2/21/24 5,532KH Energy			
						CHECK	109495 TOTAL:	9,358.47
109496	03/19/2024	PRTD	2958 SOUTHERN CALIFORNIA GAS CO (M-bil	06551212001/030524	03/05/2024		031924	16.61
			Invoice: 06551212001/030524	16.61 101109 540530	JBR P/S 1/31-3/1/24 1 THERMS Gas			
			Invoice: 14241394924/031124	14.91 101600 540530	WLK P/S 2/6-3/7/24 0 THERMS Gas			
			Invoice: 05721104007/030724	17.59 101110 540530	CORNELL 2/2-3/5/24 1 THERMS Gas			
			Invoice: 18121142006/030724		RANCHO 2/2-3/5/24 414 THERMS			

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 109500 TOTAL: 34,114.26
109501	03/19/2024	PRTD	2780 VALLEY NEWS GROUP	2-29	02/29/2024		031924	250.00
Invoice: 2-29				250.00	101900	660400	DISPLAY AD - FLAMES TO THE OCEAN 2/29/24 Public Education Programs	
								CHECK 109501 TOTAL: 250.00
109502	03/19/2024	PRTD	3035 VWR SCIENTIFIC	8815427322	03/01/2024		031924	63.29
Invoice: 8815427322				63.29	701341	551000	BIOLOGICAL INDICATORS Supplies/Material	
								CHECK 109502 TOTAL: 63.29
109503	03/19/2024	PRTD	18914 WECK LABORATORIES, INC.	W4B0065	02/01/2024		031924	111.96
Invoice: W4B0065				111.96	751750	571520	PW SAMPLING WEEKLY Other Laboratory Serv	
Invoice: W4B0066				241.96	751750	571520	PW SAMPLING WEEKLY Other Laboratory Serv	241.96
Invoice: W4B0070				1,428.83	751750	571520	PW SAMPLING BI-MONTHLY Other Laboratory Serv	1,428.83
Invoice: W4B0071				2,383.58	751750	571520	PW SAMPLING MONTHLY Other Laboratory Serv	2,383.58
Invoice: W4B0823				111.96	751750	571520	PW SAMPLING WEEKLY Other Laboratory Serv	111.96
Invoice: W4B1175				1,539.80	751750	571520	PW SAMPLING BI-MONTHLY Other Laboratory Serv	1,539.80
Invoice: W4B1550				241.96	751750	571520	PW SAMPLING WEEKLY Other Laboratory Serv	241.96
Invoice: W4B1634				111.96	751750	571520	PW SAMPLING WEEKLY Other Laboratory Serv	111.96
Invoice: W4B2047				1,498.97	751750	571520	PW SAMPLING BI-MONTHLY Other Laboratory Serv	1,498.97

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: W3J2658			WECK LABORATORIES, INC.	W3J2658	10/30/2023		031924	375.86
				375.86 751810 571520	005 EFFLUENT COMPOSITE MONTHLY			
					Other Laboratory Serv			
Invoice: W3K0512			WECK LABORATORIES, INC.	W3K0512	11/07/2023		031924	482.31
				482.31 751810 571520	TAPIA WATER RECLAMATION			
					Other Laboratory Serv			
Invoice: W3K0430			WECK LABORATORIES, INC.	W3K0430	11/07/2023		031924	340.88
				340.88 751810 571520	005 EFFLUENT QUARTERLY			
					Other Laboratory Serv			
Invoice: W3K1096			WECK LABORATORIES, INC.	W3K1096	11/15/2023		031924	160.08
				160.08 751810 571520	TAPIA WATER RECLAMATION			
					Other Laboratory Serv			
Invoice: W3K1331			WECK LABORATORIES, INC.	W3K1331	11/17/2023		031924	895.38
				895.38 751810 571520	LA RIVER QUARTERLY			
					Other Laboratory Serv			
Invoice: W3K1333			WECK LABORATORIES, INC.	W3K1333	11/17/2023		031924	735.22
				735.22 751810 571520	005 EFFLUENT QUARTERLY			
					Other Laboratory Serv			
Invoice: W3K1545			WECK LABORATORIES, INC.	W3K1545	11/22/2023		031924	157.68
				157.68 751810 571520	TAPIA AMMONIA REMOVAL BASIN			
					Other Laboratory Serv			
Invoice: W3L0272			WECK LABORATORIES, INC.	W3L0272	12/05/2023		031924	221.23
				221.23 751810 571520	005 EFFLUENT MONTHLY			
					Other Laboratory Serv			
Invoice: W3L0675			WECK LABORATORIES, INC.	W3L0675	12/08/2023		031924	146.70
				146.70 751810 571520	TAPIA GROUNDWATER MONTHLY			
					Other Laboratory Serv			
Invoice: W3L0670			WECK LABORATORIES, INC.	W3L0670	12/08/2023		031924	1,060.47
				1,060.47 751810 571520	MALIBU CREEK SPECIAL			
					Other Laboratory Serv			
Invoice: W3L0672			WECK LABORATORIES, INC.	W3L0672	12/08/2023		031924	180.00
				180.00 751810 571520	TAPIA WATER RECLAMATION			
					Other Laboratory Serv			
Invoice: W3L0674			WECK LABORATORIES, INC.	W3L0674	12/08/2023		031924	60.00
				60.00 751810 571520	TAPIA GROUNDWATER MONTHLY			
					Other Laboratory Serv			
Invoice: W3L1398			WECK LABORATORIES, INC.	W3L1398	12/18/2023		031924	360.00
				360.00 751810 571520	MALIBU CREEK MONTHLY			
					Other Laboratory Serv			

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: W3L1515			WECK LABORATORIES, INC.	W3L1515	12/19/2023		031924	895.38
				895.38 751810 571520	LA RIVER MONTHLY			
					Other Laboratory Serv			
Invoice: W3L1514			WECK LABORATORIES, INC.	W3L1514	12/19/2023		031924	375.86
				375.86 751810 571520	005 EFFLUENT COMPOSITE MONTHLY			
					Other Laboratory Serv			
Invoice: W3L1597			WECK LABORATORIES, INC.	W3L1597	12/20/2023		031924	362.31
				362.31 751810 571520	TAPIA WATER RECLAMATION			
					Other Laboratory Serv			
Invoice: W3L1594			WECK LABORATORIES, INC.	W3L1594	12/20/2023		031924	1,378.81
				1,378.81 751810 571520	DIAZINON			
					Other Laboratory Serv			
Invoice: W3L1645			WECK LABORATORIES, INC.	W3L1645	12/21/2023		031924	161.23
				161.23 751810 571520	TAPIA EFFLUENT MONTHLY			
					Other Laboratory Serv			
Invoice: W3L1907			WECK LABORATORIES, INC.	W3L1907	12/27/2023		031924	1,338.94
				1,338.94 751810 571520	TAPIA INFLUENT SEMI-ANNUAL			
					Other Laboratory Serv			
Invoice: W4A0175			WECK LABORATORIES, INC.	W4A0175	01/03/2024		031924	498.17
				498.17 751810 571520	TAPIA EFFLUENT MONTHLY			
					Other Laboratory Serv			
Invoice: W4A0172			WECK LABORATORIES, INC.	W4A0172	01/03/2024		031924	269.01
				269.01 751810 571520	TAPIA GROUNDWATER MONTHLY			
					Other Laboratory Serv			
Invoice: W4A0174			WECK LABORATORIES, INC.	W4A0174	01/03/2024		031924	22.24
				22.24 751810 571520	TAPIA EFFLUENT			
					Other Laboratory Serv			
Invoice: W4A1423			WECK LABORATORIES, INC.	W4A1423	01/19/2024		031924	4,283.79
				4,283.79 751810 571520	TAPIA EFFLUENT SEMI-ANNUAL			
					Other Laboratory Serv			
Invoice: W4A1421			WECK LABORATORIES, INC.	W4A1421	01/19/2024		031924	8,738.46
				8,738.46 751810 571520	MALIBU CREEK SEMI-ANNUAL			
					Other Laboratory Serv			
Invoice: W4A1426			WECK LABORATORIES, INC.	W4A1426	01/19/2024		031924	377.64
				377.64 751810 571520	MALIBU CREEK			
					Other Laboratory Serv			
Invoice: W4A1427			WECK LABORATORIES, INC.	W4A1427	01/19/2024		031924	381.76
				381.76 751810 571520	TAPIA WATER RECLAMATION			
					Other Laboratory Serv			

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: W4A1425			WECK LABORATORIES, INC.	W4A1425	01/19/2024		031924	3,761.87
				3,761.87 751810 571520	MALIBU CREEK MONTHLY Other Laboratory Serv			
Invoice: W4A1424			WECK LABORATORIES, INC.	W4A1424	01/19/2024		031924	133.96
				133.96 751810 571520	TAPIA INFLUENT MONTHLY Other Laboratory Serv			
Invoice: W4B0068			WECK LABORATORIES, INC.	W4B0068	02/01/2024		031924	62.94
				62.94 751810 571520	MALIBU CREEK Other Laboratory Serv			
Invoice: W4B0906			WECK LABORATORIES, INC.	W4B0906	02/12/2024		031924	47.84
				47.84 101600 571520	WLK MONTHLY Other Laboratory Serv			
Invoice: W4A0586			WECK LABORATORIES, INC.	W4A0586	01/09/2024		031924	272.31
				272.31 751820 571520	RANCHO COMPOST INPUT MIX Other Laboratory Serv			
Invoice: W4B0067			WECK LABORATORIES, INC.	W4B0067	02/01/2024		031924	215.20
				215.20 701341 551500	DIONIZED WATER Outside Services			
Invoice: W4B2275			WECK LABORATORIES, INC.	W4B2275	02/28/2024		031924	62.00
				62.00 751820 571520	RANCHO COMPOST INPUT MIX Other Laboratory Serv			
Invoice: W4B2276			WECK LABORATORIES, INC.	W4B2276	02/28/2024		031924	62.00
				62.00 751820 571520	RANCHO COMPOST INPUT MIX Other Laboratory Serv			
Invoice: W4B0907			WECK LABORATORIES, INC.	W4B0907	02/12/2024		031924	115.40
				115.40 101600 571520	WLK RESERVOIR - TTHM Other Laboratory Serv			
Invoice: W4B0905			WECK LABORATORIES, INC.	W4B0905	02/12/2024		031924	153.89
				153.89 751810 571520	TAPIA GROUNDWATER MONTHLY Other Laboratory Serv			
Invoice: W4B1548			WECK LABORATORIES, INC.	W4B1548	02/20/2024		031924	2,044.87
				2,044.87 751810 571520	MALIBU CREEK ANNUAL Other Laboratory Serv			
Invoice: W4B2271			WECK LABORATORIES, INC.	W4B2271	02/28/2024		031924	12,480.87
				12,480.87 751810 571520	MALIBU CREEK ANNUAL Other Laboratory Serv			
Invoice: W4B2272			WECK LABORATORIES, INC.	W4B2272	02/28/2024		031924	2,434.07
				2,434.07 751810 571520	TAPIA INFLUENT ANNUAL Other Laboratory Serv			

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				
Invoice: W4B2274	WECK LABORATORIES, INC.	W4B2274	02/28/2024		031924	4,931.32
		4,931.32 751810 571520	TAPIA EFFLUENT ANNUAL Other Laboratory Serv			
			CHECK	109503	TOTAL:	58,708.93
109504 03/19/2024 PRTD Invoice: 20339	30635 WESTERN A/V	20339	02/29/2024		031924	21,120.99
		21,120.99 301440 900000	BOARDROOM AUDIO & VISUAL UPGRD Capital Asset Expenses			
Invoice: 20360	WESTERN A/V	20360	03/07/2024		031924	22,203.95
		22,203.95 301440 900000	BOARDROOM AUDIO & VISUAL UPGRD Capital Asset Expenses			
			CHECK	109504	TOTAL:	43,324.94
109505 03/19/2024 PRTD Invoice: K22359030101	21474 ZONES, LLC	K22359030101	03/05/2024	2240133	031924	1,705.82
		1,705.82 701420 543000	CISCO MERAKEI WI-FI FOR TAPIA Capital outlay			
			CHECK	109505	TOTAL:	1,705.82
	NUMBER OF CHECKS	38	*** CASH ACCOUNT TOTAL ***			363,782.48
	TOTAL PRINTED CHECKS		COUNT		AMOUNT	
	TOTAL EFT'S		36		330,284.98	
			2		33,497.50	
			*** GRAND TOTAL ***			363,782.48

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				
2024	9	251													
APP	701-200000			03/19/2024	031924		031924				Accounts Payable			76,362.99	
											AP CASH DISBURSEMENTS JOURNAL				
APP	999-100100			03/19/2024	031924		031924				Cash-General				363,782.48
											AP CASH DISBURSEMENTS JOURNAL				
APP	751-200000			03/19/2024	031924		031924				Accounts Payable			235,554.62	
											AP CASH DISBURSEMENTS JOURNAL				
APP	101-200000			03/19/2024	031924		031924				Accounts Payable			4,849.63	
											AP CASH DISBURSEMENTS JOURNAL				
APP	130-200000			03/19/2024	031924		031924				Accounts Payable			206.21	
											AP CASH DISBURSEMENTS JOURNAL				
APP	201-200000			03/19/2024	031924		031924				Accounts Payable			3,195.00	
											AP CASH DISBURSEMENTS JOURNAL				
APP	301-200000			03/19/2024	031924		031924				Accounts Payable			43,614.03	
											AP CASH DISBURSEMENTS JOURNAL				
											GENERAL LEDGER TOTAL			363,782.48	363,782.48
APP	999-207010			03/19/2024	031924		031924				Due to/Due FromInternal Svcs			76,362.99	
											Cash-General				76,362.99
APP	701-100100			03/19/2024	031924		031924				Due to/Due FromJPA Operations			235,554.62	
											Cash-General				235,554.62
APP	999-207510			03/19/2024	031924		031924				Due to/Due Frm Potable Wtr Ops			4,849.63	
											Cash-General				4,849.63
APP	751-100100			03/19/2024	031924		031924				Due to/Due FrmSanitation Ops			206.21	
											Cash-General				206.21
APP	999-201010			03/19/2024	031924		031924				Due to/Due FrmPotable Wtr Cnst			3,195.00	
											Cash-General				3,195.00
APP	101-100100			03/19/2024	031924		031924				Due to/Due FrmPotable Wtr Repl			43,614.03	
											Cash-General				43,614.03
APP	999-203010			03/19/2024	031924		031924				Due to/Due FrmPotable Wtr Repl			43,614.03	
											Cash-General				43,614.03
APP	301-100100			03/19/2024	031924		031924				Due to/Due FrmPotable Wtr Repl			43,614.03	
											Cash-General				43,614.03
											SYSTEM GENERATED ENTRIES TOTAL			363,782.48	363,782.48
											JOURNAL 2024/09/251 TOTAL			727,564.96	727,564.96

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	2024 9	251	03/19/2024	Cash-General Accounts Payable	4,849.63	4,849.63
FUND TOTAL					4,849.63	4,849.63
130 Sanitation Operations 130-100100 130-200000	2024 9	251	03/19/2024	Cash-General Accounts Payable	206.21	206.21
FUND TOTAL					206.21	206.21
201 Potable Water Construction 201-100100 201-200000	2024 9	251	03/19/2024	Cash-General Accounts Payable	3,195.00	3,195.00
FUND TOTAL					3,195.00	3,195.00
301 Potable wtr Replacement Fund 301-100100 301-200000	2024 9	251	03/19/2024	Cash-General Accounts Payable	43,614.03	43,614.03
FUND TOTAL					43,614.03	43,614.03
701 Internal Service Fund 701-100100 701-200000	2024 9	251	03/19/2024	Cash-General Accounts Payable	76,362.99	76,362.99
FUND TOTAL					76,362.99	76,362.99
751 JPA Operations 751-100100 751-200000	2024 9	251	03/19/2024	Cash-General Accounts Payable	235,554.62	235,554.62
FUND TOTAL					235,554.62	235,554.62
999 Pooled Cash 999-100100 999-201010 999-201300 999-202010 999-203010 999-207010 999-207510	2024 9	251	03/19/2024	Cash-General Due to/Due Frm Potable Wtr Ops Due to/Due Frm Sanitation Ops Due to/Due Frm Potable wtr Cnst Due to/Due Frm Potable wtr Repl Due to/Due From Internal Sys Due to/Due From JPA Operations	4,849.63 206.21 3,195.00 43,614.03 76,362.99 235,554.62	363,782.48
FUND TOTAL					363,782.48	363,782.48

A/P CASH DISBURSEMENTS JOURNAL
 JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FR
101	Potable Water Operations		4,849.63
130	Sanitation Operations		206.21
201	Potable Water Construction		3,195.00
301	Potable Wtr Replacement Fund		43,614.03
701	Internal Service Fund		76,362.99
751	JPA Operations		235,554.62
999	Pooled Cash		
		363,782.48	
TOTAL		363,782.48	363,782.48

** 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
					INVOICE DTL DESC			
							CHECK 57 TOTAL:	17,338.80
58	03/26/2024	PRTD	7770 AUTOMATIONDIRECT.COM	16194653	02/28/2024		032624	625.25
Invoice: 16194653				625.25 751810 551000	PHASE RELAY & DELAY TIMERS Supplies/Material			
			AUTOMATIONDIRECT.COM	16140804	02/15/2024		032624	330.69
Invoice: 16140804				330.69 751810 551000	CONTACTORS, OVERLOADS & RELAY Supplies/Material			
			AUTOMATIONDIRECT.COM	16220059	03/06/2024		032624	370.11
Invoice: 16220059				370.11 751820 551000	RELAYS & PRESSURE TRANSDUCERS Supplies/Material			
							CHECK 58 TOTAL:	1,326.05
109506	03/26/2024	PRTD	30555 13 STARS MEDIA	2024CI-5168	02/26/2024		032624	825.00
Invoice: 2024CI-5168				825.00 101900 660400	AD FEB'24 ISSUE Public Education Programs			
							CHECK 109506 TOTAL:	825.00
109507	03/26/2024	PRTD	2339 AGOURA LOCK TECHNOLOGIES	92397	12/19/2023	2240093	032624	2,041.96
Invoice: 92397				2,041.96 701 132000	MASTER PADLOCKS Storeroom & Truck Inventory			
							CHECK 109507 TOTAL:	2,041.96
109508	03/26/2024	PRTD	3077 AIRGAS USA, LLC	5506461157	02/29/2024		032624	349.16
Invoice: 5506461157				349.16 701002 551500	CYLINDER RENTAL FEBRUARY 2024 Outside Services			
							CHECK 109508 TOTAL:	349.16
109509	03/26/2024	PRTD	30729 AMAZON CAPITAL SERVICES, INC.	1XQK-PCVJ-FYR7	02/06/2024		032624	776.31
Invoice: 1XQK-PCVJ-FYR7				776.31 701326 572500	PANEL METER & ELECTRICAL CONDUIT HOLE CUTTER Genl Supplies/Small Tools			
			AMAZON CAPITAL SERVICES, INC.	1C36-VPM3-FXGM	02/10/2024		032624	38.30
Invoice: 1C36-VPM3-FXGM				38.30 751810 541000	BLANK CAR MAGNET SET Supplies/Material			
			AMAZON CAPITAL SERVICES, INC.	1RXV-3G3M-6N79	02/20/2024		032624	101.09
Invoice: 1RXV-3G3M-6N79				101.09 751810 551000	TIME RELAY & CONTROL RELAY Supplies/Material			
			AMAZON CAPITAL SERVICES, INC.	19KC-RR14-QX9F	02/19/2024		032624	26.22

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: 19KC-RR14-QX9F				26.22 701220	683000			
				INVOICE DTL DESC				
				CSTM SRV TIP & PHRASES FOR EFFECTIVE CSTMR SRV Training & Professional Devel				
						CHECK	109509 TOTAL:	941.92
109510	03/26/2024	PRTD	30711 ANIMAL & INSECT PEST MANAGEMENT I	10424D				
Invoice: 10424D				485.50 701001	551500			
				158.75 751820	551500			
				101.50 751810	551500			
				57.75 101100	551500			
				39.50 101100	551500			
				335.50 101600	551500			
						CHECK	109510 TOTAL:	1,178.50
					02/29/2024		032624	
				FEBRUARY 2024 PEST CONTROL SRV				
				Outside Services				
				Outside Services				
				Outside Services				
				Outside Services				
				Outside Services				
				Outside Services				
						CHECK	109510 TOTAL:	1,178.50
109511	03/26/2024	PRTD	30535 BETTER BUSINESS PLANNING, INC	338817				
Invoice: 338817				1.50 701430	622000			
						CHECK	109511 TOTAL:	1.50
					02/28/2024		032624	
				ADMIN DATA FEED MARCH 2024				
				Outside Services				
109512	03/26/2024	PRTD	30804 BLUE BEYOND CONSULTING, INC.	24091				
Invoice: 24091				7,000.00 701112	651600			
						CHECK	109512 TOTAL:	7,000.00
					02/21/2024		032624	
				STRATEGIC PLANNING WORKSHOP				
				Other Professional Serv				
109513	03/26/2024	PRTD	8091 BROWN AND CALDWELL	45512803				
Invoice: 45512803				5,899.44 754440	900000			
						CHECK	109513 TOTAL:	5,899.44
					03/06/2024		032624	
				RLV FLARE WASTE GAS FLARE 12/29-1/25/24				
				Capital Asset Expenses				
109514	03/26/2024	PRTD	30303 CALIFORNIA NURSERY SPECIALTIES "C	030624-001				
Invoice: 030624-001				1,494.68 701230	660200			
						CHECK	109514 TOTAL:	1,494.68
					03/06/2024		032624	
				SUCCULENTS FOR SCHOOL EDUCATION PROGRAM				
				School Education Programs				
109515	03/26/2024	PRTD	19779 CALABASAS STYLE, LLC	2024-40516				
Invoice: 2024-40516				1,200.00 101900	660400			
						CHECK	109515 TOTAL:	1,200.00
					02/21/2024		032624	
				MAR/APR 2024 FULL PAGE EDITORIAL				
				Public Education Programs				

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 109515 TOTAL:	1,200.00
109516	03/26/2024	PRTD	20655 CANNON CORPORATION	87566	02/27/2024		032624	8,071.25
			Invoice: 87566	8,071.25	301440	900000	CORNELL P/S UPGRD JANUARY 2024 Capital Asset Expenses	
							CHECK 109516 TOTAL:	8,071.25
109517	03/26/2024	PRTD	7992 CARB/PERP	P-047040-031224	03/12/2024		032624	1,470.00
			Invoice: P-047040-031224	1,470.00	701325	552000	REGISTRATION-GEN #933 & #934 Permits and Fees	
							CHECK 109517 TOTAL:	1,470.00
109518	03/26/2024	PRTD	2554 COASTLINE EQUIPMENT	1109334	03/07/2024		032624	777.00
			Invoice: 1109334	777.00	751820	551500	REPAIR #711 Outside Services	
							CHECK 109518 TOTAL:	777.00
109519	03/26/2024	PRTD	7257 DIRECTV, INC.	017818825X240313	03/13/2024		032624	8.00
			Invoice: 017818825X240313	8.00	751820	551500	TV ACCESS FEE 3/12-4/11/24 Outside Services	
			DIRECTV, INC.	017819005X240316	03/16/2024		032624	22.25
			Invoice: 017819005X240316	22.25	751820	551500	TV ACCESS FEE 3/15-4/14/24 Outside Services	
			DIRECTV, INC.	015016309X240311	03/11/2024		032624	16.00
			Invoice: 015016309X240311	16.00	701001	551500	TV ACCESS FEE 3/10-4/9/24 Outside Services	
							CHECK 109519 TOTAL:	46.25
109520	03/26/2024	PRTD	30562 GARLAND/DBS, INC.	42785245373	01/31/2024		032624	102,536.51
			Invoice: 42785245373	102,536.51	754440	900000	TAPIA ROOF REPLACEMENT JANUARY 2024 Capital Asset Expenses	
							CHECK 109520 TOTAL:	102,536.51
109521	03/26/2024	PRTD	10102 INFOSEND INC.	258132	02/29/2024		032624	9,898.63
			Invoice: 258132	9,898.63	701221	622000	1/31-2/28/24 BILL PAYMENT MAILING 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
CHECK 109521 TOTAL: 9,898.63								
109522	03/26/2024	PRTD	20856 INTERNATIONAL PRINTING & TYPESETT	23272	03/08/2024		032624	1,259.25
				1,259.25 701230 660200				
				INTERNATIONAL PRINTING & TYPESETT 23273	03/12/2024		032624	509.18
				509.18 701410 620000				
CHECK 109522 TOTAL: 1,768.43								
109523	03/26/2024	PRTD	2611 LA DWP	0176980000/031524	03/15/2024		032624	50.54
				50.54 101700 540510				
				5038501000/031824	03/18/2024		032624	44.92
				44.92 101700 540510				
				8756980000/031524	03/15/2024		032624	5,850.52
				5,850.52 101106 540510				
CHECK 109523 TOTAL: 5,945.98								
109524	03/26/2024	PRTD	2793 LISTER RENTS INC	166890.1.2	02/26/2024		032624	265.45
				265.45 101700 551000				
CHECK 109524 TOTAL: 265.45								
109525	03/26/2024	PRTD	30744 MCKENNA BOILER WORKS, INC.	PS-INV108239	02/05/2024		032624	2,331.81
				2,331.81 751820 551500				
CHECK 109525 TOTAL: 2,331.81								
109526	03/26/2024	PRTD	2814 MCMaster-CARR SUPPLY CO	23188244	03/05/2024		032624	254.74
				254.74 101600 551000				
CHECK 109526 TOTAL: 254.74								

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 109533 TOTAL:	1,112.50
109534	03/26/2024	PRTD	20583 RT LAWRENCE CORPORATION	48834	03/08/2024		032624	617.63
			Invoice: 48834				LOCKBOX FEE FEBRUARY 2024	
				617.63	701221	622000	Outside Services	
							CHECK 109534 TOTAL:	617.63
109535	03/26/2024	PRTD	30807 SEAN MURPHY	031224	03/12/2024		032624	2,400.00
			Invoice: 031224				CLAIM FILED - WATER MAIN BREAK	
				2,400.00	101900	714500	Claims Paid	
							CHECK 109535 TOTAL:	2,400.00
109536	03/26/2024	PRTD	30117 SOUTHERN CALIFORNIA NEWS GROUP	0000584111	02/29/2024		032624	9,272.72
			Invoice: 0000584111				DIGITAL AD - FEBRUARY 2024	
				9,272.72	101900	660400	Public Education Programs	
							CHECK 109536 TOTAL:	9,272.72
109537	03/26/2024	PRTD	30534 TAIT ENVIRONMENTAL SERVICES, INC.	000000955815	02/29/2024		032624	155.00
			Invoice: 000000955815				INSPECTION 2/5/24	
				155.00	701325	551500	Outside Services	
							CHECK 109537 TOTAL:	155.00
109538	03/26/2024	PRTD	21599 THE ROVISYS COMPANY	87610	09/11/2023		032624	2,237.42
			Invoice: 87610				NTWRK UPGRD MASTR PLN DVLPMNT AUGUST 2023	
				2,237.42	301440	900000	Capital Asset Expenses	
							CHECK 109538 TOTAL:	56,544.67
			THE ROVISYS COMPANY	89097	11/07/2023		032624	45,587.07
			Invoice: 89097				NTWRK UPGRD MASTR PLN DVLPMNT OCTOBER 2023	
				45,587.07	301440	900000	Capital Asset Expenses	
			THE ROVISYS COMPANY	89980	12/10/2023		032624	2,149.08
			Invoice: 89980				NTWRK UPGRD MASTR PLN DVLPMNT NOVEMBER 2023	
				2,149.08	301440	900000	Capital Asset Expenses	
			THE ROVISYS COMPANY	91271	02/07/2024		032624	6,571.10
			Invoice: 91271				NTWRK UPGRD MASTR PLN DVLPMNT JANUARY 2024	
				6,571.10	301440	900000	Capital Asset Expenses	

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
109539	03/26/2024	PRTD	18651 TOYOTA-LIFT OF LOS ANGELES	PSI-0395084	02/20/2024		032624	161.54
			Invoice: PSI-0395084					
				161.54 751820 551500	SERVICE #723			
					Outside Services			
			Invoice: PSI-0395155	PSI-0395155	02/21/2024		032624	97.95
				97.95 751810 551500	SERVICE #304			
					Outside Services			
			Invoice: PSI-0395154	PSI-0395154	02/21/2024		032624	97.95
				97.95 751810 551500	SERVICE #306			
					Outside Services			
			Invoice: PSI-0395153	PSI-0395153	02/21/2024		032624	217.97
				217.97 751810 551500	SERVICE #305			
					Outside Services			
			Invoice: PSI-0395152	PSI-0395152	02/21/2024		032624	215.47
				215.47 101600 551500	SERVICE #202			
					Outside Services			
			Invoice: PSI-0395087	PSI-0395087	02/20/2024		032624	97.95
				97.95 751820 551500	SERVICE #708			
					Outside Services			
			Invoice: PSI-0395086	PSI-0395086	02/20/2024		032624	97.95
				97.95 751820 551500	SERVICE #712			
					Outside Services			
			Invoice: PSI-0395085	PSI-0395085	02/20/2024		032624	164.81
				164.81 701325 551500	SERVICE #134			
					Outside Services			
						CHECK	109539 TOTAL:	1,151.59
109540	03/26/2024	PRTD	30802 U.S. CAD HOLDINGS, LLC	QT141426	03/25/2024		032624	1,795.00
			Invoice: QT141426					
				1,795.00 701420 621500	BLUEBEAM CORE ANNUAL SUBSCRIPTION			
					System Support and Maintenance			
						CHECK	109540 TOTAL:	1,795.00
109541	03/26/2024	PRTD	3006 UNDERGROUND SERVICE ALERT	23-2424704	03/01/2024		032624	157.29
			Invoice: 23-2424704					
				157.29 101700 551500	DIG SAFE FEE FEBRUARY 2024			
					Outside Services			
			Invoice: 220240424	220240424	03/01/2024		032624	365.25
				365.25 101700 551500	204 TICKETS - FEBRUARY 2024			
					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 109541 TOTAL:	522.54
109542	03/26/2024	PRTD	8764 UNITED IMAGING	5533427	02/29/2024	2240135	032624	74.44
			Invoice: 5533427					
				74.44	701410	620000	TONER CARTRIDGES Forms, Supplies And Postage	
							CHECK 109542 TOTAL:	74.44
109543	03/26/2024	PRTD	30811 VENTURA COUNTY MEDICAL ASSOCIATIO	20240313	03/13/2024		032624	1,000.00
			Invoice: 20240313					
				1,000.00	701230	660400	2024 BRONZE SPONSORSHIP Public Education Programs	
							CHECK 109543 TOTAL:	1,000.00
109544	03/26/2024	PRTD	3034 VORTEX INDUSTRIES, LLC	01-1734822	03/06/2024		032624	5,877.11
			Invoice: 01-1734822					
				5,877.11	701002	551500	REPAIR BLDG#7 ROLL UP DOOR Outside Services	
							CHECK 109544 TOTAL:	5,877.11
				NUMBER OF CHECKS	45		*** CASH ACCOUNT TOTAL ***	291,500.14
				TOTAL PRINTED CHECKS		COUNT	AMOUNT	
						40	253,094.08	
				TOTAL EFT'S		5	38,406.06	
							*** GRAND TOTAL ***	291,500.14

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				
2024	9	340													
APP	701-200000			03/26/2024	032624		032624				Accounts Payable			54,786.11	
											AP CASH DISBURSEMENTS JOURNAL				
APP	999-100100			03/26/2024	032624		032624				Cash-General				291,500.14
											AP CASH DISBURSEMENTS JOURNAL				
APP	302-200000			03/26/2024	032624		032624				Accounts Payable			5,189.14	
											AP CASH DISBURSEMENTS JOURNAL				
APP	751-200000			03/26/2024	032624		032624				Accounts Payable			26,685.87	
											AP CASH DISBURSEMENTS JOURNAL				
APP	101-200000			03/26/2024	032624		032624				Accounts Payable			24,715.15	
											AP CASH DISBURSEMENTS JOURNAL				
APP	130-200000			03/26/2024	032624		032624				Accounts Payable			523.00	
											AP CASH DISBURSEMENTS JOURNAL				
APP	754-200000			03/26/2024	032624		032624				Accounts Payable			114,984.95	
											AP CASH DISBURSEMENTS JOURNAL				
APP	301-200000			03/26/2024	032624		032624				Accounts Payable			64,615.92	
											AP CASH DISBURSEMENTS JOURNAL				
											GENERAL LEDGER TOTAL			291,500.14	291,500.14
APP	999-207010			03/26/2024	032624		032624				Due to/Due FromInternal Svs			54,786.11	
											Cash-General				54,786.11
APP	701-100100			03/26/2024	032624		032624				Due to/Due FrmRec1 wtr Rep1			5,189.14	
											Cash-General				5,189.14
APP	999-203020			03/26/2024	032624		032624				Due to/Due FromJPA Operations			26,685.87	
											Cash-General				26,685.87
APP	302-100100			03/26/2024	032624		032624				Due to/Due Frm Potable Wtr Ops			24,715.15	
											Cash-General				24,715.15
APP	999-207510			03/26/2024	032624		032624				Due to/Due FrmSanitation Ops			523.00	
											Cash-General				523.00
APP	751-100100			03/26/2024	032624		032624				Due to/Due FromJPA Replacement			114,984.95	
											Cash-General				114,984.95
APP	999-201010			03/26/2024	032624		032624				Due to/Due FrmPotable wtr Rep1			64,615.92	
											Cash-General				64,615.92
APP	101-100100			03/26/2024	032624		032624				Due to/Due FrmPotable wtr Rep1			64,615.92	
											Cash-General				64,615.92
APP	999-201300			03/26/2024	032624		032624				Due to/Due FrmPotable wtr Rep1			64,615.92	
											Cash-General				64,615.92
APP	130-100100			03/26/2024	032624		032624				Due to/Due FromJPA Replacement			114,984.95	
											Cash-General				114,984.95
APP	999-207540			03/26/2024	032624		032624				Due to/Due FromJPA Replacement			114,984.95	
											Cash-General				114,984.95
APP	754-100100			03/26/2024	032624		032624				Due to/Due FromPotable wtr Rep1			64,615.92	
											Cash-General				64,615.92
APP	999-203010			03/26/2024	032624		032624				Due to/Due FromPotable wtr Rep1			64,615.92	
											Cash-General				64,615.92
APP	301-100100			03/26/2024	032624		032624				Due to/Due FromPotable wtr Rep1			64,615.92	
											Cash-General				64,615.92

A/P CASH DISBURSEMENTS JOURNAL

JOURNAL ENTRIES TO BE CREATED

YEAR PER	JNL					ACCOUNT DESC	T	OB	DEBIT	CREDIT
SRC ACCOUNT	EFF DATE	JNL DESC	REF 1	REF 2	REF 3	LINE DESC				
	03/26/2024	032624	032624							
						SYSTEM GENERATED ENTRIES TOTAL			291,500.14	291,500.14
						JOURNAL 2024/09/340 TOTAL			583,000.28	583,000.28

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	2024 9	340	03/26/2024	Cash-General Accounts Payable	24,715.15	24,715.15
FUND TOTAL					24,715.15	24,715.15
130 Sanitation Operations 130-100100 130-200000	2024 9	340	03/26/2024	Cash-General Accounts Payable	523.00	523.00
FUND TOTAL					523.00	523.00
301 Potable wtr Replacement Fund 301-100100 301-200000	2024 9	340	03/26/2024	Cash-General Accounts Payable	64,615.92	64,615.92
FUND TOTAL					64,615.92	64,615.92
302 Recycled Water Replacement 302-100100 302-200000	2024 9	340	03/26/2024	Cash-General Accounts Payable	5,189.14	5,189.14
FUND TOTAL					5,189.14	5,189.14
701 Internal Service Fund 701-100100 701-200000	2024 9	340	03/26/2024	Cash-General Accounts Payable	54,786.11	54,786.11
FUND TOTAL					54,786.11	54,786.11
751 JPA Operations 751-100100 751-200000	2024 9	340	03/26/2024	Cash-General Accounts Payable	26,685.87	26,685.87
FUND TOTAL					26,685.87	26,685.87
754 JPA Replacement 754-100100 754-200000	2024 9	340	03/26/2024	Cash-General Accounts Payable	114,984.95	114,984.95
FUND TOTAL					114,984.95	114,984.95
999 Pooled Cash 999-100100 999-201010 999-201300 999-203010 999-203020 999-207010	2024 9	340	03/26/2024	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 Frm Recl wtr Repl Due to/Due From Internal Svs	24,715.15 523.00 64,615.92 5,189.14 54,786.11	291,500.14

A/P CASH DISBURSEMENTS JOURNAL
 JOURNAL ENTRIES TO BE CREATED

FUND	YEAR PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
ACCOUNT						
999-207510				Due to/Due FromJPA Operations	26,685.87	
999-207540				Due to/Due FromJPA Replacement	114,984.95	
				FUND TOTAL	291,500.14	291,500.14

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 24199 TOTAL:	36.28
NUMBER OF CHECKS	8	***	CASH ACCOUNT TOTAL ***	1,533.23
		COUNT	AMOUNT	
TOTAL MANUAL CHECKS		8	1,533.23	
		***	GRAND TOTAL ***	1,533.23

A/P CASH DISBURSEMENTS JOURNAL

JOURNAL ENTRIES TO BE CREATED

CLERK: 3296jcortez

YEAR	PER	JNL	SRC	ACCOUNT	JNL	DESC	REF 1	REF 2	REF 3	ACCOUNT	DESC	T	OB	DEBIT	CREDIT
			EFF	DATE						LINE	DESC				
2024	9	248													
APP	101-200000		03/19/2024	031924B	031924	Accounts Payable								878.90	
						AP CASH DISBURSEMENTS JOURNAL									
APP	999-100100		03/19/2024	031924B	031924	Cash-General									1,533.23
						AP CASH DISBURSEMENTS JOURNAL									
APP	701-200000		03/19/2024	031924B	031924	Accounts Payable								581.77	
						AP CASH DISBURSEMENTS JOURNAL									
APP	751-200000		03/19/2024	031924B	031924	Accounts Payable								72.56	
						AP CASH DISBURSEMENTS JOURNAL									
						GENERAL LEDGER TOTAL								1,533.23	1,533.23
APP	999-201010		03/19/2024	031924B	031924	Due to/Due Frm Potable Wtr Ops								878.90	
						Cash-General									878.90
APP	101-100100		03/19/2024	031924B	031924	Due to/Due FromInternal Svs								581.77	
						Cash-General									581.77
APP	999-207010		03/19/2024	031924B	031924	Due to/Due FromJPA Operations								72.56	
						Cash-General									72.56
APP	999-207510		03/19/2024	031924B	031924										
APP	751-100100		03/19/2024	031924B	031924										
						SYSTEM GENERATED ENTRIES TOTAL								1,533.23	1,533.23
						JOURNAL 2024/09/248 TOTAL								3,066.46	3,066.46

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	2024 9	248	03/19/2024	Cash-General		878.90
				Accounts Payable	878.90	
				FUND TOTAL	878.90	878.90
701 Internal Service Fund 701-100100 701-200000	2024 9	248	03/19/2024	Cash-General		581.77
				Accounts Payable	581.77	
				FUND TOTAL	581.77	581.77
751 JPA Operations 751-100100 751-200000	2024 9	248	03/19/2024	Cash-General		72.56
				Accounts Payable	72.56	
				FUND TOTAL	72.56	72.56
999 Pooled Cash 999-100100 999-201010 999-207010 999-207510	2024 9	248	03/19/2024	Cash-General		1,533.23
				Due to/Due Frm Potable Wtr Ops	878.90	
				Due to/Due FromInternal Sys	581.77	
				Due to/Due FromJPA Operations	72.56	
				FUND TOTAL	1,533.23	1,533.23

A/P CASH DISBURSEMENTS JOURNAL
JOURNAL ENTRIES TO BE CREATED

FUND	DUE TO	DUE FR
101 Potable Water Operations		878.90
701 Internal Service Fund		581.77
751 JPA Operations		72.56
999 Pooled Cash		
	1,533.23	
	1,533.23	1,533.23
	TOTAL	

** END OF REPORT - Generated by Jessica Cortez **

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
40	03/19/2024	WIRE	3384 METROPOLITAN WATER DISTRICT OF S.	11416	03/08/2024		031924A	1,343,818.60
Invoice: 11416					ANALYSIS MWD BILL - FEBRUARY 2024			
				1,139,821.60	101001	500200	Non-Interruptible	
				40,040.00	101001	501200	Capacity Reservation Charge	
				163,957.00	101001	501000	Readiness To Serve	
							CHECK 40 TOTAL:	1,343,818.60
				NUMBER OF CHECKS	1	*** CASH ACCOUNT TOTAL ***		1,343,818.60
				TOTAL WIRE TRANSFERS		COUNT	AMOUNT	
						1	1,343,818.60	
							*** GRAND TOTAL ***	1,343,818.60

A/P CASH DISBURSEMENTS JOURNAL

JOURNAL ENTRIES TO BE CREATED

CLERK: 3296jcortez

YEAR PER	JNL	ACCOUNT	JNL	DESC	REF 1	REF 2	REF 3	ACCOUNT	DESC	T	OB	DEBIT	CREDIT
SRC	EFF	DATE	DATE					LINE					
2024	9		247										
APP 101-200000	03/19/2024	031924A	031924					Accounts Payable				1,343,818.60	
								AP CASH DISBURSEMENTS JOURNAL					
APP 999-100100	03/19/2024	031924A	031924					Cash-General					1,343,818.60
								AP CASH DISBURSEMENTS JOURNAL					
								GENERAL LEDGER TOTAL				1,343,818.60	1,343,818.60
APP 999-201010	03/19/2024	031924A	031924					Due to/Due Frm Potable Wtr Ops				1,343,818.60	
APP 101-100100	03/19/2024	031924A	031924					Cash-General					1,343,818.60
								SYSTEM GENERATED ENTRIES TOTAL				1,343,818.60	1,343,818.60
								JOURNAL 2024/09/247	TOTAL			2,687,637.20	2,687,637.20

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	2024	9	247	03/19/2024			
	101-100100					Cash-General		1,343,818.60
	101-200000					Accounts Payable	1,343,818.60	
						FUND TOTAL	1,343,818.60	1,343,818.60
999	Pooled Cash	2024	9	247	03/19/2024			
	999-100100					Cash-General		1,343,818.60
	999-201010					Due to/Due Frm Potable Wtr Ops	1,343,818.60	
						FUND TOTAL	1,343,818.60	1,343,818.60

A/P CASH DISBURSEMENTS JOURNAL
JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FR
101	Potable Water Operations		1,343,818.60
999	Pooled Cash	1,343,818.60	
TOTAL		1,343,818.60	1,343,818.60

** END OF REPORT - Generated by Jessica Cortez **



MWD
 METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
 700 North Alameda Street
 Los Angeles, CA, 90012-2944

INVOICE

Billed To:

Las Virgenes Municipal Water District



Service Address

4232 Las Virgenes Road
 Calabasas, CA 91302

February 2024	Page No. 1 of 1
Mailed: 03/08/2024	Due Date: 04/30/2024
Invoice Number: 11416	Revision: 0

NOTICE

The MWD Administrative Code Section 4507 and 4508 require that payment must be made in "Good Funds" by the due date or the payment will be considered delinquent and an additional charge shall be assessed.

DELIVERIES	Volume (AF)
Total Water Treated Delivered	643.1
Total Water Untreated Delivered	

SALES	Type	Volume (AF)	Rate (\$ /AF)	Total (\$)
Full Service	Tier 1 Supply Rate	753.5	\$332.00	\$250,162.00
	System Access Rate	753.5	\$389.00	\$293,111.50
	System Power Rate	753.5	\$182.00	\$137,137.00
	Treatment Surcharge	753.5	\$353.00	\$265,985.50
	SUBTOTAL			\$946,396.00

MISCELLANEOUS SALES	Volume (AF)	Amount
Cyclic Storage Delivery	546.4	\$193,425.60
		\$193,425.60

OTHER CHARGES AND CREDITS	Rate (\$ /AF)	Amount
Capacity Charge(Payment Schedule: M)		\$40,040.00
Readiness To Serve Charge(Payment Schedule: M)		\$163,957.00
	SUBTOTAL	\$203,997.00

ADDITIONAL INFORMATION	Volume (AF)	Tier1 %	Peak Day	Flow (CFS)
Capacity Charge			8/5/2021	42.9
Purchase Order Firm Delivery To Date (Jan 2015 to Dec 2024)	167,146.1			
Tier 1 Annual Limit (For Current Calendar Year)	24,359.0			
Tier 1 YTD Deliveries (For Current Calendar Year)	1,355.1	5.6		
Tier 1 Current Month Deliveries	753.5			
Purchase Order Commitment (Jan 2015 to Dec 2024)	146,151.0			

INVOICE TOTAL	Volume AF	Amount Now Due
	753.5	\$1,343,818.60

Note: Amount Due is based on highlighted fields



MWD

METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

700 North Alameda Street

Los Angeles, CA, 90012-2944

INVOICE DETAIL

NOTICE

The MWD Administrative Code Section 4507 and 4508 require that payment must be made in "Good Funds" by the due date or the payment will be considered delinquent and an additional charge shall be assessed.

IN ACCORDANCE WITH READINGS AND BILLING DATA LISTED BELOW

Agency Name	Invoice No.	Rev.	Bill Period	Page No.	Mailed On	Due On
Las Virgenes Municipal Water District	11416	0	February 2024	1 of 2	03-08-24	04-30-24

Meter No LV-01

Treated Domestic	Constant	Previous Reading	Current Reading	Volume (Cu. Ft.)	Rate Desc.
Chatsworth St. and Andora Ave.	100	23242450	23300638	5818800	Unbundled

--- DELIVERIES ---

	Rate Per AF	Volume AF	Amount
Tier 1 Supply Rate	332.00	133.6	44,355.20
System Access Rate	389.00	133.6	51,970.40
System Power Rate	182.00	133.6	24,315.20
Treatment Surcharge	353.00	133.6	47,160.80
Delivery Subtotal		133.6	167,801.60
LV-01 Total		133.6	167,801.60

Meter No LV-02

Treated Domestic	Constant	Previous Reading	Current Reading	Volume (Cu. Ft.)	Rate Desc.
Terminus of Calabasas Feeder	1,000	23634215	23655475	21260000	Unbundled

--- DELIVERIES ---

	Rate Per AF	Volume AF	Amount
Tier 1 Supply Rate	332.00	488.1	162,049.20
System Access Rate	389.00	488.1	189,870.90
System Power Rate	182.00	488.1	88,834.20
Treatment Surcharge	353.00	488.1	172,299.30
Delivery Subtotal		488.1	613,053.60

--- ADJUSTMENT ---

	Rate Per AF	Volume AF	Amount
Dec 2023 adj basic to cyc voided	1,209.00	546.4	660,597.60
Dec 2023 adj basic to ccop	1,209.00	-546.4	-660,597.60
Dec 2023 adj treatment surcharge (Las Virgenes)	354.00		193,425.60
Adjustment Subtotal		0.0	193,425.60
LV-02 Total		488.1	806,479.20

Meter No LV-03

Treated Domestic	Constant	Previous Reading	Current Reading	Volume (Cu. Ft.)	Rate Desc.
Chatsworth Park	10	95807543	95900844	933010	Unbundled

--- DELIVERIES ---

	Rate Per AF	Volume AF	Amount
Tier 1 Supply Rate	332.00	21.4	7,104.80
System Access Rate	389.00	21.4	8,324.60
System Power Rate	182.00	21.4	3,894.80
Treatment Surcharge	353.00	21.4	7,554.20
Delivery Subtotal		21.4	26,878.40

Agency Name	Invoice No.	Rev.	Bill Period	Page No.	Mailed On	Due On
Las Virgenes Municipal Water District	11416	0	February 2024	2 of 2	03-08-24	04-30-24

LV-03 Total	21.4	26,878.40
-------------	------	-----------

Meter No LV-KT

Treated Domestic	Constant	Previous Reading	Current Reading	Volume (Cu. Ft.)	Rate Desc.
Kittridge St and Lemay St	N/A	0	0	0	Unbundled

--- ADJUSTMENT ---

	Rate Per AF	Volume AF	Amount
Jan 2024 adj la to las virgenes transfer (shutdown)	1,256.00	110.4	138,662.40
Adjustment Subtotal		110.4	138,662.40
LV-KT Total		110.4	138,662.40

--- OTHER CHARGES AND CREDITS ---

	Amount
Capacity Charge for current calendar year	40,040.00
Readiness to Serve Charge for current fiscal year	163,957.00

VOLUME TOTAL	INVOICE TOTAL
753.5	\$1,343,818.60

This invoice was printed on 3/8/2024 at 2:15:47PM



THE METROPOLITAN WATER DISTRICT
of SOUTHERN CALIFORNIA
700 North Alameda Street
Los Angeles, CA 90012-2944
<http://www.mwdh2o.com/>

**SUMMARY OF PROGRAM DEMANDS BY WATER DESCRIPTION IN ACRE FEET
BASED ON HISTORICAL WATER DELIVERIES
INVOICE COVER SHEET
For the Fiscal Year 2023 - 2024**

LV - Las Virgenes Municipal Water District

DELIVERIES													
MWD Water	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Year Bal
Program: BASIC													
TREATED FULL SERVICE													
Subtotal	1,846.2	1,597.4	1,338.2	1,417.4	1,414.5	1,001.6	601.6	643.1	0.0	0.0	0.0	0.0	9,860.0
TREATED FULL SERVICE AGENCY TRANSFER													
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	110.4	0.0	0.0	0.0	0.0	0.0	110.4
TREATED INTERRUPTIBLE (HISTORICAL)													
Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BASIC Total	1,846.2	1,597.4	1,338.2	1,417.4	1,414.5	1,001.6	712.0	643.1	0.0	0.0	0.0	0.0	9,970.4
MWD Water Total	1,846.2	1,597.4	1,338.2	1,417.4	1,414.5	1,001.6	712.0	643.1	0.0	0.0	0.0	0.0	9,970.4

STORAGE - CYC															
Program: CYC Version: CC03 Impl_Code: 001															
	Begin Bal	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Year Bal	End Bal
Deliveries	0.0	0.0	0.0	0.0	0.0	0.0	546.4	0.0	0.0	0.0	0.0	0.0	0.0	546.4	546.4
Sales	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Adj/Losses	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	0.0	0.0	0.0	0.0	0.0	0.0	546.4	0.0	0.0	0.0	0.0	0.0	0.0	546.4	546.4

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
52	03/26/2024	WIRE	21537 IOSIGHT, LTD. Invoice: 3531	3531	03/07/2024		032624A	29,000.00
				29,000.00	751810	541500	2024 ANNUAL LICENSE FEE & IMPLEMENTATION TAPIA Outside Services	
							CHECK 52 TOTAL:	29,000.00
				NUMBER OF CHECKS	1		*** CASH ACCOUNT TOTAL ***	29,000.00
				TOTAL WIRE TRANSFERS		COUNT	AMOUNT	
						1	29,000.00	
							*** GRAND TOTAL ***	29,000.00

A/P CASH DISBURSEMENTS JOURNAL

JOURNAL ENTRIES TO BE CREATED

CLERK: 3296jcortez

YEAR	PER	JNL	SRC	ACCOUNT	JNL	DESC	REF 1	REF 2	REF 3	ACCOUNT	DESC	T	OB	DEBIT	CREDIT
			EFF	DATE						LINE	DESC				
2024	9	339													
APP	751-200000		03/26/2024	032624A	032624					Accounts Payable				29,000.00	
										AP CASH DISBURSEMENTS JOURNAL					
APP	999-100100		03/26/2024	032624A	032624					Cash-General					29,000.00
										AP CASH DISBURSEMENTS JOURNAL					
										GENERAL LEDGER TOTAL				29,000.00	29,000.00
APP	999-207510		03/26/2024	032624A	032624					Due to/Due FromJPA Operations				29,000.00	
APP	751-100100		03/26/2024	032624A	032624					Cash-General					29,000.00
										SYSTEM GENERATED ENTRIES TOTAL				29,000.00	29,000.00
										JOURNAL 2024/09/339			TOTAL	58,000.00	58,000.00

A/P CASH DISBURSEMENTS JOURNAL

JOURNAL ENTRIES TO BE CREATED

FUND	ACCOUNT	YEAR	PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
751	JPA Operations	2024	9	339	03/26/2024			
	751-100100					Cash-General		29,000.00
	751-200000					Accounts Payable	29,000.00	
						FUND TOTAL	29,000.00	29,000.00
999	Pooled Cash	2024	9	339	03/26/2024			
	999-100100					Cash-General		29,000.00
	999-207510					Due to/Due From JPA Operations	29,000.00	
						FUND TOTAL	29,000.00	29,000.00

A/P CASH DISBURSEMENTS JOURNAL
JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FR
751	JPA Operations		29,000.00
999	Pooled Cash	29,000.00	
TOTAL		29,000.00	29,000.00

** END OF REPORT - Generated by Jessica Cortez **



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

MINUTES
REGULAR MEETING

9:00 AM

March 19, 2024

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance to the Flag was led by Eric Schlageter.

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. Susan Brown, Administrative Assistant, 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, Director of Engineering and External Affairs
Don Patterson, Director of Finance and Administration
Darrell Johnson, Interim Director of Facilities and Operations
Susan Brown, Administrative Assistant
Keith Lemieux, District Counsel

2. APPROVAL OF AGENDA

General Manager David Pedersen asked that Item 7A be removed from the agenda and be brought back to a future agenda.

Director Polan moved to approve the agenda as amended with the removal of Item 7A.

Motion seconded by Director Caspary. 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.

Darrell Johnson, Interim Director of Facilities and Operations, introduced new employee Victor Serrano, Facilities Maintenance Worker. The Board welcomed Mr. Serrano to the District.

Joe McDermott, Director of Engineering and External Affairs, introduced new employee Andrew Cerosky, Customer Service Representative. The Board welcomed Mr. Cerosky to the District.

4. CONSENT CALENDAR

A List of Demands: March 19, 2024: Receive and file

B Minutes Regular Meeting of March 5, 2024: Approve

C Directors' Per Diem: February 2024: Ratify

D Annual Supply and Delivery of Polymer: Award

Accept the bid from Solenis, LLC, and authorize the General Manager to issue a one-year purchase order, in the amount of \$215,824.50, with four one-year renewal options using a mutually agreeable inflationary factor for the supply and delivery of polymer.

E 2023 Las Virgenes Reservoir (Westlake) Dam Settlement Report

Receive and file the 2023 Las Virgenes Reservoir (Westlake) Dam Settlement Report.

F Water Main Breaks at 5745 Parkmor Road and Valley Circle Boulevard near Dorie Drive: 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 and a 30-inch water main break along Valley Circle Boulevard near Dorie Drive in West Hills.

Director Coradeschi moved to approve the Consent Calendar. Motion seconded by

Director Caspary.

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 Presentation on the Delta Conveyance Project

General Manager David Pedersen introduced Graham Bradner, Executive Director of the Delta Conveyance and Construction Authority, Carrie Buckman, Environmental Program Manager for the California Department of Water Resources, and Nina Hawk, Chief of Bay Delta Resources for the Metropolitan Water District of Southern California.

Ms. Buckman provided a PowerPoint presentation regarding the Delta Conveyance Project, including dependence on water that flows from the Delta, adapting to “weather whiplash” and how the Delta Conveyance Project could help, effects of water management, project operations, declining baseline in the State Water Project supplies, and missed opportunities in capturing water during high rain events.

Mr. Bradner continued the PowerPoint presentation, including a description of the Delta Conveyance Project, project advantages, seismic resiliency, cost estimate updates, and project design development.

Ms. Buckman continued the PowerPoint presentation, including project operations, community engagement, creation and components of a Community Benefits Program, California Environmental Quality Act (CEQA) process and status, alternatives to a tunnel, project financing, validation case and decision, future steps, and 2024 project milestones.

Mr. Buckman and Ms. Bradner responded to several questions posed by the Board.

Glen Peterson, MWD Representative, commended Mr. Bradner and Ms. Buckman regarding their detailed presentation, and suggested that they provide the presentation to the other MWD member agencies.

B MWD Representative Report

Glen Peterson, MWD Representative, reported that the MWD Board held a hearing regarding the proposed water rates and charges for Calendar Years 2025 and 2026; approved an amendment to the Capital Investment Plan for Fiscal Years 2022-23 and 2023-24 to include the Sepulveda Feeder Pump Stations Stage 2 Project; created the Ethics, Organizations, and Personnel Subcommittee on 360 Evaluations Review of Direct Reports; appointed Director Jeff Armstrong as Chair of the Subcommittee on Audits;

elected Directors Jeff Armstrong, Juan Garza, and David DeJesus as nonofficer members of the Executive Committee; awarded a contract for nearly \$2 million for procurement of butterfly valves to be installed at the Foothill Pump Station as part of water supply reliability improvements to the Rialto Pipeline service area; approved several amendments to the MWD Administrative Code; and authorized a lease agreement with Lemhi Land and Cattle to grow rice in one of MWD's Delta islands. He responded to questions regarding the surcharge for MWD treated and untreated water.

C Legislative and Regulatory Updates

Jeremy Wolf, Legislative Program Manager, provided a summary of the preliminary results from the March 5, 2024 Primary Election. He stated that the Taxpayer Protection in Government Accountability Act would be included on the November 5, 2024 ballot, which would expand the definition of what constitutes a tax, raise the voter approval threshold for local taxes, and limit certain fees to the least amount necessary to provide services. He noted that the California Association of Sanitation Agencies (CASA), the Association of California Water Agencies (ACWA), the California Special Districts Association (CSDA), over 200 California cities, and labor organizations oppose this ballot measure. He reported that the State Water Resources Control Board's (SWRCB) revised *Making Conservation a California Way of Life* regulations would provide water providers an extra five years to reduce outdoor irrigation. He noted that a public hearing would be held on March 20th regarding the proposed regulations. He stated that a letter of support was sent regarding SB 1169 (Stern) Los Angeles County Flood Control District (LACFCD) Finances, which would eliminate the LACFCD's outdated \$4.5 million debt limit. He also stated that the District joined a coalition regarding SB 1218 (Newman) Emergency Water Supplies, which would change the Water Code to encourage and incentivize the development of emergency water supplies, and also joined a coalition for SB 903 (Skinner) Environmental Health, Product Safety, Perfluoroalkyl and Polyfluoroalkyl Substances (PFAS), which would prohibit the distribution, selling, or offering the sale of products that intentionally added PFAS unless the Department of Toxic Substances has made the determination that the use of PFAS in the product is currently unavoidable.

A discussion ensued regarding the Taxpayer Protection in Government Accountability Act, which would require proposed rate increases to be approved by two-thirds vote, and the impacts to the District by changing the reasonable cost to provide a service to the actual cost to provide a service. There was also discussion that this initiative would threaten the District's pay-go strategy and would supersede provisions of Proposition 218. The Board asked that staff bring back an item to consider sending a letter in opposition to this ballot measure in conjunction with CASA, ACWA, CSDA, and the four local cities.

Craig Jones, Resource Conservation Manager, stated that the SWRCB's comment period regarding the revised *Making Conservation a California Way of Life* regulations would end on March 27th. He provided a summary of the proposed revisions, which include time extension for some of the outdoor water use standards, extension of the allowance of the 20 percent irrigable not-irrigated area for suppliers that are unable to meet their overall water use objective, and delay of enforcement for compliance deadlines until 2027. He noted that the SWRCB's proposed regulations included revised text related to

performance measures for commercial, industrial, and institutional (CII) water use to allow flexibility to the timeline. He stated that staff would monitor SB 1330 (Archuleta) Urban Retail Water Supplier Water Use, and AB 3121 (Hart) Urban Retail Water Suppliers Written Notice Conservation Order Dates.

6. **TREASURER**

Director Coradeschi stated that he reviewed the expenditures.

7. **FACILITIES AND OPERATIONS**

A Purchase of Chemical Dosing Trailer: Authorization (This item was removed from the agenda.)

8. **FINANCE AND ADMINISTRATION**

Items 8A and 8B were presented concurrently.

A Workers Compensation Insurance: Award

Accept the proposal from The Zenith, A Fairfax Company, and authorize the General Manager to execute a one-year agreement, in the amount to \$205,589, with four one-year renewal options for workers compensation insurance provided through the California Association of Mutual Water Companies Joint Powers Risk and Insurance Management Authority.

B Annual Property and Liability Insurance: Renewal

Accept the proposal from Assured Partners, in the aggregate amount of \$3,018,556, and authorize the General Manager to execute the necessary contracts and forms to purchase property and liability insurance for the term of April 1, 2024, through March 31, 2025.

Don Patterson, Director of Finance and Administration, presented Item 8A.

Jeff Dodds, representing Assured Partners of California, responded to a question regarding the 27 percent cost savings in the first year's cost for workers compensation insurance and the guaranteed premium program.

Mr. Patterson presented Item 8B.

Mr. Dodds provided comments regarding the general insurance marketplace.

Paul Fuller, Chief Executive Officer of Allied Public Risk Joint Powers Risk and Insurance Management Authority (JPRIMA), provided comments regarding industry specific market issues and the proposed reduction in wildfire coverage of \$10 million with a \$100,000 deductible.

Director Caspary moved to approve Items 8A and 8B. Motion seconded by Director Polan.

A discussion ensued regarding insurance carriers' concerns with statewide litigation costs.

Motion carried 5-0 by the following vote:

AYES: Burns, Caspary, Coradeschi, Lewitt, Polan

NOES: None

ABSTAIN: None

ABSENT: None

9. NON-ACTION ITEMS

A Organization Reports

Director Caspary stated that Director Coradeschi would attend as his Alternate to the ACWA State Legislative Committee Meeting on March 22nd.

B Director's Reports on Outside Meetings

Director Polan reported that he attended the WateReuse Symposium in Denver, Colorado, held March 10th through 13th. He provided a summary of the sessions he attended during the conference.

Director Coradeschi reported that he also attended the WateReuse Symposium, and he provided a summary of the sessions he attended during the conference.

Board President Lewitt reported that he also attended the WateReuse Symposium, and he provided a summary of the sessions he attended during the conference. He also noted that the District's Pure Ale was distributed during the conference.

C General Manager Reports

(1) General Business

General Manager David Pedersen noted that a chart was distributed to the Board illustrating MWD's increase to the water treatment surcharge, and stated that the District would work with other MWD member agencies to provide comments. He noted that last year the JPA Board approved the purchase of two replacement agitators for the Rancho Las Virgenes Composting Facility (Rancho), and the equipment had arrived. He reminded the Board that the April 1st JPA Board Meeting was canceled, and a special JPA Board Meeting would be held on April 8th at Triunfo Water & Sanitation District.

Director Caspary asked that staff provide photographs of the old agitators and the replacement agitators.

(2) Follow-Up Items

None.

D Directors' Comments

Director Coradeschi noted that he had viewed the new agitators at Rancho.

10. FUTURE AGENDA ITEMS

None.

11. PUBLIC COMMENTS

None.

12. CLOSED SESSION

A Conference with District Counsel – Anticipated Litigation (Government Code Section 54956.9(d)(2): One item

Tort claim by Iosif Mermelshtayn

B Conference with Legal Counsel – Existing Litigation (Government Code Section 54956.9)

Pacific Bell v. Las Virgenes Municipal Water District

The Board recessed to Closed Session at **11:57 a.m.** and reconvened to Open Session at **12:12 p.m.**

Keith Lemieux, District Counsel, reported that the Board met in Closed Session to receive reports on Items 12A and 12B, and there was no reportable action.

13. OPEN SESSION AND ADJOURNMENT

Seeing no further business to come before the Board, the meeting was duly adjourned at **12:12 p.m.**

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

ATTEST:

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

(SEAL)



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

MINUTES
REGULAR MEETING

9:00 AM

April 2, 2024

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance to the Flag was led by Len Polan.

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, CA 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, Director of Engineering and External Affairs
Ivo Nkwenji, Information Systems Manager
Eric Schlageter, Interim Director of Facilities and Operations
Josie Guzman, Clerk of the Board
Keith Lemieux, District Counsel

2. APPROVAL OF AGENDA

Director Caspary 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

None.

4. CONSENT CALENDAR

A List of Demands: April 2, 2024: Receive and file

B Monthly Cash and Investment Report: February 2024

Receive and file the Monthly Cash and Investment Report for February 2024.

C Water Main Breaks at 5745 Parkmor Road and Valley Circle Boulevard near Dorie Drive: 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 and a 30-inch water main break along Valley Circle Boulevard near Dorie Drive in West Hills.

Director Polan moved to approve the Consent Calendar. Motion seconded by Director Caspary. 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 Water Supply Conditions Update

Joe McDermott, Director of Engineering and External Affairs, presented the report. He noted that the Department of Water Resources increased the State Water Project allocation from 15 percent to 30 percent. He reviewed the current 8-station index, which was at 100 percent of normal.

General Manager David Pedersen responded to questions regarding reservoir levels at the San Luis Reservoir, and the inability to pump and transfer water from the Delta due to turbidity and the presence of Steelhead Trout.

6. TREASURER

Director Coradeschi stated that he reviewed the expenditures.

General Manager David Pedersen responded to questions regarding the payment for Direct TV and the purchase of Keurig coffee machines by stating that Direct TV was used during emergencies to monitor the news, and the purchase of Keurig coffee machines was the result from an idea submitted to the Employee Idea Program.

7. BOARD OF DIRECTORS

A Local Agency Formation Commission: Election of Special District Representative

Select a candidate to serve as the Local Agency Formation Commission Special District Representative, and authorize the General Manager to execute and return the official voting ballot no later than 5:00 p.m. on Friday, April 26, 2024.

General Manager David Pedersen, presented the report.

Director Caspary moved to select Gary Burns as a candidate to serve as the Local Agency Formation Commission Special District Representative and approve Item 7A. 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

8. ENGINEERING AND EXTERNAL AFFAIRS

A Potable Water Main Relocation at Lindero Canyon Road and Agoura Road Project: Design Award

Accept the proposal from DRP Engineering, Inc., and authorize the General Manager to execute a professional services agreement, in the amount of \$277,774, for the environmental investigation, design, bidding, and engineering report during construction for the Potable Water Main Relocation at Lindero Canyon Road and Agoura Road Project; and re-appropriate funding, in the amount of \$277,774, from CIP Job No. 10736 – Emergency Pipeline Construction Repair and Replacement to CIP Job No. 10819 – Potable Water Main Relocation at Lindero Canyon Rod and Agoura Road Project.

Alex Leu, Senior Engineer, presented the report.

Director Coradeschi moved to approve Item 8A. Motion seconded by Director Caspary.

A discussion ensued regarding the intent of the study to investigate the best course of action to replace or protect the piping, and to determine the responsible party for the

damage caused to the pipelines.

Motion carried 5-0 by the following vote:

AYES: Burns, Caspary, Coradeschi, Lewitt, Polan

NOES: None

ABSTAIN: None

ABSENT: None

B Stationary Emergency Generators for Critical Potable Water Pump Stations Project: Final Acceptance

Authorize the General Manager to execute a Notice of Completion and have the same recorded; waive liquidated damages; and in the absence of claims from subcontractors or others, release the retention, in the amount of \$101,179.34, within 30 calendar days after filing the Notice of Completion for the Stationary Emergency Generators for Critical Potable Water Pump Stations Project.

Alex Leu, Senior Engineer, presented the report.

Director Burns moved to approve Item 8B. Motion seconded by Director Caspary.

A discussion ensued regarding the operation, security, and allowable run time for the emergency generators.

Motion carried 5-0 by the following vote:

AYES: Burns, Caspary, Coradeschi, Lewitt, Polan

NOES: None

ABSTAIN: None

ABSENT: None

9. NON-ACTION ITEMS

A Organization Reports

Director Coradeschi reported that he attended the Association of California Water Agencies (ACWA) State Legislative Committee Meeting on March 22nd, where they discussed per- and polyfluoroalkyl substances (PFAS) legislation, AB 2735 – Joint Powers Agreements Public Utilities, AB 2079 – Groundwater Extraction Large Diameter High Capacity Wells Permits, and AB 1594 - Medium- and Heavy-duty Zero-emission Vehicles Public Agency Utilities.

B Director's Reports on Outside Meetings

Director Polan reported that he attended the Association of Ventura County Water Agencies (AWAVC) WaterWise Program on March 21st, where a presentation was

provided regarding the Delta Conveyance Project.

Director Coradeschi reported that he also attended the AWAVC WaterWise Program on March 21st.

Board President Lewitt reported that he also attended the AWAVC WaterWise Program on March 21st, and noted that he spoke with Graham Bradner, Executive Director of the Delta Conveyance Design and Construction Authority (DCA) regarding any discussions with state elected officials the Delta Conveyance, Project. He noted that Mr. Bradner indicated that not much discussion had occurred.

Director Coradeschi stated that he spoke with Syrus Devers, the District's state lobbyist, regarding the concept of the Delta Conveyance Project.

Board President Lewitt stated that Jeremy Wolf, Legislative Program Manager, would ask Mr. Devers to include the Delta Conveyance Project in the talking points for the upcoming ACWA Legislative Symposium.

Director Caspary suggested that the District also reach out to other State Water Project-dependent area agencies.

C General Manager Reports

(1) General Business

General Manager David Pedersen stated that staff would hold a meeting with Syrus Devers to discuss talking points for the ACWA Legislative Symposium scheduled on April 10th, including the Delta Conveyance Project. He noted that Kristine McCaffrey, General Manager of Calleguas Municipal Water District (Calleguas), indicated that Calleguas was in support of the project. He also noted that ACWA was in support of a comprehensive fix in the Delta, but had not endorsed the Delta Conveyance Project. He also reported that the District would participate at the Great Race of City of Agoura Hills on April 13th, and provide information on the Pure Water Project Las Virgenes-Triunfo. He also noted that the District would participate in Earth Day events at Pepperdine University on April 9th, City of Calabasas on April 13th, and City of Westlake Village on April 20th. He also reported that staff was coordinating meetings with medical associations to support and endorse potable reuse. He noted that Board President Lewitt referred staff to Brian Barry, Executive Director of the Ventura County Medical Association, who was provided a tour of District facilities. He stated that staff anticipated that the Ventura County Medical Association was likely to support and endorse the Pure Water Project Las Virgenes-Triunfo. He also stated that staff was working on reaching out to the Los Angeles County Medical Association. He also reported that staff was scheduling presentations to the local City Councils regarding updates on water supply conditions, Pure Water Project Las Virgenes-Triunfo, and conservation rebates. He asked the Board to provide opening remarks at the City Council presentations. He also reported that staff met with Directors Coradeschi and Polan to discuss the Pure Water Project Las Virgenes-Triunfo and architectural elements for the Advanced Water Purification Facility. He noted that this topic would be included on the April 8th JPA agenda. He provided an update on the

Malibou Lake Siphon Replacement Project, and noted that the contractor had mobilized at the construction site. He also provided an update regarding the rehabilitation of Lift Station No. 1, and noted that wastewater was diverted to the City of Los Angeles to allow the inspection of the wet well. He also reported that Tapia Water Reclamation Facility received 2.38 inches of rain on March 30th, influent measured 19 million gallons per day (MGD), average flow was 11.7 MGD, and Malibu Creek reached 1,138 cubic feet per second (CSF). He noted that staff from the Delta Conveyance Project were interested in hosting a tour of the project location, as well as the Bethany Reservoir and alignment. He asked the Board to inform staff if they were interested in attending.

The Board expressed an interest in a tour of the Delta Conveyance Project location, and suggested extending an invitation to other agencies.

General Manager David Pedersen also reported that the Triunfo Water & Sanitation District (TWSD) Board appointed Carl Jarecky as the new TWSD Director. He stated that he would send a welcome letter to Director Jarecky, and invite him on a tour of District facilities.

Eric Schlageter, Interim Director of Facilities and Operations, responded to questions regarding construction activities for the Malibou Lake Siphon Replacement Project.

(2) Follow-Up Items

General Manager David Pedersen stated that staff would work more diligently to capture Board follow-up items.

D Directors' Comments

Director Coradeschi noted that Dave Eggerton, Executive Director of ACWA, was interested in visiting the District.

Board President Lewitt noted that Mr. Eggerton also expressed an interest in learning about the District's international partners.

10. FUTURE AGENDA ITEMS

None.

11. PUBLIC COMMENTS

None.

12. ADJOURNMENT

Seeing no further business to come before the Board, the meeting was duly adjourned at **9:59 a.m.**

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

ATTEST:


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

(SEAL)

April 1, 2024

To: Payroll

From: David W. Pedersen
General Manager

DocuSigned by:

 12C6BE2E4EC44E2...

RE: Per Diem Request – March 2024

Attached are the Director statements of attendance for meetings, conferences, and miscellaneous functions, which are summarized in the table below. If you have any questions, please contact me. Thank you.

On January 16, 2024, the Board adopted Ordinance No. 286, amending the per diem rate to \$245.

	<u>Director</u>	<u>No. of Meetings</u>	<u>Rate</u>	<u>Total</u>
22040	Gary Burns	7	\$245.00	\$1,715.00
8014	Charles Caspary	4	\$245.00	\$980.00
22039	Andy Coradeschi	10	\$245.00	\$2,450.00
19447	Jay Lewitt	9	\$245.00	\$2,205.00
18856	Leonard Polan	9	\$245.00	\$2,205.00

*LVMWD Code Section 2-2.106(a): “not exceeding a total of ten (10) days in any calendar month”

**LVMWD Code Section 2-2.106(b): MWD director “not exceeding a total of ten (10) additional days in any calendar month.”

LAS VIRGENES MUNICIPAL WATER DISTRICT - PER DIEM REPORT



To: Josie Guzman, Clerk of the Board Director's Name: Charles Caspary

Month of: Mar-24 Division: 1

The following are Las Virgenes Municipal Water District Board of Directors Meetings, Committee Meetings/Conferences I have attended:

Date(s)	# of Days Claimed			Reimbursible Expenses ² (Y/N)	Check One		Event Title
	Event	Travel ¹	Total		MWD	LVMWD	
3/1/2023	1		1	N		X	ACWA STATE LEGISLATIVE COMMITTEE - VIRTUAL
3/4/2024	1		1	N		X	LV-TWSD JPA BOARD MEETING
3/5/2024	1		1	N		X	LVMWD REGULAR BOARD MEETING
3/19/2024	1		1	N		X	LVMWD REGULAR BOARD MEETING
TOTAL			4				

Date Submitted: 27-Mar-24

Director Signature: Charles Caspary via email

NOTES: 1. Travel the day before and/or after an authorized meeting or seminar outside of LA, Ventura and Orange Counties may be paid in accordance with Board Policy. 2. Attach completed Statement of Account and Claim for Personally Incurred Expenses form.

LAS VIRGENES MUNICIPAL WATER DISTRICT - PER DIEM REPORT



To: Josie Guzman, Clerk of the Board

Director's Name: Leonard Polan

Month of: Mar-24

Division: #4

The following are Las Virgenes Municipal Water District Board of Directors Meetings, Committee Meetings/Conferences I have attended:

Date(s)	# of Days Claimed			Reimbursible Expenses ² (Y/N)	Check One		Event Title
	Event	Travel ¹	Total		MWD	LVMWD	
3/4/24	1	----	1	N	----	Y	JPA Bd Mtg
3/5/24	1	----	1	N	----	Y	LVMWD Bd Mtg
3/7/24	0	----	0	N	----	Y	Flames to the Ocean Movie
3/10/24	1	Y	1	Y	----	Y	WaterReuse Conference Denver
3/11/24	1	----	1	Y	----	Y	WaterReuse Conference Denver
3/12/24	1	----	1	Y	----	Y	WaterReuse Conference Denver
3/13/24	1	Y	1	Y	----	Y	WaterReuse Conference Denver
3/19/24	1	----	1	Y	----	Y	LVMWD Bd Mtg
3/21/24	1	----	1	Y	----	Y	VCAWA Meeting
3/26/24	1	----	1	N	----	Y	MWD Budget Workshop
TOTAL			9				

Date Submitted: 3/30/24

Director Signature: Leonard E. Polan By Email

NOTES: 1. Travel the day before and/or after an authorized meeting or seminar outside of LA, Ventura and Orange Counties may be paid in accordance with Board Policy. 2. Attach completed Statement of Account and Claim for Personally Incurred Expenses form.

Glen Peterson, Director

Metropolitan Water District of Southern California

2936 Triunfo Canyon Rd

Agoura, CA. 91301

email: glenpsop@icloud.com

INVOICE

DATE: 04/01/24
INVOICE # 64
FOR: Director fees

Bill To:

Las Virgenes Municipal Water District

4232 Las Virgenes Rd

Calabasas, CA. 91302

attn: Josie Guzman, Clerk of the Board

818-251-2100

Date	Description	fee
3/4/2024	Bay Delta Committee	\$245.00
3/7/2024	Northern Caucus	\$245.00
3/11/2024	Committee Meetings	\$245.00
3/12/2024	Board and Committee Meetings	\$245.00
3/18/2024	Camp4W Task force meeting	\$245.00
3/19/2024	Report to LV Board via zoom	\$245.00
3/22/2024	Bay Delta sub committee meeting	\$245.00
3/25/2024	Meeting with Delta Counties and Bay Delta subcommittee	\$245.00
3/26/2024	Committee Meetings and Special Board Meeting	\$245.00
3/27/2024	Camp4W Task force meeting	\$245.00
	TOTAL	\$2,450.00

Make Check payable to Glen Peterson

Thank you for the opportunity to serve



DATE: April 16, 2024
TO: Board of Directors
FROM: Finance and Administration

SUBJECT: Statement of Revenues, Expenses and Changes in Net Position: February 2024

SUMMARY:

This report provides a year-to-date summary of unaudited Fiscal Year 2023-24 financial results for the District through February 29, 2024.

Through the first eight months of Fiscal Year 2023-24, the District generated operating revenues of \$45.9 million, 7.8 percent above prior year operating revenues of \$42.6 million. Year-to-date operating expenses were \$37.1 million for the current fiscal year, 9.2 percent above prior year expenses of \$34.0 million.

The District generated net operating income available for capital projects of \$8.7 million year-to-date through February of Fiscal Year 2023-24, above the prior year's net income of \$8.5 million, and on pace to surpass the annual budgeted net operating income of \$9.2 million for the fiscal year. The District depends on the net operating income to fund capital projects and meet policy-required reserves.

RECOMMENDATION(S):

Receive and file the Statement of Revenues, Expenses and Changes in Net Position for the period ending on February 29, 2024.

FINANCIAL IMPACT:

There is no financial impact associated with the report.

DISCUSSION:

Districtwide operating revenues year-to-date through February 2024 were \$45.9 million, \$3.3 million (or 7.8 percent) above the prior year's revenues of \$42.6 million. The operating revenues encompassed 62.3 percent of the annual budgeted revenues, below expectations through 67 percent of the fiscal year. The increase in revenues, as compared to the prior year, was due to increases in potable water sales of \$4.8 million (or 23.8 percent) and

sanitation charges of \$0.9 million (or 5.9 percent), partly offset by a decrease in "other income" of \$2.5 million. Year-to-date recycled water sales remained consistent year-over-year at \$3.4 million in the current fiscal year versus \$3.3 million in the prior fiscal year through February.

Potable water sales were \$25.1 million year-to-date through February of Fiscal Year 2023-24, versus \$20.3 million during the same period of the prior year, an increase of \$4.8 million. \$3.4 million of the favorable result was due to sales resulting from increased residential customer "efficient outdoor" water use versus the prior year. Overall, potable water use by customers through the first eight months of the fiscal year increased 13.7% percent year-over-year (9,924 acre-feet for the current fiscal year versus 8,729 acre-feet during the prior fiscal year). The increase was expected and due to the District being in Stage 3 of its Water Shortage Contingency Plan during the first seven months of the prior fiscal year, resulting in customer outdoor water budgets being reduced by 50 percent. The District has since transitioned back to Stage 2 of its Water Shortage Contingency Plan, which allows for increased customer outdoor water use. Additionally, per the District's adopted five-year rate study, potable water rates increased 5.0 percent in Fiscal Year 2023-24 versus the prior year, resulting in higher revenues year-over-year through February 2024.

Sanitation service fees of \$15.9 million through February 2024 of Fiscal Year 2023-24 were up \$0.9 million (or 5.9 percent), as compared to prior year revenues of \$15.0 million. Year-to-date revenues through February encompassed 69.4 percent of the annual budgeted revenues of \$22.9 million, ahead of expectations through two-thirds of the fiscal year. Per the District's adopted five-year rate study, sanitation rates increased 3.75 percent versus the prior year, which was the primary driver of increased revenues year-over-year. The remaining favorable variance year-over-year was due to the timing of utility billing invoicing. Timing related increases due to billing cycles will eventually "wash" over the course of the fiscal year.

The District generated revenue from potable water penalties (included in "other income"), in the amount of approximately \$0.3 million year-to-date through February 2024, which was significantly down from prior year's penalties of \$1.8 million through the first eight months of the fiscal year. The decrease in penalty revenue year-over-year was expected as the District moved back to Stage 2 of its Water Shortage Contingency Plan during February 2023 after being in Stage 3 for a little over a year. Penalties for wasteful water usage are imposed as a violation of the law and independent of the cost to provide water service. As a result, penalty revenues are unrestricted and may be used for a wide variety of items subject to Board approval, including enhanced funding for water conservation programs, funding for the Pure Water Project Las Virgenes-Triunfo and one-time payment(s) to CalPERS for unfunded pension liabilities.

Districtwide operating expenses year-to-date through February 2024 of \$37.1 million were \$3.1 million (or 9.2 percent) above the prior year's operating expenses of \$34.0 million year-over-year. Overall, operating expenses encompassed 57.7 percent of the \$64.4 million annual operating budget, which is favorable to expectations through two-thirds of the fiscal year.

Water operating expenses were \$24.3 million through the first eight months of the fiscal year, encompassing 55.4 percent of the annual budget of \$43.9 million and favorable to expectations through two-thirds of the fiscal year. Water operating expenses year-to-date were 8.4 percent above prior year expenses, mainly from higher source of supply costs due to the aforementioned increase in efficient outdoor water usage by the District's residential customers, resulting in an increase in purchased water deliveries.

Sanitation operating expenses were \$12.8 million through February 2024, up 10.7 percent year-over-year versus prior year expenses of \$11.6 million. During the prior fiscal year, operating expenses were reduced due to a one-time billing decrease in purchased service costs from the Las Virgenes-Triunfo Joint Powers Authority (JPA). In August 2022, the JPA received an insurance claim payment of \$581,000. The payment compensated the JPA for building damage repair costs at the Rancho Las Virgenes Composting Facility that resulted from the Woolsey Fire in 2018. The one-time revenue received by the JPA reduced the net expenses invoiced to the District and Triunfo Water & Sanitation District for sanitation services. The savings to the District from its share of the JPA payment resulted in a \$0.4 million reduction in operating expenses for the prior year.

The District generated net operating income available for capital projects of \$8.7 million year-to-date through February of Fiscal Year 2023-24, above the prior year's net income of \$8.5 million, and on pace to surpass the annual budgeted net operating income of \$9.2 million for the fiscal year. The District depends on the net operating income to fund capital projects and meet policy-required reserves.

The attached Statement of Revenues, Expenses, and Changes in Net Position, summarizes the District's Fiscal Year 2023-24 year-to-date financial results through February 29, 2024.

GOALS:

Ensure Effective Utilization of the Public's Assets and Money

Prepared by: Brian Richie, Finance Manager

ATTACHMENTS:

[Statement of Revenues, Expenses and Changes in Net Position: February 2024](#)

LAS VIRGENES MUNICIPAL WATER DISTRICT
Statements of Revenues, Expenses, and Changes in Net Position
For the Months Ended February 29, 2024 (Preliminary) and 2023
(dollars in thousands)



	Annual Budget	<i>Through 67% of fiscal year</i>		Variance with Prior Year Positive (Negative)
		Actual Year-to-Date		
	<u>2023/24</u>	<u>2023/24</u>	<u>2022/23</u>	<u>2023/24 to 2022/23</u>
OPERATING REVENUES:				
Potable water sales and service fees	\$ 41,279	\$ 25,127	\$ 20,294	\$ 4,833
Recycled water sales and service fees	6,638	3,390	3,325	65
Sanitation service fees	22,908	15,890	15,006	884
Other income	2,749	1,456	3,928	(2,472)
Total operating revenues	73,574	45,863	42,553	3,310
OPERATING EXPENSES:				
Water expenses:				
Source of supply	25,148	14,350	12,836	1,514
Pumping	2,826	1,386	856	530
Transmission and distribution	3,761	2,344	2,368	(24)
Meter	1,156	170	481	(311)
Water conservation	616	89	137	(48)
General and administrative	10,386	5,963	5,741	222
Total water expenses	43,893	24,302	22,419	1,883
Sanitation expenses:				
Share of Joint Powers Authority (expense)	17,286	10,964	9,894	1,070
Other sewage treatment	553	24	6	18
Lift stations	113	86	102	(16)
General and administrative	2,530	1,759	1,589	170
Total sanitation expenses	20,482	12,833	11,591	1,242
Total operating expenses	64,375	37,135	34,010	3,125
NET OPERATING INCOME (LOSS)	9,199	8,728	8,543	185
NON-OPERATING REVENUES (EXPENSES):				
Taxes	978	611	630	(19)
Lease income	105	62	67	(5)
Interest income	1,000	2,329	1,188	1,141
Facilities income/ (expense)	572	223	192	31
Other revenues/(expenses)	79	2,744	467	2,277
Non-operating revenues (expenses)	2,734	5,969	2,544	3,425
Capital contributions	833	5,002	497	4,505
Change in Net Position	12,766	19,699	11,584	8,115
NET POSITION:				
Beginning of fiscal year	297,087	297,087	286,843	10,244
Ending Net Position	\$ 309,853	\$ 316,786	\$ 298,427	\$ 18,359



DATE: April 16, 2024
TO: Board of Directors
FROM: Finance and Administration

SUBJECT: Fiscal Year 2022-23 Single Audit Report on Federal Awards

SUMMARY:

Title 2 of the U.S. Code of Federal Regulations (CFR), Part 200, requires non-federal agencies that expend \$750,000 or more of federal awards in a fiscal year to be subject to a "single audit." The single audit report reflects how an agency managed the receipt of federal grant funds and if an agency followed the federal compliance rules for funds associated with the grant. The District's external auditor, Rogers, Anderson, Malody, & Scott (RAMS), completed its single audit report of the District's compliance with federal grant funding rules for Fiscal Year 2022-23 and issued a "clean" opinion with no findings or adverse comments.

RECOMMENDATION(S):

Receive and file the Fiscal Year 2022-23 Single Audit Report on Federal Awards.

FINANCIAL IMPACT:

There is no financial impact associated with the filing of this report.

DISCUSSION:

Non-federal agencies that expend \$750,000 or more of federal awards in a fiscal year are subject to a "single audit." The single audit is part of the federal Office of Management and Budget's (OMB's) *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards*, commonly referred to as "Uniform Guidance," or Title 2 of the U.S. Code of Federal Regulations (CFR), Part 200. The purpose of Uniform Guidance is to provide a government-wide set of rules and requirements for the reporting of federal grants. The single audit reviews how an agency managed federal grants and ensures the agency followed the rules for funds associated with the grants or funding awards.

During Fiscal Year 2022-23, the District received federal funds, in the amount of \$1,059,671, from the U.S. Department of Homeland Security's *Federal Emergency Management Agency (FEMA) Hazard Mitigation Program*. The funds were received as a "pass through" from the California Office of Emergency Services and used to fund the purchase of stationary

emergency generators installed at critical potable water pump stations throughout the District's service area.

The District's external auditors, Rogers, Anderson, Malody, & Scott (RAMS), completed its report of the District's compliance with federal grant funding rules for Fiscal Year 2022-23 and issued a "clean" opinion notating no findings or control deficiencies. The single audit report was submitted to the Federal Audit Clearinghouse as required.

GOALS:

Ensure Effective Utilization of the Public's Assets and Money

Prepared by: Brian Richie, Finance Manager

ATTACHMENTS:

[Fiscal Year 2022-23 Single Audit Report on Federal Awards](#)

LAS VIRGENES MUNICIPAL WATER DISTRICT

Single Audit Report on Federal Awards

Year Ended June 30, 2023



ROGERS, ANDERSON, MALODY & SCOTT, LLP
CERTIFIED PUBLIC ACCOUNTANTS, SINCE 1948

**Las Virgenes Municipal Water District
Single Audit Report on Federal Awards
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**REPORT ON INTERNAL CONTROL OVER FINANCIAL
REPORTING AND ON COMPLIANCE AND OTHER MATTERS
BASED ON AN AUDIT OF FINANCIAL STATEMENTS
PERFORMED IN ACCORDANCE WITH
GOVERNMENT AUDITING STANDARDS**

Independent Auditor's Report

PARTNERS

Scott W. Manno, CPA, CGMA
Leena Shanbhag, CPA, MST, CGMA
Bradferd A. Welebir, CPA, MBA, CGMA
Jenny W. Liu, CPA, MST
Gardenya Duran, CPA, CGMA
Brianna Schultz, CPA, CGMA
Brenda L. Odle, CPA, MST (Partner Emeritus)
Terry P. Shea, CPA (Partner Emeritus)

MANAGERS / STAFF

Seong-Hyea Lee, CPA, MBA
Evelyn Morentin-Barcena, CPA
Veronica Hernandez, CPA
Laura Arvizu, CPA
John Maldonado, CPA, MSA
Julia Rodriguez Fuentes, CPA, MSA
Demi Hite, CPA
Jeffrey McKennan, CPA
Monica Wysocki, CPA

MEMBERS

American Institute of
Certified Public Accountants

*PCPS The AICPA Alliance
for CPA Firms*

*Governmental Audit
Quality Center*

California Society of
Certified Public Accountants

To the Board of Directors
Las Virgenes Municipal Water District
Calabasas, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Las Virgenes Municipal Water District (the District) as of and for the year ended June 30, 2023, and the related notes to the financial statements, which collectively comprise the District's basic financial statements, and have issued our report thereon dated November 14, 2023.

Report on Internal Control over Financial Reporting

In planning and performing our audit of the financial statements, we considered the District's internal control over financial reporting (internal control) as a basis for designing audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control. Accordingly, we do not express an opinion on the effectiveness of the District's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees in the normal course of performing their assigned functions, to prevent, or detect and correct misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.



Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audit we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Report on Compliance and Other Matters

As part of obtaining reasonable assurance about whether the District's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audit, and accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the District's internal control or on compliance. This report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the District's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

Rogers, Anderson, Malody & Scott, LLP.

San Bernardino, California
November 14, 2023



ROGERS, ANDERSON, MALODY & SCOTT, LLP
CERTIFIED PUBLIC ACCOUNTANTS, SINCE 1948

735 E. Carnegie Dr. Suite 100
San Bernardino, CA 92408
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REPORT ON COMPLIANCE FOR EACH MAJOR FEDERAL PROGRAM; REPORT ON INTERNAL CONTROL OVER COMPLIANCE; AND REPORT ON SCHEDULE OF EXPENDITURES OF FEDERAL AWARDS IN ACCORDANCE WITH THE UNIFORM GUIDANCE

Independent Auditor's Report

PARTNERS

Scott W. Manno, CPA, CGMA
Leena Shanbhag, CPA, MST, CGMA
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Jenny W. Liu, CPA, MST
Gardenya Duran, CPA, CGMA
Brianna Schultz, CPA, CGMA
Brenda L. Odle, CPA, MST (Partner Emeritus)
Terry P. Shea, CPA (Partner Emeritus)

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Laura Arvizu, CPA
John Maldonado, CPA, MSA
Julia Rodriguez Fuentes, CPA, MSA
Demi Hite, CPA
Jeffrey McKennan, CPA
Monica Wysocki, CPA

MEMBERS

American Institute of
Certified Public Accountants

*PCPS The AICPA Alliance
for CPA Firms*

*Governmental Audit
Quality Center*

California Society of
Certified Public Accountants

To the Board of Directors
Las Virgenes Municipal Water District
Calabasas, California

Report on Compliance for Each Major Federal Program

Opinion on Each Major Federal Program

We have audited the Las Virgenes Municipal Water District's (the District) compliance with the types of compliance requirements described in the *OMB Compliance Supplement* that could have a direct and material effect on each of the District's major federal programs for the year ended June 30, 2023. The District's major federal programs are identified in the summary of auditor's results section of the accompanying Schedule of Findings and Questioned Costs.

In our opinion, the District complied, in all material respects, with the types of compliance requirements referred to above that could have a direct and material effect on each of its major federal programs for the year ended June 30, 2023.

Basis for Opinion on Each Major Federal Program

We conducted our audit of compliance in accordance with auditing standards generally accepted in the United States of America (GAGAS); the standards applicable to financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States (*Government Auditing Standards*); and the audit requirements of Title 2 U.S. *Code of Federal Regulations* Part 200, *Uniform Administrative Requirements, Cost Principles and Audit Requirements for Federal Awards* (Uniform Guidance). Our responsibilities under those standards and the Uniform Guidance are further described in the Auditor's Responsibilities for the Audit of Compliance section of our report.



We are required to be independent of the District and to meet our other ethical responsibilities, in accordance with relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion on compliance for each major federal program. Our audit does not provide a legal determination of the District's compliance with the compliance requirements referred to above.

Responsibilities of Management for Compliance

Management is responsible for compliance with the requirements referred to above and for the design, implementation, and maintenance of effective internal control over compliance with the requirements of laws, statutes, regulations, rules and provisions of contracts or grant agreements applicable to the District's federal programs.

Auditor's Responsibilities for the Audit of Compliance

Our objectives are to obtain reasonable assurance about whether material noncompliance with the compliance requirements referred to above occurred, whether due to fraud or error, and express an opinion on the District's compliance based on our audit. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS, *Government Auditing Standards*, and the Uniform Guidance will always detect material noncompliance when it exists. The risk of not detecting material noncompliance resulting from fraud is higher than for that resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Noncompliance with the compliance requirements referred to above is considered material if there is a substantial likelihood that, individually or in the aggregate, it would influence the judgment made by a reasonable user of the report on compliance about the District's compliance with the requirements of each major federal program as a whole.

In performing an audit in accordance with GAAS, *Government Auditing Standards*, and the Uniform Guidance, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material noncompliance, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the District's compliance with the compliance requirements referred to above and performing such other procedures as we considered necessary in the circumstances.
- Obtain an understanding of the District's internal control over compliance relevant to the audit in order to design audit procedures that are appropriate in the circumstances and to test and report on internal control over compliance in accordance with the Uniform Guidance, but not for the purpose of expressing an opinion on the effectiveness of the District's internal control over compliance. Accordingly, no such opinion is expressed.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and any significant deficiencies and material weaknesses in internal control over compliance that we identified during the audit.

Report on Internal Control over Compliance

A deficiency in internal control over compliance exists when the design or operation of a control over compliance does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, noncompliance with a type of compliance requirement of a federal program on a timely basis. A *material weakness in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance, such that there is a reasonable possibility that material noncompliance with a type of compliance requirement of a federal program will not be prevented, or detected and corrected, on a timely basis. A *significant deficiency in internal control over compliance* is a deficiency, or a combination of deficiencies, in internal control over compliance with a type of compliance requirement of a federal program that is less severe than a material weakness in internal control over compliance, yet important enough to merit attention by those charged with governance.

Our consideration of internal control over compliance was for the limited purpose described in the Auditor's Responsibilities for the Audit of Compliance section above and was not designed to identify all deficiencies in internal control over compliance that might be material weaknesses or significant deficiencies in internal control over compliance. Given these limitations, during our audit we did not identify any deficiencies in internal control over compliance that we consider to be material weaknesses, as defined above. However, material weaknesses or significant deficiencies in internal control over compliance may exist that were not identified.

Our audit was not designed for the purpose of expressing an opinion on the effectiveness of internal control over compliance. Accordingly, no such opinion is expressed.

The purpose of this report on internal control over compliance is solely to describe the scope of our testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Accordingly, this report is not suitable for any other purpose.

Report on Schedule of Expenditures of Federal Awards Required by the Uniform Guidance

We have audited the financial statements of the governmental activities, each major fund, and the aggregate remaining fund information of the District as of and for the year ended June 30, 2023, and the related notes to the financial statements, which collectively comprise the District's basic financial statements. We issued our report thereon dated November 14, 2023, which contained unmodified opinions on those financial statements. Our audit was conducted for the purpose of forming opinions on the financial statements that collectively comprise the basic financial statements. The accompanying schedule of expenditures of federal awards is presented for purposes of additional analysis as required by the Uniform Guidance and is not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America.

In our opinion, the schedule of expenditures of federal awards is fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Rogers, Anderson, Malody & Scott, LLP.

San Bernardino, California

February 15, 2024 (except for our report on the Schedule of Expenditures of Federal Awards, for which the date is November 14, 2023).

**Las Virgenes Municipal Water District
Schedule of Expenditures of Federal Awards
Year Ended June 30, 2023**

Federal Grantor / Pass-through Grantor / Program or Cluster Title	Assistance Listing Number	Program Identification Number	Federal Expenditures	Amount Provided to Subrecipients
<u>U.S. Department of Homeland Security</u>				
<i>Passed through State of California Office of Emergency Services</i>				
Federal Emergency Management Agency - Hazard Mitigation Program	97.039	FEMA-4407-DR-CA	\$ 1,059,671	\$ -
Total Assistance Listing Number 97.039			<u>1,059,671</u>	<u>-</u>
Total U.S. Department of Homeland Security			<u>1,059,671</u>	<u>-</u>
<u>U.S. Department of Interior</u>				
<i>Direct Assistance</i>				
WaterSMART (Water and Manage America's resources for Tomorrow)	15.507	R21AP10395	70,477	-
Total Assistance Listing Number 15.507			<u>70,477</u>	<u>-</u>
Total U.S. Department of the Interior			<u>70,477</u>	<u>-</u>
Total Expenditures of Federal Awards			<u>\$ 1,130,148</u>	<u>\$ -</u>

See accompanying notes to the schedule of expenditures of federal awards.

**Las Virgenes Municipal Water District
Notes to the Schedule of Expenditures of Federal Awards
Year Ended June 30, 2023**

1. Basis of Presentation

The accompanying Schedule of Expenditures of Federal Awards (SEFA) includes the federal awards activity of the Las Virgenes Municipal Water District (the District) under federal programs of federal government for the year ended June 30, 2023. The information in this SEFA is presented in accordance with Title 2 U.S. *Code of Federal Regulations (CFR) Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance). Because the SEFA presents only a selected portion of the operations of the District, it is not intended to and does not present the financial position, changes in net position or fund balance, or cash flows of the District. For the purposes of this schedule, federal financial assistance includes both federal financial assistances received directly from a federal agency, as well as federal funds received indirectly by the District from a nonfederal agency or other organization. Only that portion of program expenditures reimbursable with such federal funds are reported in the accompanying schedule. Program expenditures in excess of the maximum federal reimbursement authorized or the portion of the program expenditures that were funded with state, local or other non-federal funds are excluded from the accompanying schedule.

2. Summary of Significant Accounting Policies

The expenditures included in the accompanying schedule were reported on the accrual basis of accounting. Under the accrual basis of accounting, expenditures are recognized in the period incurred. In addition, such expenditures are recognized following cost principles contained in the Uniform Guidance, wherein certain types of expenditures are not allowable or are limited as to reimbursement. Expenditures reported include any property or equipment acquisitions incurred under federal programs.

3. De Minimis Indirect Cost Rate

The District did not elect to use the 10-percent indirect cost rate allowed under the Uniform Guidance.

**Las Virgenes Municipal Water District
 Schedule of Findings and Questioned Costs
 Year Ended June 30, 2023**

Section I: Summary of Auditor's Results

Financial Statements

Type of report the auditor issued on whether the financial statements audited were prepared in accordance with GAAP: unmodified

Internal control over financial reporting:

Material weakness identified?	_____	Yes	_____ X _____	No
Significant deficiencies identified?	_____	Yes	_____ X _____	None Reported
Noncompliance material to financial statements noted?	_____	Yes	_____ X _____	No

Federal Awards

Internal control over major programs:

Material weakness identified?	_____	Yes	_____ X _____	No
Significant deficiencies identified	_____	Yes	_____ X _____	None Reported

Type of auditor's report issued on compliance for major programs: unmodified

Any audit findings disclosed that are required to be reported in accordance with 2 CFR 200.516(a)?	_____	Yes	_____ X _____	No
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Identification of major programs:

<u>Assistance Listing Number</u>	<u>Name of Federal Program</u>
97.039	Federal Emergency Management Agency

Dollar threshold used to distinguish between type A and type B programs:	_____
	\$750,000

Auditee qualified as low-risk auditee?	_____	Yes	_____ X _____	No
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**Las Virgenes Municipal Water District
Schedule of Findings and Questioned Costs
Year Ended June 30, 2023**

Section II: Financial Statement Findings

No findings to be reported.

Section III: Federal Awards Findings and Questioned Costs

No findings to be reported.

**Las Virgenes Municipal Water District
Summary Schedule of Prior Audit Findings
Year Ended June 30, 2023**

No prior year findings were reported.



DATE: April 16, 2024
TO: Board of Directors
FROM: Finance and Administration

SUBJECT: Tyler Technologies Software and Maintenance Agreement: Renewal

SUMMARY:

The District has been using the Tyler Technologies Enterprise Resource Planning (ERP) software since 2020. The ERP modules include functionality for general accounting, job costing, accounts payable, inventory, purchasing, human resources, payroll and employee self-service. At the time of implementation, the Tyler Technologies ERP software was named Munis. In 2022, the software was renamed to Enterprise ERP (EERP). Open Finance is an additional service being utilized, which provides a transparent view of the types of revenue the District collects and displays them on the District's website.

The Tyler Technologies EERP is a Software as a Service (SaaS) solution, which includes backup and disaster recovery services. Since the implementation of EERP, staff have been expanding the use of the system to streamline processes and enhance operational efficiency. To further this effort, staff recommends the addition of the Accounts Receivable module that would allow customers to make on-line payments. The annual renewal of EERP provides the District with continued access to the software services including support, backups, and disaster recovery. Staff recommends authorization for the annual renewal with Tyler Technologies.

RECOMMENDATION(S):

Authorize the General Manager to execute a one-year agreement, in the amount of \$240,000, with Tyler Technologies with four one-year renewal options based on an annual escalator not to exceed five percent; and authorize an additional one-time fee, in the amount of \$33,219, for implementation of the Accounts Receivable module of the Tyler Enterprise ERP System.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

The total cost for the first year of the annual renewal is \$273,219, which includes a one-time implementation fee of \$33,219 for the Accounts Receivable module. Sufficient funds are available in the adopted Fiscal Year 2023-24 Budget. Funds for any renewal options will be proposed in future fiscal year budgets. The total five-year cost for the Tyler Technologies EERP will be \$1,326,152.

DISCUSSION:

In December 2018, the District executed a five-year agreement with Tyler Technologies for the implementation and hosting of Tyler's Enterprise ERP (EERP), Executime, and Open Finance software services. Tyler Technologies was selected through a competitive procurement process that included evaluations of other ERP systems. The District completed the full implementation at the end of 2020. Tyler Technologies services are hosted on-line through a software as a service (SaaS) platform. The SaaS solution implementation has reduced the need to maintain on-premise servers, allowing Information Systems staff to focus on in-depth support of the software application.

The following modules are currently used as part of the Tyler Technologies EERP:

- General Ledger/Budget
- Cash Management
- Contract Management
- Project Accounting
- Accounts Payable
- Payroll
- Executime – timekeeping
- Inventory
- Purchasing
- Tyler Forms
- Tyler Content Manager – document storage
- Employee self-service
- Open Finance

Since implementation of Tyler's EERP, additional features have been added as staff has become more acquainted with the new software. Some examples include an employee portal where paystubs, W-2s, and leave accruals can easily be accessed. The portal also allows for employees to make withholding changes, enroll in benefits during open enrollment and be reimbursed for expenses. The District also implemented a feature that allows invoices to be paid through Wells Fargo electronically, thus reducing the need for paper checks to be printed in-house.

Open Finance was implemented as an additional service that gives a transparent look at the types of revenue the District collects and where the funds are used. The data is displayed in a graphical, easy-to-view format on the District's website. The data comes directly from the Enterprise ERP, reducing any errors that could arise when manipulating data for formatting purposes. Open Finance also increases efficiency by eliminating the need for staff to produce reports displaying the data. An weblink to the Open Finance portal is available on the District's

website via the Finance page.

Accounts Receivable Module:

Staff recommends implementation of the Accounts Receivable (AR) module as part of the EERP. The District's current AR process is handled outside of EERP and requires manual steps to bring the transactions into the system. The AR module will allow invoices to be electronically generated and distributed by the EERP. Payments for the invoices can then be collected through the Tyler Technologies payment portal, providing customers a simplified way to pay. The new process will streamline and simplify the AR process at the District.

The total first-year cost for the AR module will be \$47,932, which is comprised of a \$33,219 one-time implementation costs with an annual maintenance fee of \$14,713. Customers will have the option to pay by e-check or credit card on-line. Credit card payments will incur a fee of 3.95 percent, which would be passed on to the customer. Electronic check payments will have a flat fee of \$1.95 per transaction. To increase efficiency and promote electronic payments, the District would absorb the cost of e-check payments. Staff estimates around 400 annual e-check payments, resulting in a total cost of \$780.

GOALS:

Ensure Effective Utilization of the Public's Assets and Money

Prepared by: Andrew Spear, Principal Technology Analyst



DATE: April 16, 2024
TO: Board of Directors
FROM: Facilities and Operations

SUBJECT: Water Main Breaks at 5745 Parkmor Road and Valley Circle Boulevard near Dorie Drive: Continuation of Emergency Declaration

SUMMARY:

On February 6, 2024, the Board adopted Resolution No. 2634, declaring an emergency due to a 12-inch water main break at 5745 Parkmor Road in the City of Calabasas and a 30-inch water main break along Valley Circle Boulevard near Dorie Drive in West Hills to ensure 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 and a 30-inch water main break along Valley Circle Boulevard near Dorie Drive in West Hills.

FINANCIAL IMPACT:

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

DISCUSSION:

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: Eric Schlageter, Principal Engineer

The Metropolitan Water District of Southern California

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.

Agenda

Board of Directors - Final - Revised 3

April 9, 2024

2:00 PM

Tuesday, April 9, 2024 Meeting Schedule
08:30 a.m. LC 10:30 a.m. FAM 01:30 p.m. Break 02:00 p.m. BOD

Agendas, live streaming, meeting schedules, and other board materials are available here: <https://mwdh2o.legistar.com/Calendar.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 click <https://us06web.zoom.us/j/81520664276pwd=a1RTQWh6V3h3ckFhNmDsUWpKR1c2Zz09>

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

Teleconference Locations:

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

3008 W. 82nd Place • Inglewood, CA 90305

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

525 Via La Selva • Redondo Beach, CA 90277

Cedars Sinai Medical Center • 8700 Beverly Blvd • Los Angeles, CA 90048

1545 Victory Blvd., 2nd Floor • Glendale, CA 91201

1. Call to Order

- a. Invocation: Director Ardy Kassakhian, City of Glendale
- b. Pledge of Allegiance: Director Juan Garza, Central Basin Municipal Water District

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 21-3171
Attachments: 04092024 BOD 5A Report
- B. Chair's Monthly Activity Report 21-3172
Attachments: 04092024 BOD 5B Report
- C. General Manager's summary of activities 21-3173
Attachments: 04092024 BOD 5C Report
- D. General Counsel's summary of activities 21-3174
 a. Update on Social Media and the First Amendment
Attachments: 04092024 BOD 5D Report
04092024 BOD 5Da Presentation
- E. General Auditor's summary of activities 21-3175
Attachments: 04092024 BOD 5E Report
- F. Ethics Officer's summary of activities 21-3176
Attachments: 04092024 BOD 5F Report

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

6. CONSENT CALENDAR OTHER ITEMS - ACTION

- A. Approval of the Minutes Board of Directors Workshop on Proposed Biennial Budget for February 27, 2024, Special Meeting of the Board of Directors for February 27, 2024, and the Board of Directors Meeting for March 12, 2024 (Copies have been submitted to each Director, any additions, corrections, or omissions) 21-3177
Attachments: 04092024 BOD 6A (02272024) Budget Workshop Minutes
04092024 BOD 6A (02272024) Sp BOD Minutes
04092024 BOD 6A (03122024) BOD Minutes
- B. Approve Committee Assignments

7. CONSENT CALENDAR ITEMS - ACTION

- 7-1** Certify the Final Program Environmental Impact Report for the F.E. Weymouth Water Treatment Plant and La Verne Site Improvements Program and take related CEQA actions; and award three procurement contracts to furnish water quality equipment for Metropolitan's Water Quality Laboratory: (1) a \$1,512,882 contract to Agilent Technologies to furnish two gas chromatograph-mass spectrometer units and two gas chromatograph mass spectrometry/solid phase microextraction units; (2) a \$726,432 contract to SCIEX to furnish one liquid chromatograph-mass spectrometer unit; and (3) a \$665,441 contract to Thermo Fisher Scientific to furnish four ion chromatograph systems (EOT) **21-3179**
- Attachments:** 04092024 EOT 7-1 B-L
04082024 EOT 7-1 Presentation
- 7-2** Authorize an agreement with HDR Engineering Inc. for a not-to-exceed amount of \$3 million for final design to rehabilitate a portion of the Sepulveda Feeder; and adopt the CEQA determination that the Sepulveda Feeder rehabilitation project was previously addressed in the certified 2017 Final Programmatic Environmental Impact Report for the Prestressed Concrete Cylinder Pipe Rehabilitation Program (EOT) **21-3180**
- Attachments:** 04092024 EOT 7-2 B-L
04082024 EOT 7-2 Presentation
- 7-3** Authorize an increase of \$1,100,000 to an agreement with HDR Engineering Inc. for a new not-to-exceed total amount of \$1,735,000 for final design services to replace the 2.4 kV power line that serves the Black Metal Mountain Communications Site; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (EOT) **21-3182**
- Attachments:** 04092024 EOT 7-3 B-L
04082024 EOT 7-3 Presentation
- 7-4** Award a \$295,562 contract to The Kepler Group Inc. to implement security system improvements at the Gene Pumping Plant; the General Manager has determined that this proposed action is exempt or otherwise not subject to CEQA (EOT) **21-3183**
- Attachments:** 04092024 EOT 7-4 B-L
04082024 EOT 7-4 Presentation

- 7-5** Adopt resolution for the 113th Fringe Area Annexation to Eastern Municipal Water District and Metropolitan; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. [BL # CHANGED 4/2/24] (FAM) **21-3193**

Attachments: 04092024 FAM 7-5 B-L
04092024 FAM 7-5 Presentation

- 7-6** Express support for broadening Metropolitan’s board priorities to include funding for Delta levee maintenance in the State of California’s climate resiliency bond proposals, AB 1567 (Garcia-D) and SB 867 (Allen-D); the General Manager has determined that the action is exempt or otherwise not subject to CEQA. [BL # CHANGED 4/2/24] [SUBJECT UPDATED 4/5/24] (Leg) **21-3194**

Attachments: 04092024 LEG 7-6 B-L
04092024 LEG 7-6 Presentation

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

8. OTHER BOARD ITEMS - ACTION

- 8-1** Appropriate \$636.48 million for projects identified in the Capital Investment Plan for Fiscal Years 2024/25 and 2025/26 and authorize the General Manager to initiate or proceed with work on capital projects identified in the Capital Investment Plan for Fiscal Years 2024/25 and 2025/26; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA (EOT) **21-3181**

Attachments: 04092024 EOT 8-1 B-L
04082024 EOT 8-1 Presentation

- 8-2** Approve and authorize the distribution of Appendix A for the 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) **21-3191**

Attachments: 04092024 FAM 8-2 B-L

- 8-3** Review and consider Eastern Municipal Water District's five approved Initial Studies/Mitigated Negative Declarations and two Addenda, and take related CEQA actions; authorize the General Manager to enter into a Local Resources Program Agreement with Eastern Municipal Water District for the Perris North Basin Groundwater Contamination Prevention and Remediation Program for up to 3,466 acre-feet per year of treated groundwater for potable purposes in the Eastern Municipal Water District service area. [MOVED FROM CONSENT 4/2/24] (OWS) **21-3186**

Attachments: [04092024 OWS 8-3 B-L Attachment 1](#)
[04092024 OWS 8-3 Attachment 2](#)
[04092024 OWS 8-3 Attachment 3](#)
[04092024 OWS 8-3 Attachment 4](#)
[04092024 OWS 8-3 Presentation](#)
[04092024 OWS 8-3 to 8-6 Presentation](#)

- 8-4** Review and consider the Las Virgenes Municipal Water District and Las Virgenes-Triunfo Joint Powers Authority certified Final Environmental Impact Report and two Addenda, and take related CEQA actions; authorize the General Manager to enter into a Local Resources Program Agreement with Las Virgenes Municipal Water District and Las Virgenes-Triunfo Joint Powers Authority for the PURE Water Project Las Virgenes-Triunfo for up to 5,000 acre-feet per year of treated recycled water for potable purposes in the Las Virgenes Municipal Water District service area. [MOVED FROM CONSENT 4/2/24] (OWS) **21-3187**

Attachments: [04092024 OWS 8-4 B-L](#)
[04092024 OWS 8-4 Presentation](#)

- 8-5** Review and consider the South Coast Water District's certified Final Environmental Impact Report and take related CEQA actions; authorize the General Manager to enter into a Local Resources Program Agreement with the Municipal Water District of Orange County and South Coast Water District for the Doheny Ocean Desalination Project for up to 5,600 acre-feet per year of treated desalinated water for potable purposes in the Municipal Water District of Orange County service area. [UPDATED SUBJECT 4/4/24; MOVED FROM CONSENT 4/2/24] (OWS) **21-3188**
- Attachments:** 04092024 OWS 8-5 B-L (Revised) w/Attach 1
04092024 OWS 8-5 Attach 2
04092024 OWS 8-5 Attach 3
04092024 OWS 8-5 A-4 & A-5a-5b
04092024 OWS 8-5 Presentation
- 8-6** Review and consider the Los Angeles Department of Water and Power's certified Environmental Impact Report and Addendum, and take related CEQA actions; authorize the General Manager to enter into a Local Resources Program Agreement with the Los Angeles Department of Water and Power for the Los Angeles Groundwater Replenishment Project for up to 19,500 acre-feet per year of potable recycled water through groundwater replenishment in the San Fernando Valley. [MOVED FROM CONSENT 4/2/24] (OWS) **21-3189**
- Attachments:** 04092024 OWS 8-6 B-L
04092024 OWS 8-6 Presentation
- 8-7** Approve the Proposed Biennial Budget for fiscal years 2024/25 and 2025/26, which includes the Capital Investment Plan and revenue requirements for fiscal years 2024/25 and 2025/26 and the ten-year forecast; adopt resolutions fixing and adopting the water rates and charges for calendar years 2025 and 2026; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. [BL # CHANGED 4/2/24] (FAM) **21-3192**
- Attachments:** 04092024 FAM 8-7 B-Lpdf
04092024 FAM 8-7 Presentation

- 8-8** Ratify General Manager's Appointment of Chief of Staff and the terms and conditions of the Chief of Staff's employment. The General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. [ADDED ITEM 4/2/2024] [WITHDRAWN 4/5/24] (EOP) **21-3265**

9. BOARD INFORMATION ITEMS

- 9-1** Conservation Report **21-3178**
Attachments: 04092024 BOD 9-1 Report
- 9-2** Proposed Interagency Local Supply Exchange Program (OWS) **21-3190**
Attachments: 04092024 OWS 9-2 B-L
04092024 OWS 9-2 Presentation
- 9-3** Equal Employment Opportunity Statistical Report (EOP) **21-3217**
Attachments: 04092024 BOD 9-3 Presentation

10. OTHER MATTERS

NONE

11. FOLLOW-UP ITEMS

NONE

12. FUTURE AGENDA ITEMS

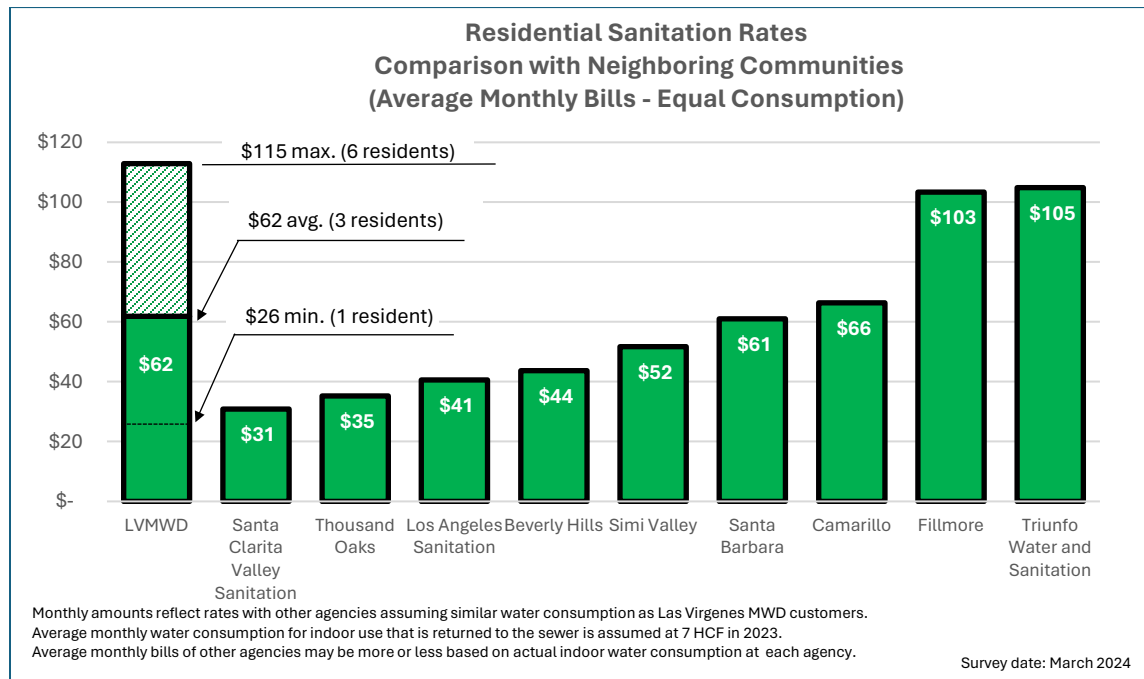
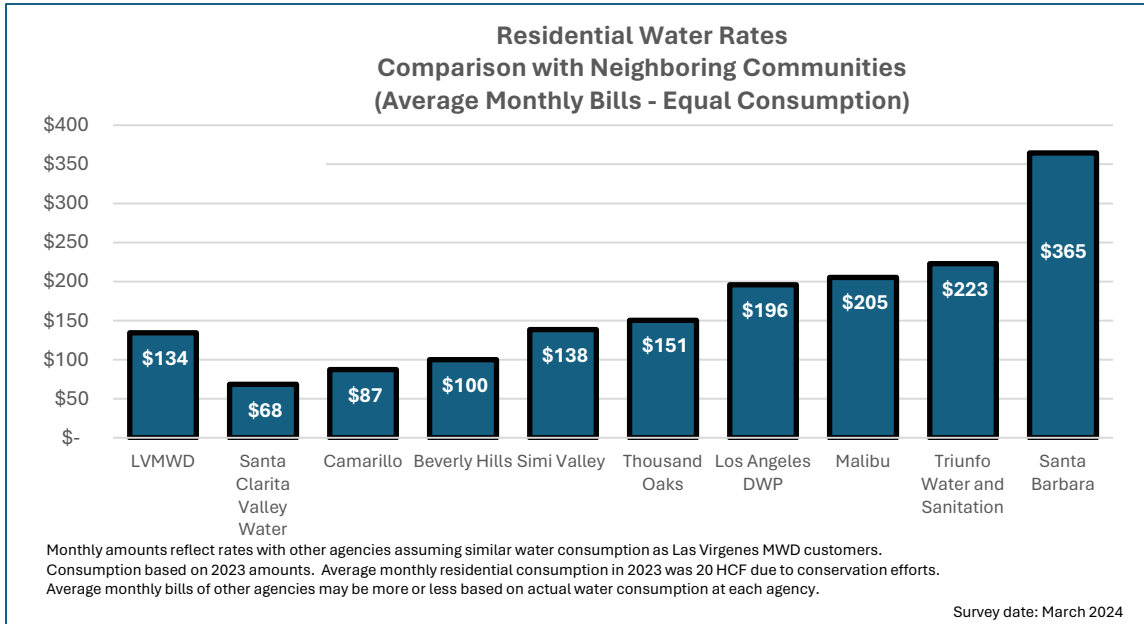
13. ADJOURNMENT

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>

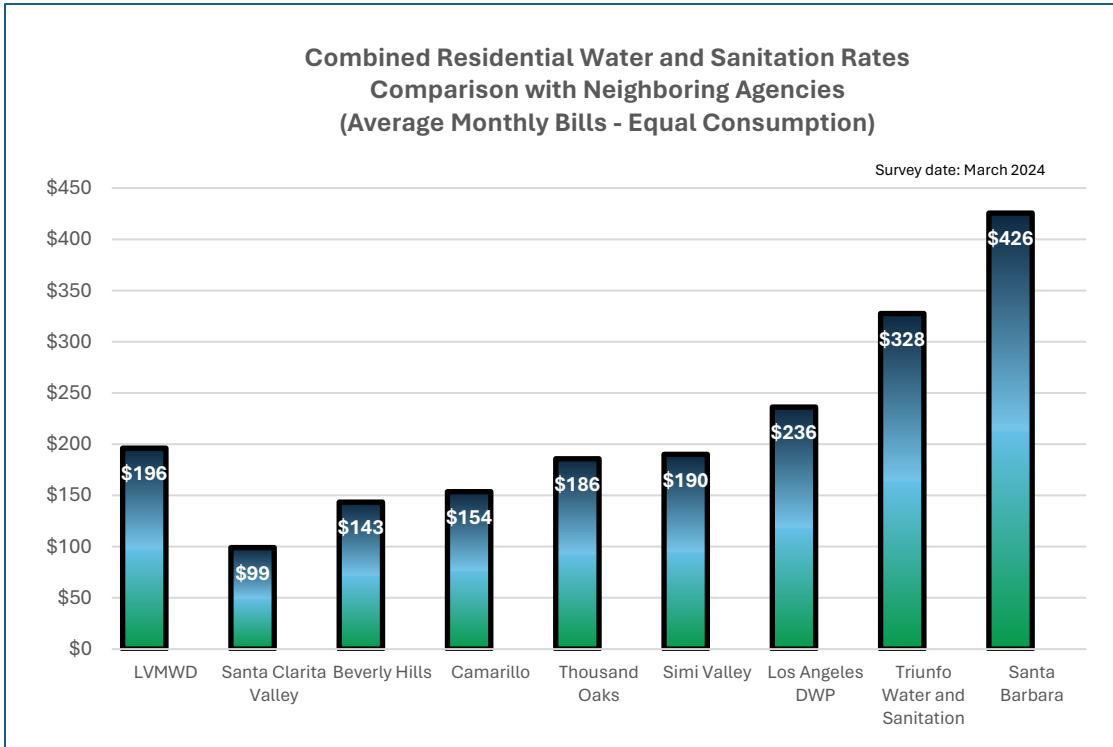
Writings relating to open session agenda items distributed to Directors less than 72 hours prior to a regular meeting are available for public inspection at Metropolitan's Headquarters Building and on Metropolitan's Web site <https://mwdh2o.legistar.com/Calendar.aspx>.

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 Board Executive Secretary in advance of the meeting to ensure availability of the requested service or accommodation.

2024 Rate Comparison Study



2024 Rate Comparison Study





DATE: April 16, 2024
TO: Board of Directors
FROM: General Manager

SUBJECT: Los Angeles County Water Plan: Adoption

SUMMARY:

On December 5, 2023, the Los Angeles County Board of Supervisors adopted the Los Angeles County Water Plan as a guiding document for a shared, regional path towards water resilience. The District was a key stakeholder in the process to develop the Los Angeles County Water Plan, together with representatives from other water agencies serving the residents of Los Angeles County. The Board of Supervisors has asked local agencies to consider adopting the Los Angeles County Water Plan.

RECOMMENDATION(S):

Pass, approve, and adopt proposed Resolution No. 2637, adopting the Los Angeles County Water Plan.

RESOLUTION NO. 2637

A RESOLUTION OF THE BOARD OF DIRECTORS OF LAS VIRGENES MUNICIPAL WATER DISTRICT ADOPTING THE LOS ANGELES COUNTY WATER PLAN

(Reference is hereby made to Resolution No. 2637 on file in the District's Resolution Book and by this reference the same is incorporated herein.)

FINANCIAL IMPACT:

There is no financial impact associated with this action.

DISCUSSION:

The Los Angeles County Water Plan articulates a shared, inclusive, regional path forward to sustainably and equitably achieve safe, clean, and reliable water resources for Los Angeles County. The plan was developed through a collaborative process with input from stakeholders throughout Los Angeles County including representatives of the District.

Attached for reference is a copy of the Los Angeles County Water Plan, which includes four key focal areas: (1) regional water supply reliability; (2) groundwater management and quality; (3) small, at-risk system resilience and drinking water equity; and (4) watershed sediment management.

Prepared by: David Pedersen, General Manager

ATTACHMENTS:

[Los Angeles County Water Plan](#)
[Proposed Resolution No. 2637](#)



LOS ANGELES COUNTY
WATER PLAN

2023 Edition | Water Supply Resilience

equity
sustainability
opportunity

local
water
resources
collaboration
relationships
regional
resilience

The County of Los Angeles recognizes that we occupy land originally and still inhabited and cared for by the Tongva, Tataviam, Serrano, Kizh, and Chumash Peoples. We honor and pay respect to their elders and descendants – past, present, and emerging – as they continue their stewardship of these lands and waters. We acknowledge that settler colonization resulted in land seizure, disease, subjugation, slavery, relocation, broken promises, genocide, and multigenerational trauma. This acknowledgment demonstrates our responsibility and commitment to truth, healing, and reconciliation and to elevating the stories, culture, and community of the original inhabitants of Los Angeles County. We are grateful to have the opportunity to live and work on these ancestral lands. We are dedicated to growing and sustaining relationships with Native peoples and local tribal governments, including (in no particular order) the

Fernandeño Tataviam Band of Mission Indians

Gabrielino Tongva Indians of California Tribal Council

Gabrieleno/Tongva San Gabriel Band of Mission Indians

Gabrieleño Band of Mission Indians - Kizh Nation

San Manuel Band of Mission Indians

San Fernando Band of Mission Indians

To learn more about the First Peoples of Los Angeles County, please visit the Los Angeles City/County Native American Indian Commission website at lanaic.lacounty.gov.

The Los Angeles County Water Plan (CWP) would not have been possible without the guidance, contribution, and support from numerous groups and individuals. Please see Appendix F for a full list of contributors.

DIRECTOR'S MESSAGE

As Director of Los Angeles County Public Works, it is my pleasure to introduce the Los Angeles County Water Plan (CWP), First Edition, an aspirational yet actionable blueprint for improving water resilience in our region.

This plan comes at a critical time. More frequent and intense wildfires; three years of drought followed by intense rainfall; and recently, tropical storm Hilary, the first such storm to make landfall in nearly 100 years, have all clearly demonstrated our region's vulnerability to the weather impact driven by climate change. Meanwhile, other significant stressors exist, and many are escalating, such as polluted groundwater basins, aging infrastructure, lack of access to safe, reliable, and affordable water supplies in vulnerable communities.

Water management in Los Angeles County is the responsibility of more than 200 agencies, yet there are many issues that are beyond the purview of individual agencies and should be addressed in a coordinated fashion at the countywide level. For this reason, dozens of water professionals, tribes, community leaders, and an array of diverse stakeholders came together to develop the CWP to articulate an ambitious, inclusive, and regional path to achieve water resiliency.

The CWP will not be a static document but a living roadmap that will be updated to address the evolving needs of our communities in future iterations.

Although circumstances will continue to change, a secure and equitable water future will require all involved to work together to adapt to our infrastructure and prepare our communities to be resilient and thrive.

Thank you for your continued partnership and commitment to fulfilling the vision of the Los Angeles County Water Plan.



Mark Pestrella, PE
Director of Public Works





LA COUNTY WATER PLAN EXECUTIVE SUMMARY

OUR ROUTE TO RESILIENCE, TOGETHER

Climate change is establishing a “new normal” of more frequent and intense droughts, as well as less frequent and more torrential rains. Recognizing a new climate reality and the need to be thoughtful stewards of future water supplies, the Los Angeles County Board of Supervisors envisioned the development of a countywide water plan focused on collaborative management of Los Angeles County’s water resources. Los Angeles County Public Works (Public Works) developed this Los Angeles County Water Plan (CWP), together with water resources organizations, and an array of diverse stakeholders, to secure Los Angeles County’s water future and achieve our collective vision of equitable and sustainable water resources for everyone. The CWP builds upon the 2019 OurCounty Sustainability Plan, establishing the path to realizing our vision that is rooted in cross-sector collaboration and coalition building.

VISION

The CWP articulates a shared, inclusive, regional path forward to sustainably and equitably achieve safe, clean, and reliable water resources for Los Angeles County.

SHARED OPPORTUNITIES FOR WATER RESILIENCE

THE CWP FOCUSES ON ACHIEVING REGIONAL WATER RESILIENCE THROUGH COLLABORATIVE STRATEGIES. Over 200 agencies in Los Angeles County manage a complex network of water systems to meet the needs of our communities and environment. To achieve sustainability, resilience, and equity, cross-sector teamwork and a holistic approach to best leverage natural systems and infrastructure are essential. This plan is a living document. The targets, strategies, and actions are a starting point in this effort.

The CWP is not intended to address every water-related issue in Los Angeles County. Instead, it builds upon and complements the many existing local and regional water planning efforts by focusing on four key focal areas where new or additional regional collaboration can add value. These four key focal areas were established through a gaps analysis, which included a review of local and regional planning documents, along with initial stakeholder discussions encompassing a variety of perspectives. For each of the four key focal areas, the CWP describes shared desired outcomes, identified by Public Works through discussions with numerous groups and individuals. During our gaps analysis, Public Works evaluated disparities in water resilience throughout the County and specifically selected a focal area to address a pressing need. The CWP provides an approach for achieving these desired outcomes through collaboration and a platform for measuring progress.

CWP Four Key Focal Areas



REGIONAL WATER SUPPLY RELIABILITY

Improving regional water supply reliability by better leveraging our collective local and imported water resources and infrastructure.



GROUNDWATER MANAGEMENT AND QUALITY

Realizing our shared groundwater management opportunities by sharing expertise and resources to overcome challenges.



SMALL, AT-RISK SYSTEM RESILIENCE AND DRINKING WATER EQUITY

Ensuring a consistently high standard of water service for everyone in Los Angeles County by providing regional support for small systems, with focused attention to under-resourced communities.



WATERSHED SEDIMENT MANAGEMENT

Mitigating the impacts of wildfire on our water supplies through coordinated efforts between land and water managers.

REGIONAL STRATEGIES, REGIONAL BENEFITS

The CWP is organized around a framework of targets and strategies, which are supported by specific actions. Targets measure collective progress toward the shared desired outcomes for the key focal areas of the CWP. These targets are intended to help Los Angeles County achieve regional water resilience by 2045. See Chapter 2 for more on targets. Public Works will publish an interactive dashboard to track progress toward these targets. Strategies provide the overarching approaches to achieving the targets. Actions support the strategies and include specific steps to drive results, along with timing, responsible agencies, and potential participants.

Strategies for a Resilient Water Future



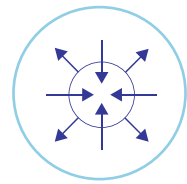
STRATEGY 1

Achieving the most efficient water use possible countywide



STRATEGY 2

Collaborating on consistent drought preparedness and response messaging



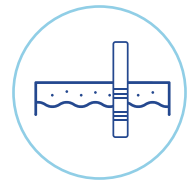
STRATEGY 3

Coupling local supply development with regional conveyance



STRATEGY 4

Managing salt and concentrate regionally



STRATEGY 5

Leveraging regional groundwater storage potential



STRATEGY 6

Collaborating on water quality needs and treatment technologies



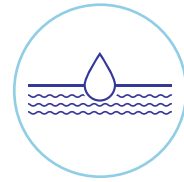
STRATEGY 7

Enhancing cost-effectiveness of pumping and treating impaired groundwater



STRATEGY 8

Protecting coastal groundwater basins from seawater intrusion



STRATEGY 9

Facilitating regional groundwater recharge understanding and initiatives



STRATEGY 10

Facilitating natural infiltration of precipitation



STRATEGY 11

Providing regional support for small, at-risk water systems



STRATEGY 12

Mitigating wildfire effects on water supply and quality



STRATEGY 13

Managing invasive species in riparian areas



STRATEGY 14

Facilitating sediment management and debris removal from flood control facilities

VALUES GUIDING FUTURE ACTION

At the onset of CWP development, Public Works proactively reached out to a diverse group of stakeholders to understand what matters to them. We identified several broad, overarching values for the CWP through these conversations. Some of these values provided core tenets to our overall process for preparing the CWP. Others guided us in establishing targets, strategies, and actions. Other values, while not directly addressed through the actions in the CWP, will continue to inform how water resource management is approached to achieve sustainable and equitable outcomes. Each of these values will guide future iterations of the plan, as well as steps taken throughout CWP implementation.

These values are aligned with LA County's Anti-Racism, Diversity, and Inclusion (ARDI) Initiative, which aims to guide the County by offering training and capacity building; technical assistance and planning; policy analysis and development; data collection; analysis and reporting; community, tribal, and other stakeholder engagement; and equity-infused resourcing and programming to help reach its goals.

CWP VALUES

- Strive for equitable benefits and impacts of water resource management decisions
- Ensure inclusive, diverse, multigenerational, and sustained tribal and community engagement
- Use data to inform policies, priorities, and practices
- Encourage multi-benefit projects and green infrastructure
- Promote capacity building of a local, skilled workforce
- Incorporate tribal knowledge into water management
- Integrate the knowledge and experiences of local communities in water planning
- Ensure CWP is actionable and adaptable
- Address climate resiliency
- Establish clear communications (outline priorities, listen, incorporate feedback, maintain dialogue)
- Implement vegetated/nature-based solutions



The CWP outlines a path to achieve a resilient water future for all Los Angeles County residents. Everyone has a role in successfully realizing the CWP. By working across County departments and with other partners, actively engaging Tribes and other stakeholders, seeking funding to support CWP implementation, and tracking and reporting on progress, we are committed to facilitating the ongoing collaboration that is core to making the CWP successful.

CENTRAL THEMES FOR A PATH AHEAD

To lead the way on regional initiatives, the CWP was developed with resilience, equity, sustainability, and engagement as central themes. These themes will guide CWP implementation and its future iterations to create reliable water resources for all communities in Los Angeles County.

RESILIENCE

Water resilience refers to the capacity of communities and the environment to adapt to changes in the availability of water resources resulting from extreme and shifting weather patterns, as well as other stressors.

EQUITY

Water equity entails ensuring that all people and communities can depend on water management institutions and infrastructure to provide equal access to clean, safe, high-quality, and affordable water.

SUSTAINABILITY

Sustainable water management involves using water resources in a manner that fulfills current ecological, social, and economic needs without compromising the ability to meet those needs in the future.

ENGAGEMENT

Engagement means actively reaching out to and collaborating with a diverse and representative range of stakeholders to develop and implement water management policies and programs.

A FORWARD-LOOKING LIVING DOCUMENT

THE CWP IS A LIVING DOCUMENT. This inaugural 2023 Edition of the CWP marks the first iteration for this regional planning effort and focuses on water supply resilience. As a living document, future iterations of the CWP are intended to evolve and adapt to meet Los Angeles County's changing water resources needs.

WHAT IS IT? The CWP is a forward-looking strategic plan that crafts a vision for the region's water resources management. The CWP articulates strategies to align efforts both small and large in order to launch Los Angeles County on a successful path towards water supply resilience.

WHO IS IT FOR? Water knows no city or county boundaries. The CWP is a plan for the County region as a whole, not a single locality or governing body. The CWP was developed to serve – collaboratively with local agencies and stakeholders – the people and communities of Los Angeles County.

THE CWP FILLS CURRENT GAPS TO ENHANCE THE REGION'S WATER RESILIENCE. Recognizing that there are so many ambitious efforts already underway in Los Angeles County, the CWP takes a bird's-eye view on what else can be done to optimize, leverage, and align programs and processes. While the CWP does not attempt to reinvent the wheel or address every water-related issue, it complements existing efforts and fills in the gaps for matters not currently being addressed at a regional level. The CWP does not address activities best managed at the Federal, State, or local levels, nor does it recommend specific projects subject to environmental analysis or duplicate other ongoing efforts. As a strategic plan, the CWP does not supersede land use plans that have been adopted by the Board of Supervisors.

LA COUNTY
WATER PLAN

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CHAPTER 1 ACHIEVING REGIONAL WATER RESILIENCE THROUGH COLLABORATION

While the opportunities for more effective water management are great, water resources in Los Angeles County are becoming increasingly stressed. Climate change is establishing a “new normal” of more frequent and intense droughts, coupled with less frequent but more torrential rains. Groundwater basin levels are declining, and some of our most under-resourced communities do not have equitable access to consistently reliable, high-quality drinking water. California wildfires, sometimes fueled by invasive species, can impact water supplies and water quality. At the same time, water management in Los Angeles County is already rapidly evolving to address many of the region’s most pressing water issues. **Water agencies throughout Los Angeles County are working to solve these challenges. Regional programs that capture stormwater or produce recycled water are contributing significantly to the region’s objectives. Recognizing the value in working together, these agencies are eager to collaborate with each other, Tribes, and other stakeholders to develop integrated programs and projects that provide innovative solutions to complex problems.**

In 2016, in the face of a new climate reality and recognizing the need to be thoughtful stewards of water supplies, the Los Angeles County Board of Supervisors called for the articulation of specific actions to secure Los Angeles County’s water future. Public Works—as a regional entity with integrated interests—is well-positioned to facilitate countywide coordination to enhance water resilience, building upon the cross-sector collaboration from the OurCounty Sustainability Plan. Working together with water resources organizations and a diverse array of stakeholders in Los Angeles County, we developed this CWP to achieve our collective vision of equitable and sustainable water resources for everyone.

The Los Angeles County Water Plan (CWP) focuses on achieving countywide water resilience through collaborative strategies. Over 200 agencies manage a complex network of water systems to meet the needs of our communities and environment. Cross-sector teamwork and a holistic approach to best leverage natural and engineered systems are essential to achieve safe, clean, and reliable water resources for the present and future generations of Los Angeles County. This chapter provides the vision for the CWP, along with an overview of the CWP development process and outcomes.

VISION

The CWP articulates a shared, inclusive, regional path forward to sustainably and equitably achieve safe, clean, and reliable water resources for Los Angeles County.



Castaic Lake: Clean water and healthy watersheds are vital resources to Los Angeles County residents



All residents of Los Angeles County, present and future generations, deserve safe, clean, and reliable water resources

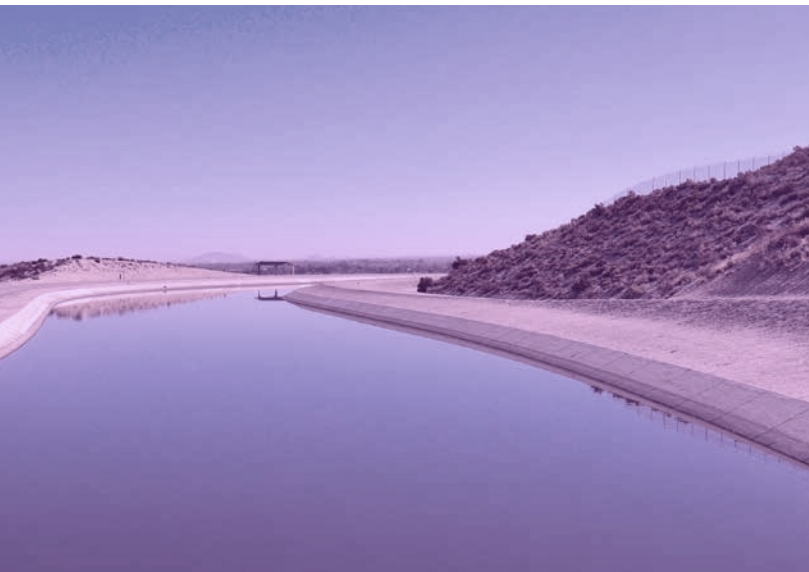
ESTABLISHING FOCAL AREAS

Since water resilience is of shared interest across agencies and communities, planning for our future water resources is a shared responsibility. Working together with water resource managers and diverse stakeholders in Los Angeles County, we developed the CWP to complement and support existing local and regional plans, programs, and projects. As a result, this initial edition of the CWP focuses on making progress within four key areas where additional collaboration would be most beneficial. Since the CWP is a living document, future iterations may focus on additional or different issues as water resource planning needs in Los Angeles County continue to evolve.

Key water management areas supported by the CWP but more explicitly addressed within other ongoing efforts include:

- **Stormwater management:** Developing and implementing stormwater capture projects that improve water quality, increase water supply, and enhance communities is the focus of the Safe, Clean Water Program - which provides funding for both regional and local concepts.
- **Regional recycled water programs:** There are several large-scale partnership programs underway (such as the Metropolitan Water District of Southern California's and Los Angeles County Sanitation District's Pure Water Southern California Program) that will maximize recycled water production for use to offset imported water.
- **Groundwater basin projects:** There are a variety of projects within individual basins across the County to enhance recharge and increase production through enhanced treatment (such as the Los Angeles Department of Water and Power's San Fernando Groundwater Basin Remediation Program).
- **Integrated flood management:** In addition to local drainage and regional flood control plans and operational policies, there are several integrated planning efforts with concepts that will maintain flood control while introducing additional benefits (e.g., LA River Master Plan).
- **Land stewardship:** Understanding the importance of the nexus between water and land management, the CWP recognizes the network of ongoing urban land use, forest, and watershed stewardship efforts conducted by planning agencies and entities throughout Los Angeles County.

REGIONAL WATER SUPPLY RELIABILITY



To address climate change impacts on future water supply reliability, managers should take a regional and integrated view of the existing networks of natural and engineered system that are available to convey supplies across Los Angeles County. Thinking beyond singular facility function and jurisdictional boundaries will allow the region to better leverage collective local and imported water resources, infrastructure, and relationships to improve regional water supply reliability.

GROUNDWATER MANAGEMENT AND QUALITY



Given that nearly all of Los Angeles County's groundwater basins are managed through adjudication agreements, information sharing is often separated by basin which can limit opportunities for collaboration. Facilitating regional discussions that leverage collective expertise and resources can benefit Los Angeles County as a whole, but especially areas with under-resourced communities, by working together to address shared challenges across groundwater basins.

SMALL, AT-RISK SYSTEM RESILIENCE AND DRINKING WATER EQUITY



Small water systems play a key role in providing water supply to communities in Los Angeles County, but some small systems are particularly at risk due to a variety of circumstances including aging or inadequate infrastructure and lack of funding, especially within under-resourced communities. Regional support for small systems can ensure that a consistently high standard of service is achieved and maintained throughout Los Angeles County.

WATERSHED SEDIMENT MANAGEMENT



The increase in frequency and intensity of wildfires within Los Angeles County has both direct and indirect impacts on water infrastructure, water supply, quality, and infrastructure. Land and water managers, together, can mitigate wildfire potential and manage the impacts from post-fire rainfall events to improve the resilience of our water supply and infrastructure.

CWP STRUCTURE

The CWP is organized around regional targets for water resilience, along with strategies and actions to support progress on these targets. The targets, strategies, and actions and their respective roles in addressing the CWP’s focal areas are defined below.

Targets:

Targets provide a quantitative representation of shared desired outcomes for regional water resilience across Los Angeles County by 2045. Targets are intended to be met through CWP strategies and actions along with other local and regional efforts. These targets provide a metric to measure and track progress implementing the CWP. A detailed discussion of target development and analysis can be found in Appendix B.

Strategies:

Fourteen overarching strategies provide regional, collaborative approaches to achieving the targets. The strategies can be implemented through the CWP directly or indirectly through acknowledgement or support of other programs and planning efforts that have a shared purpose. More information on related planning efforts is available in Appendix C.

Actions:

Actions include specific steps that can be carried out, through an ongoing CWP implementation process, to support the strategies. As many of the larger actions may require several interim steps to be completed, the CWP contains a two-year Action Plan (Appendix A). The Action Plan provides further specificity for potential next steps that can be used to advance the discussion of implementation and corresponding resources.

Equation for a Resilient Water Future

$$\text{CWP Strategies \& Actions} + \text{Other Local and Regional Efforts} = \text{CWP Targets}$$

VALUES GUIDING FUTURE ACTION

At the onset of CWP development, Public Works proactively engaged a diverse group of stakeholders to understand what matters to them. We identified several broad, overarching values for the CWP through these conversations. Some of these values provided core tenets to our overall process for preparing the CWP. Others guided us in establishing the targets, strategies, and actions. Other values, while not directly addressed through the actions in the CWP, will continue to inform how the CWP is implemented.

Although these values are not explicitly referenced within every target, strategy, and action, they are fundamental to the plan as a whole and will continue to guide future iterations of the plan, as well as steps taken throughout CWP implementation.

These values are aligned with LA County’s Anti-Racism, Diversity, and Inclusion (ARDI) Initiative, which aims to guide the County by offering training and capacity building; technical assistance and planning; policy analysis and development; data collection, analysis and reporting; community, tribal, and other stakeholder engagement; and equity-infused resourcing and programming to help reach its goals.

CWP VALUES

- Strive for equitable benefits and impacts of water resource management decisions
- Ensure inclusive, diverse, multigenerational, and sustained tribal and community engagement
- Use data to inform policies, priorities, and practices
- Encourage multi-benefit projects and green infrastructure
- Promote capacity building of a local, skilled workforce
- Incorporate tribal knowledge into water management
- Integrate the knowledge and experiences of local communities in water planning
- Ensure CWP is actionable and adaptable
- Address climate resiliency
- Establish clear communications (outline priorities, listen, incorporate feedback, maintain dialogue)
- Implement vegetated/nature-based solutions

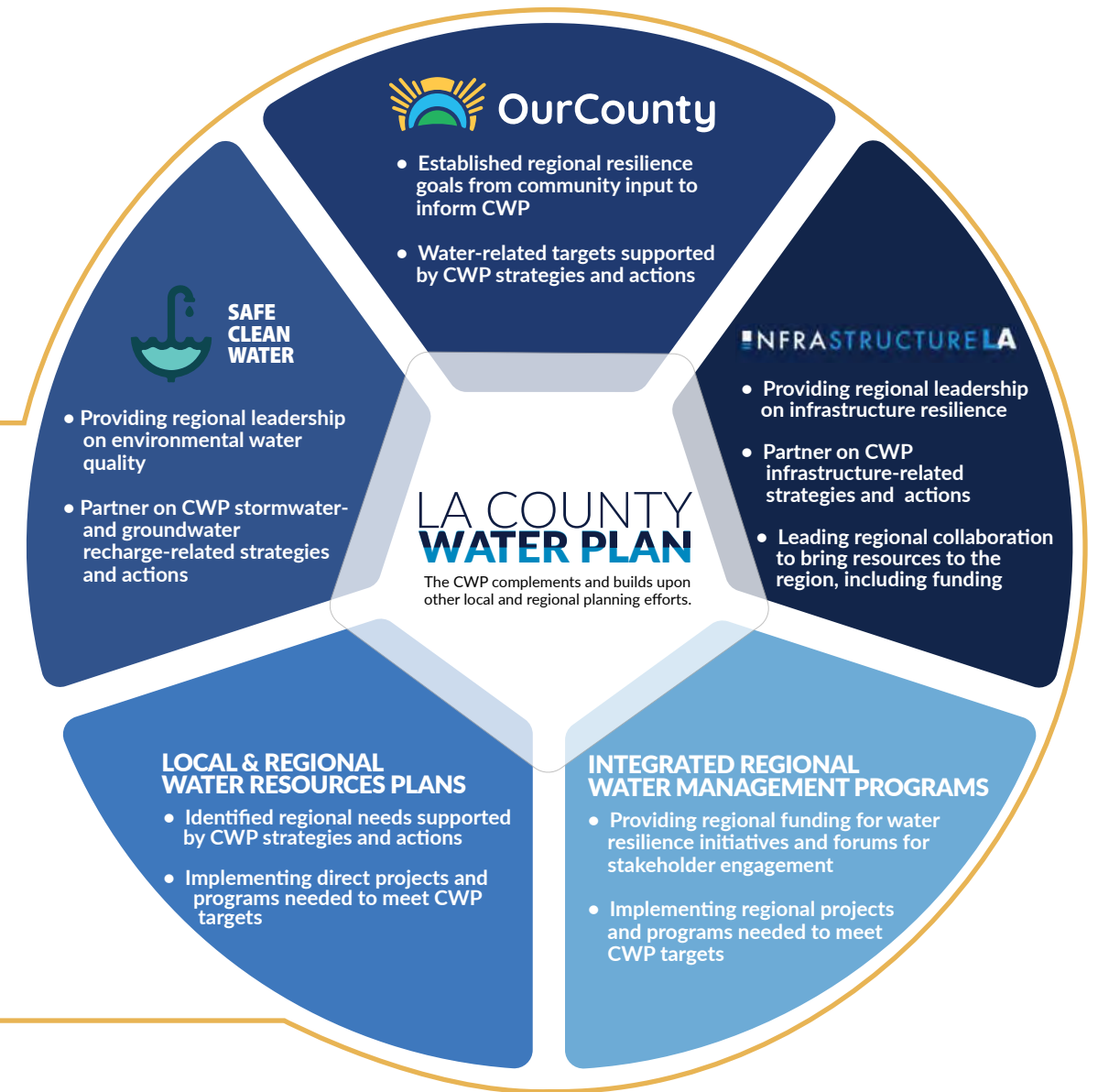
WORKING TOGETHER TO DEVELOP THE CWP

Building on the foundation of the OurCounty Sustainability Plan, the CWP was developed through a series of dialogues with nearly 100 water management agency representatives, Tribes, non-governmental organizations, local governments, and other stakeholders. After first defining the collective needs and desired outcomes for our region's water resilience, stakeholders progressed from development of targets, to strategies, and finally, to a specific, implementable two-year Action Plan. The CWP was subject to an extensive public review process which helped shape this final document. Details on the meetings and workshops that supported CWP development are provided in Appendix D.

Identifying priorities

Prior to beginning CWP development, a gaps analysis was performed to understand which water resource needs in Los Angeles County are not currently addressed in other planning initiatives. This initial step included a review of regulatory, local, and regional planning documents (much of which was conducted on a watershed scale), and State and Federal legislation. To better understand regional priorities, initial discussions were held with stakeholders representing various perspectives. This gaps analysis provided diverse viewpoints on water management challenges, initiatives, local planning efforts, and participation in the development of the CWP from entities throughout Los Angeles County, including the Santa Clarita Valley, Antelope Valley, and Greater Los Angeles area.

Previous work done through the Integrated Regional Water Management (IRWM) process informed much of the discussion including an understanding of existing local efforts that support equitable and sustainable water resources. The gaps analysis also considered input received during the OurCounty and the Safe, Clean Water Program initiatives. Significant recycled water programs are being spearheaded by agencies including the City of Los Angeles, Metropolitan Water District of Southern California, Los Angeles County Sanitation Districts, Las Virgenes Municipal Water District, and Santa Clarita Valley Water Agency. We will be building off the work they are doing to further regional collaboration that has already begun through these programs.



Establishing targets, strategies, and actions

Targets, strategies, and actions were developed through an iterative process, with multiple groups contributing ideas and building upon concepts identified by one another through a series of 45 workshops and listening sessions. Facilitated dialogue in workshop-style settings enabled content to be developed through discussion with stakeholders across multiple sectors. The CWP benefited from broad input across interests and geographies by partnering with the three IRWM regions in Los Angeles County and using their meetings to workshop ideas and concepts. Feedback received through other regional efforts, such as the Safe, Clean Water Program and OurCounty Sustainability Plan, also informed the CWP development. In addition to the workshops, many meetings were held with Tribes, environmental and environmental justice organizations, water management entities, local governments, and other stakeholders across Los Angeles County. The workshops and other meetings helped to develop targets, identify regional strategies, and create a realistic action plan. The workshops and other meetings also provided opportunities for stakeholders to express their interest in participating in CWP implementation.



CHAPTER 2 TARGETS FOR A RESILIENT WATER FUTURE

CWP targets reflect shared desired outcomes for regional water resilience across Los Angeles County by 2045. Meeting these targets relies on successful implementation of both local and regional efforts, projects, and programs, including many efforts led outside of the CWP. Guided by implementable two-year action plans, CWP strategies and actions will support progress in achieving the targets. The targets were developed to enable future progress tracking that leverages existing and easily reportable data sources in addition to any new information on benefits provided by stakeholder projects.

Targets that were meaningful and measurable were identified through the CWP planning effort. The resulting targets within each of the four focal areas are presented in this chapter with corresponding metrics and background context. Further details as to how each individual target was developed and how it will be tracked are included in Appendix B.

When stakeholders were asked their desired outcomes for future water resilience, some examples they gave were:

- “Equity, affordability and resilience”
- “Ability to withstand droughts”
- “Better connectivity between isolated systems”
- “Reduce fire-related damage”
- “Understanding of opportunities for partnerships”
- “Regional forum to discuss common concerns, issues, opportunities”

MEANINGFUL TO REFLECT DESIRED OUTCOMES

Within each of the focal areas, we asked the question “What are our desired outcomes for future water resilience?” Targets were formed to provide a meaningful yet quantifiable expression of those strongly- and commonly-held desired outcomes. Targets are intended to be countywide or regional.

As an example, targets developed for the Regional Water Supply Reliability focal area reflect more than the desire to fully leverage local supply potential across Los Angeles County. They were also selected to provide regional consistency in how we address water use efficiency, drought, and emergency response.

Targets reflect desired outcomes in each of the four CWP focal areas



REGIONAL WATER SUPPLY RELIABILITY



GROUNDWATER MANAGEMENT AND QUALITY



SMALL, AT-RISK SYSTEM RESILIENCE AND DRINKING WATER EQUITY



WATERSHED SEDIMENT MANAGEMENT

MEASURABLE FOR FUTURE TRACKING

To ensure that progress in achieving CWP targets was trackable, a numeric element was added to each target concept. The numeric element was developed by first defining the current (or baseline) conditions and building upon the baseline to set an achievable goal by 2045. Sources and methods for acquiring data that can be used to track measurable progress toward that number were also considered. As an example, the targets created for the Groundwater Management and Quality focal area establish volumetric goals for both groundwater production and recharge that build upon current baseline levels. These targets were specifically selected to leverage data and information regularly reported through adjudication and/or other management frameworks.

How target can be quantified	How data will be collected	How target will be tracked	How data will be processed
TYPE	DATA SOURCE	METRIC	CALCULATION

We used a four-step process to develop both meaningful and measurable targets. Further details are provided in Appendix B.



REGIONAL WATER SUPPLY RELIABILITY TARGETS

- A** Achieve 100% compliance with State Urban Water Use Objectives
Metric: Percent of suppliers that are meeting their State Urban Water Use Objective
- B** Increase local supply sources by 580,000 AFY
Metric: Total water supply that is sourced within Los Angeles County
- C** Meet 100% of water demands even in times of drought
Metric: Percent of water agencies that do not require Water Shortage Contingency Plans be implemented higher than Level 1
- D** Maximize ability to meet health and safety needs following an emergency by maintaining access to six months of emergency supply
Metric: Percent of water agencies that have access to six months of water supply for an emergency



GROUNDWATER MANAGEMENT AND QUALITY TARGETS

- E** Optimize production of groundwater by maintaining at least 700,000 AFY baseline groundwater production
Metric: Average annual countywide AFY of groundwater production
- F** Optimize production of groundwater by increasing production in areas overlying impaired groundwater by 18,000 AFY
Metric: Average annual production from new treatment projects, wells brought back online, and new wells (AFY)
- G** Increase groundwater recharge and storage by enhancing regional facility recharge by 250,000 AFY
Metric: Average annual countywide AFY of groundwater recharge at existing and future facilities/spreading grounds
- H** Increase groundwater recharge and storage by increasing decentralized infiltration by 80,000 AFY
Metric: Average annual countywide AFY of groundwater recharge outside of existing and future facilities/spreading grounds

Providing reliable water supplies in drought conditions is an increasing challenge across Los Angeles County. The CWP defines water supply reliability as the ability to meet current and future needs 100% of the time, including during emergencies. The CWP targets indicate the desire for increases in water conservation and efficiency as well as the further development of local supplies to improve resilience in the face of both longer-term droughts as well as near-term emergencies.

The targets reflect an alignment with the upcoming State Water Use Objectives, which are being developed by the State Water Resources Control Board (SWRCB) and will be released after this initial iteration of the CWP. Although imported water will play a vital role in Los Angeles County in the foreseeable future, increasing local sources of water promotes water supply diversity, autonomy, and reliability as well as long-term drought resilience. In addition, water use efficiency and local supplies provide environmental benefits by reducing energy consumption and improving local water quality as well as increasing local workforce. Near-term emergency resilience is equally important and greatly enhanced by maintaining sufficient levels of locally-developed and stored supplies throughout the County.

Groundwater basins provide a critical source of local supply along with seasonal and annual storage that can be accessed during drought conditions. The ability to fully maximize groundwater basin potential for both supply and storage can be constrained by water quality regulations, sea level rise, poor water quality, and regulated remediation zones. While groundwater basins are managed in isolation of each other, these shared constraints can benefit from shared solutions. Unused local, impaired (or “stranded”) groundwater is poorer quality water that would require additional relatively cost-ineffective treatment and/or conveyance for beneficial use. Being able to further tap into and use localized areas of impaired groundwater would enhance regional resilience. Additionally, leveraging combined groundwater storage potential through enhanced groundwater recharge of local and imported water would improve local emergency, seasonal, annual, and long-term supply reliability.



SMALL, AT-RISK SYSTEM RESILIENCE AND DRINKING WATER EQUITY TARGETS



WATERSHED SEDIMENT MANAGEMENT TARGETS

I Reduce at-risk systems by 100%

Metric: Number of water systems classified as in the categories of failing, at-risk, or potentially at-risk

J 100% of water agencies, including those in severely disadvantaged communities, have affordable cost of water to meet health and safety needs

Metric: Percent of water agencies where the cost of water for health and safety (6,000 gallons) does not exceed 2.5% median household income of severely disadvantaged communities

M Reduce fire-contributing species in riparian areas by 2,900 acres

Metric: Acres of riparian areas that have undergone at least one invasive species removal program

N Reduce human-caused ignitions by 50%

Metric: Count of fire ignitions in wildlands, rural, and the wildland-urban interface

K Reduce color, taste, and odor drinking water quality issues by 50%

Metric: Number of customer complaints per 1,000 connections about color, taste, and/or odor

L Maximize ability to meet health and safety needs following an emergency by confirming 100% of small community water systems have access to alternative sources of supply

Metric: Percent of small community water systems that have access to at least one other secondary water supply

O Maintain a minimum of 75% average available capacity in debris basins and 80% average available capacity in reservoirs

Metric: Percent of available capacity in debris basins and percent of available capacity in reservoirs

P Confirm 100% of water management agencies within the wildland-urban interface are implementing a wildfire resilience or mitigation plan

Metric: Percent of agencies that have implemented fire prevention measures and percent of agencies that have alternative or backup energy supply

With over 200 water supply entities in Los Angeles County of various sizes and supply portfolios, not all systems are able to provide consistently high quality, reliable drinking water to their customers. Many small and at-risk systems provide water to under-resourced communities and have limited resources and revenue potential to address water quality and quantity needs. While recognizing the differing costs of water by source, these targets aim for improvement in the availability and affordability of water supply across Los Angeles County. Although maximum contaminant levels are seldom exceeded for primary regulated constituents, there are several areas that regularly experience color, odor, and taste issues. Customer satisfaction is a fundamental part of equitable water delivery and every resident in Los Angeles County should have access to high quality, clean water for drinking, bathing, and other household uses. Additionally, many smaller, at-risk systems have only one source of supply and have no real options if that source becomes impaired or is interrupted during an emergency. For these systems an intertie or connection to alternative sources of supply is essential.

Wildfire frequency, intensity, and rate of spread have increased within the wildland-urban interfaces in Los Angeles County. These events create direct impacts to local water resources through destruction or impairment of water supply and wastewater infrastructure, and indirect effects on surface water quality and watershed functionality. In addition, post-wildfire impacts such as erosion and debris flows on watersheds lands can create flood management emergencies as well as long-term reduction in debris basin functionality, reservoir storage, and groundwater recharge potential. Reducing wildfire ignition sources and fire-contributing species that exacerbate wildfire impact are key areas to target for enhanced resilience. Furthermore, the ability to effectively manage existing flood control debris basins and reservoirs to their highest potential is critical to protecting the environment and communities and to maximizing stormwater capture during precipitation events. Water management agencies within wildland-urban interfaces need to be prepared for wildfire events and have plans in place for them to mitigate wildfire damage, respond during wildfire events, and minimize post-wildfire impacts.

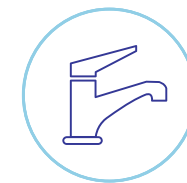


CHAPTER 3 STRATEGIES AND ACTIONS FOR A RESILIENT WATER FUTURE

Fourteen CWP strategies have been developed to capitalize on the opportunities identified for further regional collaboration to meet the shared CWP targets. Each strategy presented in this chapter is supported by a suite of detailed actions that will be facilitated throughout CWP implementation. The strategies and actions are aligned with the CWP values which include ensuring inclusive, diverse, multigenerational, and sustained tribal and community engagement, and ensuring the CWP is actionable and adaptable. A table showing the alignment between CWP targets and strategies is provided at the end of this chapter. Collectively, these strategies and actions will help to meet multiple targets both directly and indirectly by leveraging resources across Los Angeles County that support and complement existing local and regional water resilience efforts, projects, and programs. These complementary and supported planning efforts are acknowledged in Appendix C.

Many of these strategies and actions will take time to fully realize but will provide interim benefits along the way. By continually identifying and taking near-term steps, we will facilitate consistent progress on targets, strategies, and actions. A two-year Action Plan, which identifies the steps and resources needed to implement actions within the current two-year period is included as Appendix A.

Strategies for a Resilient Water Future



STRATEGY 1

Achieving the most efficient water use possible countywide



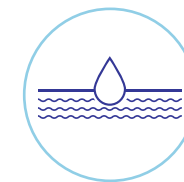
STRATEGY 8

Protecting coastal groundwater basins from seawater intrusion



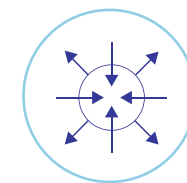
STRATEGY 2

Collaborating on consistent drought preparedness and response messaging



STRATEGY 9

Facilitating regional groundwater recharge understanding and initiatives



STRATEGY 3

Coupling local supply development with regional conveyance



STRATEGY 10

Facilitating natural infiltration of precipitation



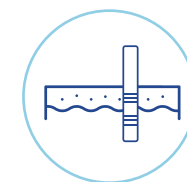
STRATEGY 4

Managing salt and concentrate regionally



STRATEGY 11

Providing regional support for small, at-risk water systems



STRATEGY 5

Leveraging regional groundwater storage potential



STRATEGY 12

Mitigating wildfire effects on water supply and quality



STRATEGY 6

Collaborating on water quality needs and treatment technologies



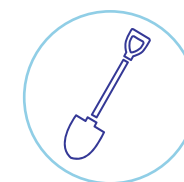
STRATEGY 13

Managing invasive species in riparian areas



STRATEGY 7

Enhancing cost-effectiveness of pumping and treating impaired groundwater production



STRATEGY 14

Facilitating sediment management and debris removal from flood control facilities

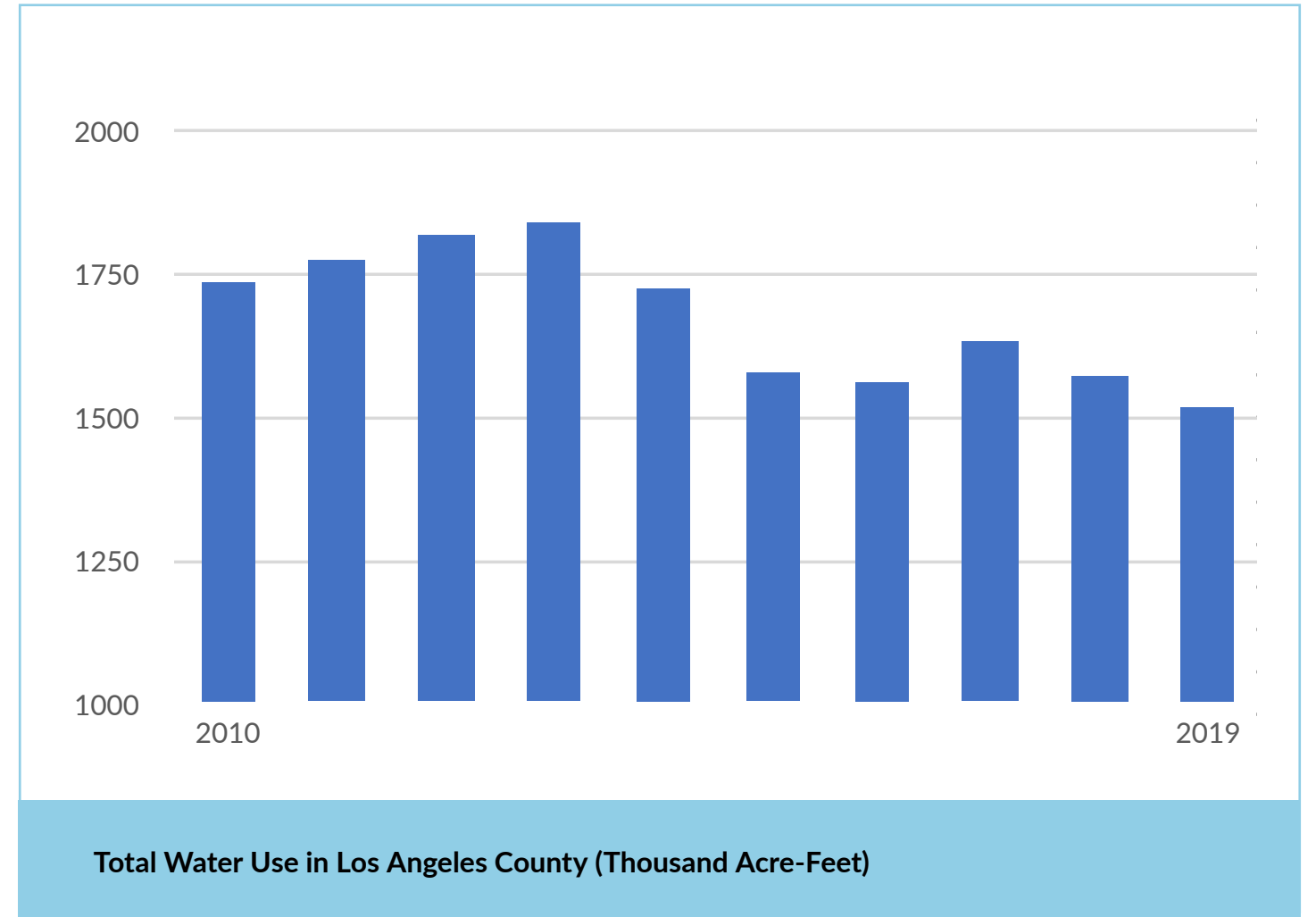


STRATEGY 1

Achieving the most efficient water use possible countywide

The State’s Urban Water Use Objectives (to be adopted by the SWRCB) are intended to establish a reasonable level of water use that will meet the unique demands within each of Los Angeles County’s over 200 urban water supplier service areas. The ability to achieve the new standards countywide would be greatly enhanced through regional collaboration that sets consistent expectations on water use efficiency throughout Los Angeles County, while accommodating the unique needs of diverse communities.

Why this strategy is needed



Los Angeles County has made significant strides in water use efficiency, reducing water use by approximately 13% since 2010 despite a 2% growth in population. Achieving the next level of efficiency to meet State objectives and improve resilience will require innovation and collaboration. In addition to improving water supply sustainability, using water efficiently also helps to improve water quality by reducing the amount of water that is conveyed and treated.

Actions to support this strategy

1.1 Facilitate universal access to Los Angeles Region Imagery Acquisition Consortium data sets to help urban water suppliers accurately estimate irrigable area and reasonable water use for their service area.

1.3 Provide access to Model Water Efficient Landscape Ordinance compliance training for all water suppliers in Los Angeles County.

1.2 Coordinate outdoor landscaping ordinances between cities, County, wholesalers, retail water agencies, and other local agencies (e.g., non-functional turf ordinances, Senate Bill 1383 mulch and composting, a trained workforce).

LA COUNTY WATER PLAN
Target Link

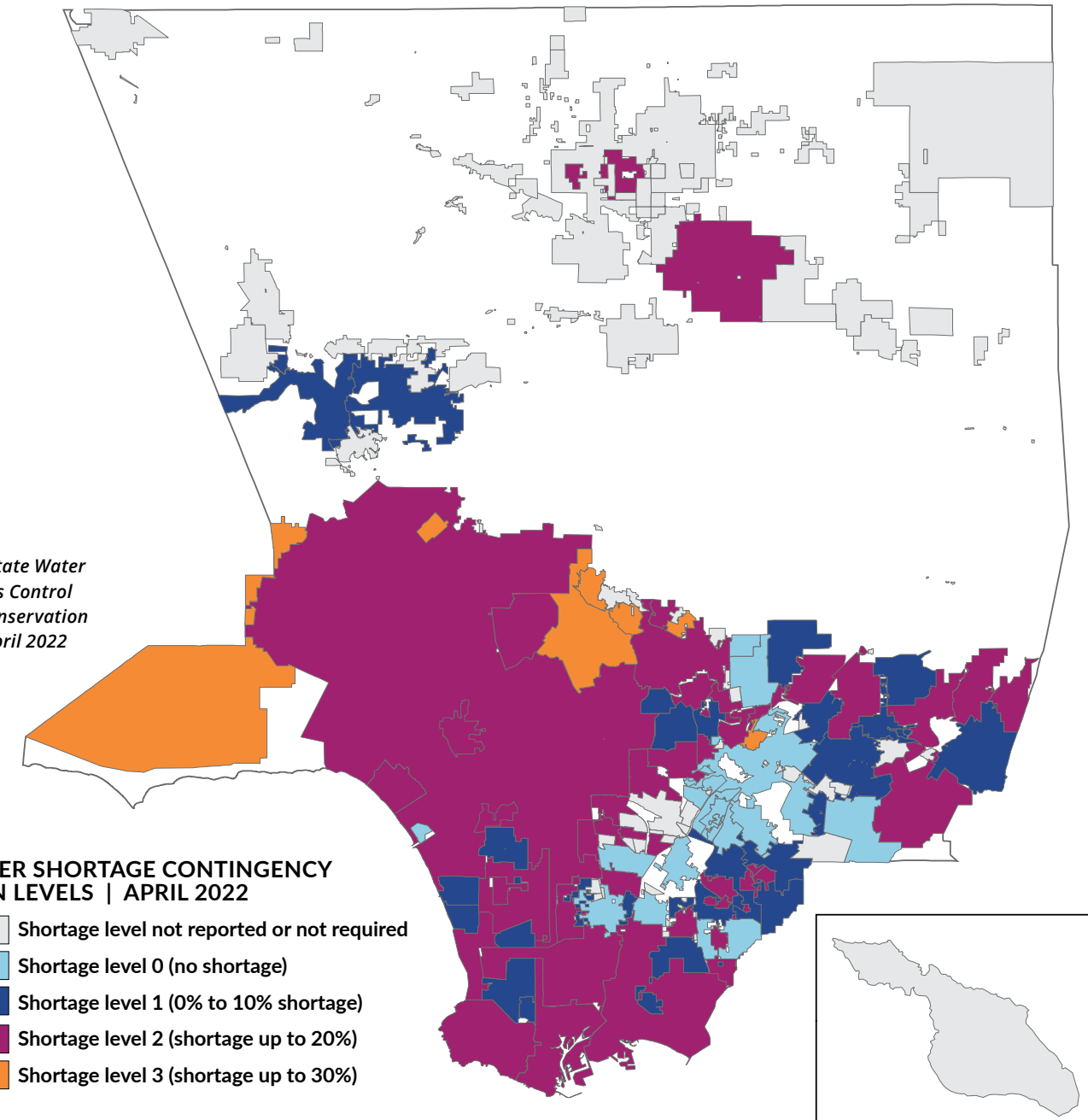
Facilitating access to water use efficiency data and training as well as ordinance coordination will help meet the target to **achieve 100% compliance with State Urban Water Use Objectives.**



Collaborating on consistent drought preparedness and response messaging

Given that people often live, work, and travel within different areas of Los Angeles County, speak different languages, and come from different cultures, collaboration between water agencies on messaging drought declarations and specific actions that the public can take to respond is critical in effectively preparing for and responding to aridification.

Why this strategy is needed



Source: State Water Resources Control Board Conservation Portal, April 2022

Variability in water supply conditions and shortage levels across the many water suppliers in Los Angeles County can create customer confusion and public messaging challenges.

Immediate public reduction in water use is the fastest way to respond to an existing drought; however, the opportunities to further reduce use in response to droughts becomes increasingly constrained as countywide normal water use efficiency continues to improve. Water supply agencies are finding it increasingly difficult to separate and elevate drought response messaging above regular messaging encouraging efficient water use as a way of life for Southern California. In addition, as shown in the above map, given the different water sources used by the over 200 water suppliers in Los Angeles County, there is often variability in drought conditions and associated public messaging that can create confusion for those living and working within different areas of the County.

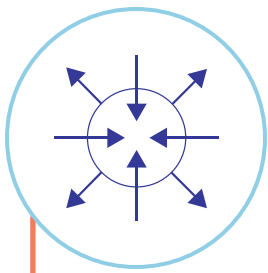
Actions to support this strategy

2.1 Collaborate on countywide drought response messaging that calls out steps that all water users in Los Angeles County can take, while directing the public to find the specific measures their water supplier is taking to respond to the local drought.

2.2 Expand upon ongoing efforts to create consistent messaging on the development of drought-resilient supplies.

LA COUNTY WATER PLAN Target Link

Improving regional drought messaging will help us collectively achieve our target to **meet 100% of water demands even in times of drought.**

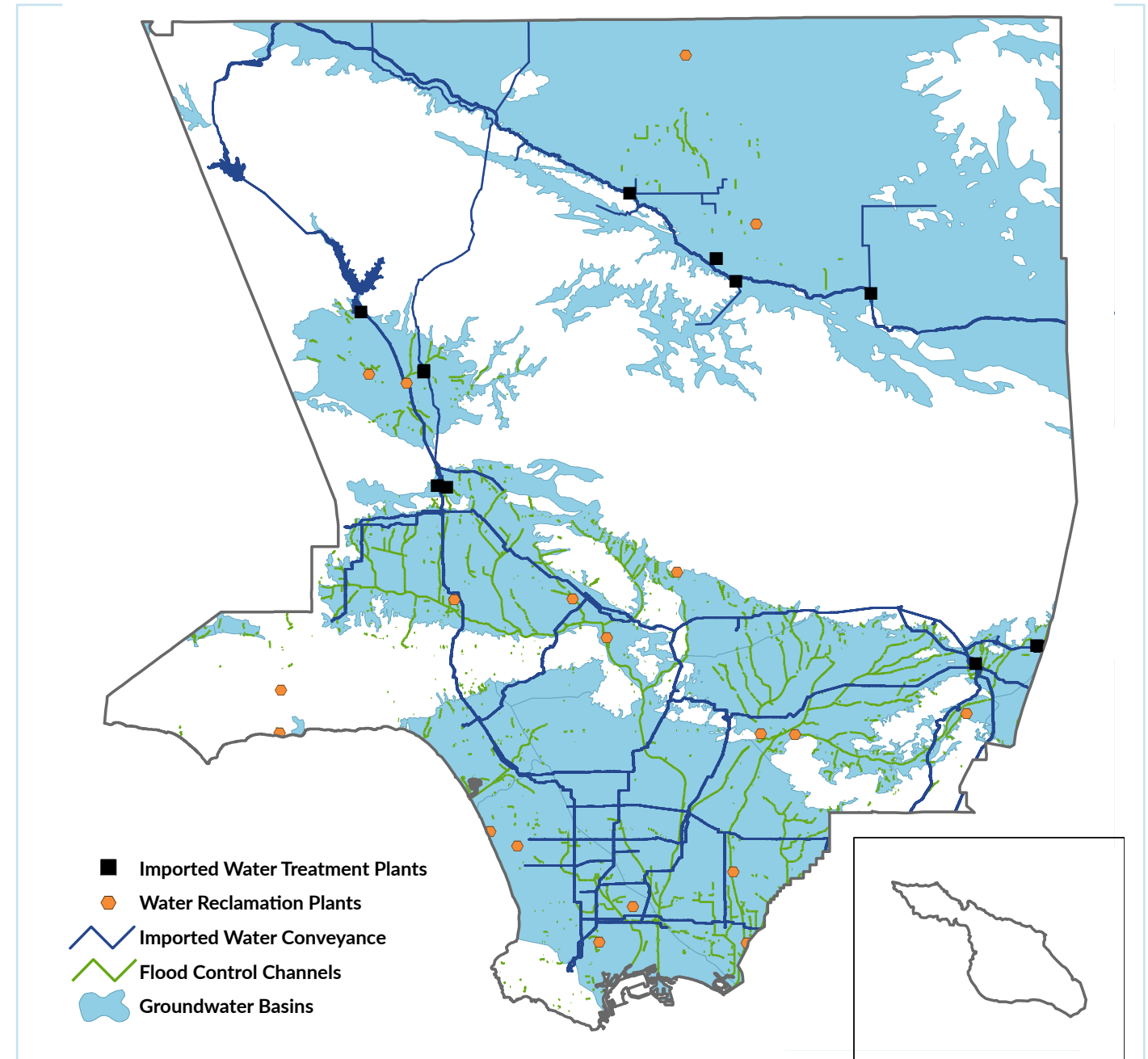


STRATEGY 3

Coupling local supply development with regional conveyance

Partnerships between agencies on local supply development and regional conveyance can increase the overall volume of local supply that can be used countywide, increase overall cost-effectiveness, and increase the potential for outside funding. Viewing and using existing water infrastructure networks in Los Angeles County as interconnected systems can provide opportunities, where appropriate, to better connect sources of supply to demands and/or storage. Examples of these types of efforts include regional recycled water programs and the Safe, Clean Water Program. This will improve regional reliability while also ensuring sustainable groundwater levels for communities that rely on local groundwater resources.

Why this strategy is needed



Los Angeles County has vast water infrastructure networks of conveyance and distribution systems, storage, and supply sources. Better connecting these networks can improve regional reliability.

The total amount of untapped local water supply potential in Los Angeles County is significant and could greatly reduce our dependence on imported water. Without economies of scale, stormwater and recycled water supply projects are often cost-prohibitive for individual water agencies to implement locally. While there has been great progress on advancing regional recycled water program concepts, there are further opportunities for collaboration on supporting local supply development for the benefit of the entire region through partnerships on regional conveyance and using existing infrastructure. Local supply development also offers opportunities for local projects that use our local workforce.

Actions to support this strategy

3.1 Explore options to improve feasibility of beneficial reuse of recycled water within the Antelope Valley and Upper Santa Clara River areas of Los Angeles County.

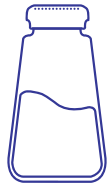
3.2 Encourage the use of Los Angeles County Flood Control District facilities to convey water supplies across Los Angeles County while mitigating known issues.

3.3 Promote use of smart technology (e.g., advanced metering infrastructure) to assess capacity and ability of wastewater systems to accept stormwater diversion flows in existing and planned infrastructure and to provide real-time controls and monitoring to more effectively conserve stormwater.

3.4 Promote use of both regional local supply development and distributed local supply development (e.g., cisterns, graywater systems in unsewered areas) and stormwater capture.

LA COUNTY WATER PLAN
Target Link

Connecting local supplies to local needs can provide alternative water supplies in alignment with the CWP target to **maximize ability to meet health and safety needs following an emergency by confirming 100% of small water systems have access to alternative sources of supply.**



STRATEGY 4

Managing salt and concentrate regionally

Regional cooperation is necessary to manage salt levels in our watersheds and groundwater basins. Concentrate management planning should accompany future regional recycled water program development. Collaboration with regulators to develop feasible options for regional concentrate management would help to maximize recycled water use as well as improve basin water quality.

Why this strategy is needed

Higher salinity levels in water is a result of industrial processing, groundwater cleanups, desalters, and purified water concentrate. Excessive salt limits a supply's beneficial use and can interfere with the operations of water and wastewater treatment plants. Concentrate, a byproduct of the advanced water treatment of groundwater and wastewater, is a commonly overlooked component of recycled water projects that can have significant ecological consequences and should be specifically considered for the planned expansion of regional recycled water programs in Los Angeles County.

Actions to support this strategy

4.1 Explore alternatives to restrictions on high total dissolved solids discharges to sewer systems and variable salinity water courses (e.g., Ballona Creek or Dominguez Channel), including measures to allow for salt cleanup projects and recover treatment costs for unavoidable salinity discharges (e.g., a salt surcharge).

4.3 Collaborate across water supply, groundwater cleanup, and recycled water programs to work with regulatory agencies on concentrate management permitting and regulations, across all areas of Los Angeles County.

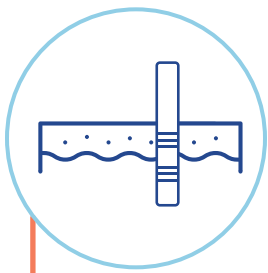
4.2 Explore development of regional conveyance for concentrates, including co-location of concentrate pipelines with regional recycled water conveyance pipelines, considering treatment, discharge permitting, and actual costs.

LA COUNTY WATER PLAN Target Link

Managing salt on a regional level, which is being done through Salt and Nutrient Management Planning efforts, will increase our ability to maximize recycled water for regional use and support the target to **increase local supply sources by 580,000 AFY.**



Brine from treatment processes is discharged to local evaporation ponds where salt is concentrated for disposal.

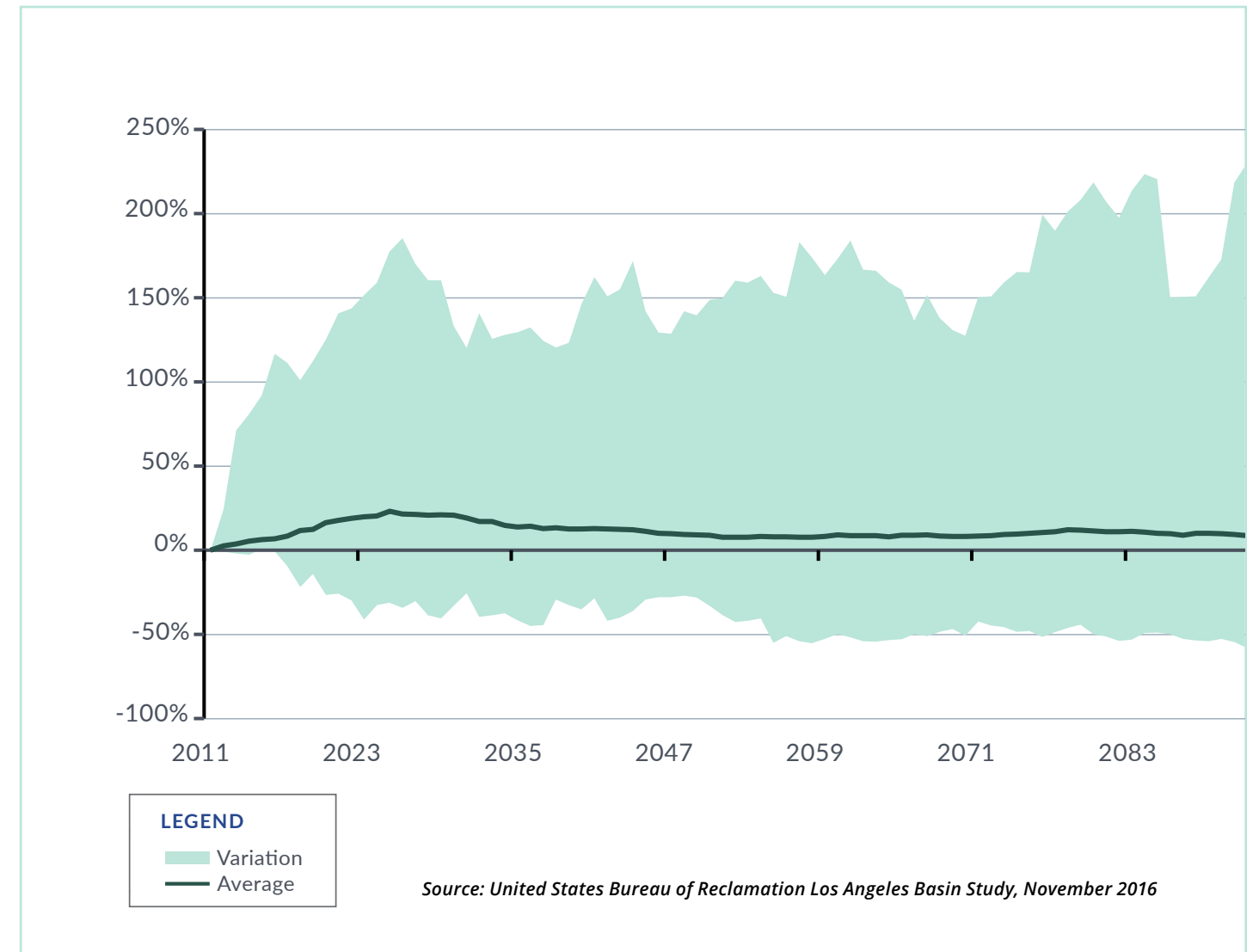


STRATEGY 5

Leveraging regional groundwater storage potential

Meeting all of Los Angeles County's water demands depends upon the use of groundwater basins that can provide water year-round, independent of the variability of precipitation events and surface flows. Since groundwater basins do not necessarily underly the communities with the greatest needs for dry year storage, identification of groundwater storage that can be accessed and delivered on a regional scale is necessary. Existing regional conveyance infrastructure (e.g., imported water) can be used as connections between groundwater basins that will allow for stored water to be conveyed across Los Angeles County.

Why this strategy is needed



Variability in Average Annual Stormwater Runoff (% change)

Groundwater basin recharge and storage potential vary from basin to basin across Los Angeles County. Most climate change models predict a decrease in the frequency of precipitation events and snowpack storage, as well as increases in the intensity of local precipitation events. These changes will necessitate enhancements in the collective ability to quickly capture and store larger volumes of water for use over extended periods of time. Additionally, planned and future regional water recycling programs are expected to produce a consistently large volume of supply that will need to be stored in groundwater basins. Coordination on timing of stormwater and recycled water recharge at centralized groundwater recharge facilities will be critical.

Actions to support this strategy

5.1 Facilitate development of regional banking agreements that promote increased groundwater replenishment and production, as well as infrastructure interconnections and enhancements to improve access to regional storage across Los Angeles County.

5.3 Engage in regional discussion of shared local water rights concerns and basin adjudication-based exporting restrictions.

5.2 Expand regional Antelope Valley groundwater banking partnerships by assessing alternatives to mitigate capacity constraints of using imported water aqueducts that connect Antelope Valley to the Los Angeles Basin.

LA COUNTY WATER PLAN Target Link

Improving use of groundwater basins for storage supports the target to **maximize ability to meet health and safety needs following an emergency by maintaining access to 6 months of emergency supply.**



STRATEGY 6

Collaborating on water quality needs and treatment technologies

Improving the efficacy and cost-effectiveness of treating impaired water is a key strategy for enhancing the reliability of regional water supplies. As legacy pollutants and new constituents of concern are regulated, and water supply sources and systems become more integrated, new challenges and innovations in water quality treatment and management processes have emerged. Economies of scale and enhanced efficiencies can be achieved through technology sharing and regional collaboration.

Why this strategy is needed

The cost of treating and testing water to meet water quality regulations for potable use is a significant portion of the overall water rate passed along to customers. In many areas within Los Angeles County, the treatment of locally generated, drought-resilient supplies, such as recycled water and groundwater, to a level of potable quality can drive the unit cost above imported water. This can create a disincentive to develop local supply when imported water is cheaper. Many new treatment technologies and projects are developed and permitted in isolation of each other, limiting the ability to leverage knowledge and resources. Information sharing will also improve local workforce knowledge.

Actions to support this strategy

6.1 Facilitate partnerships and information sharing between agencies within Los Angeles County to improve water treatment efficiency and cost through collaboration on piloting of and training for new technologies, working with drinking water regulators, sharing of information, lab sharing for emerging contaminant sample analysis (e.g., per- and polyfluoroalkyl substances (PFOS/PFOA)), public outreach, and leveraging of staff and funding resources. This action also supports Strategy 7.

6.3 Advocate for State emerging contaminants source control policy and funding.

6.2 Collaborate proactively with Regional Water Quality Control Board(s) to provide a consistent regional voice on National Pollutant Discharge Elimination System permitting and future water quality regulations.

LA COUNTY WATER PLAN Target Link

Partnering on treatment initiatives and regulatory collaboration will decrease the overall costs to individual agencies and support the target **to improve drinking water equity and affordability so that the cost for water to meet health and safety needs does not exceed 2.5% of the median household income of severely disadvantaged communities.**



Source: City of Los Angeles Bureau of Sanitation

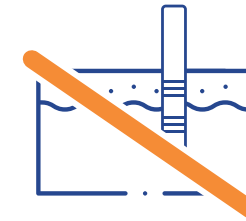
There are many efforts to maximize water recycling throughout Los Angeles County including the City of Los Angeles' plan to maximize beneficial reuse of Hyperion Water Reclamation Plant flow.



Enhancing cost-effectiveness of pumping and treating impaired groundwater

Improving production, cost-effectiveness, and accessibility to unused impaired groundwater supplies will allow for increased groundwater production and supply reliability for many communities across Los Angeles County. Regional collaboration on designating poor quality development zones could facilitate the development of production enhancement plans as well as find partnership implementation opportunities that can increase workforce training and funding.

Why this strategy is needed



122 wells are offline due to impaired groundwater*

The lost volume of groundwater is **37,000** acre-feet per year



The cost to treat impaired groundwater is **200%** more than imported water

*Source: Groundwater Ambient Monitoring and Assessment Program (GAMA)

Stranded groundwater accounts for a significant amount of potential new supply throughout Los Angeles County but treatment of that groundwater can be expensive relative to importing water.

Local groundwater can be stranded (or unused) because it is often poorer quality water that requires more intensive and cost-ineffective treatment and/or conveyance to be useful as a source of supply. There are several areas in Los Angeles County where the ability to fully maximize groundwater basin potential for both supply and storage has been limited due to water quality issues from seawater intrusion, legacy contamination, increased operating costs for small systems, and impaired water plumes as well as changing water quality regulations and recharge project supplies. Additionally, greenhouse gas emissions could be reduced with future technologies that require less energy to pump or treat groundwater. Many of these groundwater basin areas underly small and at-risk systems that do not have the resources to develop and implement the necessary production enhancement plans to access that water supply.

Actions to support this strategy

7.1 Facilitate partnerships and information sharing between agencies within Los Angeles County to improve water treatment efficiency and cost through collaboration on piloting and training for new technologies, working with drinking water regulators, sharing of information, lab sharing for emerging contaminant sample analysis (e.g., PFAS/PFOA), public outreach, and leveraging of staff and funding resources. This action also supports Strategy 6.

7.3 Explore opportunities to use existing remediation operations as a potential water supply source.

7.4 Facilitate partnerships on regional treatment funding and financing opportunities, prioritizing supply diversity, water quality, and resilience of small at-risk systems.

LA COUNTY WATER PLAN Target Link

By working together with existing remediation initiatives and regulators on poor water quality development zones, we can work toward our target to **optimize production of groundwater by increasing production in areas overlying impaired groundwater by 18,000 AFY.**



STRATEGY 8

Protecting coastal groundwater basins from seawater intrusion

Groundwater basins located along Los Angeles County's coastline will need continued protection to limit the continued pressure of seawater intrusion from sea level rise that is predicted to result from climate change. Although existing barriers are solely owned and operated by the Los Angeles County Flood Control District, they benefit multiple agencies, Tribes, communities, and other stakeholders throughout Los Angeles County. As such, the ability to maintain and possibly further enhance protections and groundwater supply could benefit from regional collaboration.

Why this strategy is needed



In coastal aquifers, seawater can move into freshwater aquifers and contaminate potable groundwater supplies if groundwater levels have decreased relative to sea level. Maintaining and optimizing our seawater barriers to prevent seawater intrusion is increasingly important as the sea level rises.

Some coastal groundwater basins in Los Angeles County are protected from seawater intrusion by rows of injection wells that pump freshwater in groundwater basins near the coast to form a barrier that pushes seawater away from the groundwater basin while enhancing groundwater supplies. Without these barriers, saltwater could infiltrate coastal aquifers and contaminate groundwater supplies. In addition to more intense and less frequent storm events and more frequent and more intense droughts, climate change models are also predicting sea level rise. Seawater barrier facilities and operations will need to continue to adapt to meet the challenges of climate change and the need to fully leverage groundwater basin recharge and storage.

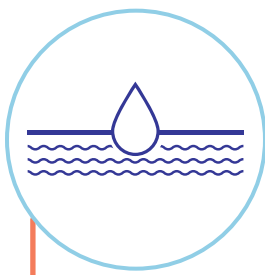
Actions to support this strategy

8.1 Determine vulnerability of barrier programs to seawater intrusion as a result of future sea level rise and evaluate opportunities to optimize barrier system operations.

LA COUNTY WATER PLAN
Target Link

Protecting our coastal groundwater basins from future sea water intrusion is critical to meeting the target to **optimize production of groundwater by maintaining at least 700,000 AFY baseline groundwater production.**

8.2 Explore partnership opportunities to create further investments and increase recharge potential at barriers to enhance protection and increase groundwater supply.



STRATEGY 9

Facilitating regional groundwater recharge understanding and initiatives

Groundwater basins in Los Angeles County are managed locally and independent of each other. Collaborating to improve understanding of inter-basin flows and manage groundwater basins from a regional perspective while addressing mutual challenges will assist in maximizing groundwater supply and storage potential.

Why this strategy is needed

Although Los Angeles County is home to numerous regional groundwater recharge facilities and programs, there is a significant amount of uncaptured stormwater, recycled water, and wet year imported water that is not yet recharged into local groundwater basins. The ability to increase centralized groundwater recharge beyond current operations can be limited due to shared concerns such as retaining recharge water within local groundwater basins, regulatory issues around potential impacts to groundwater remediation operations, and the maintenance activities at spreading ground facilities to maximize recharge potential.

Actions to support this strategy

9.1 Facilitate collaboration between groundwater basins within Los Angeles County to share information, resolve common impediments, and provide consistent guidance that will facilitate increased potential for groundwater recharge and accounting of anticipated and realized benefits provided.

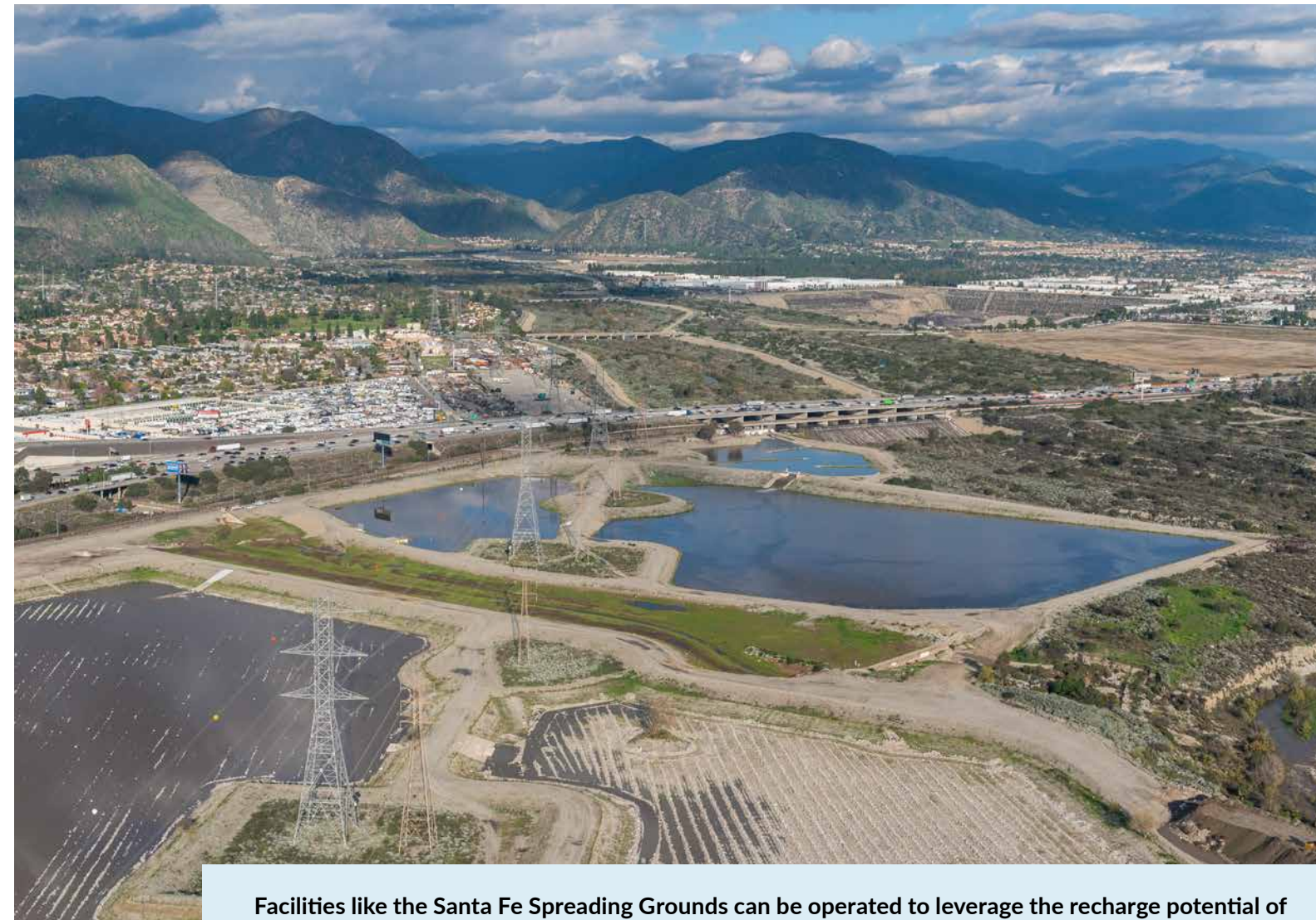
9.3 Work collaboratively with regulatory agencies to most effectively advance permitting processes and facilitate further enhancement of groundwater recharge potential.

9.2 Create a consolidated groundwater basin data platform that highlights geohydrologic interconnections and flows with an information sharing system for use to develop regional storage and groundwater management partnerships.

9.4 Acknowledge Los Angeles County Flood Control District's Sediment Management Strategic Plan to maximize recharge facility capture and infiltration rates and efforts to remove invasive species to improve groundwater recharge.

LA COUNTY WATER PLAN Target Link

Collaboration between Los Angeles County's groundwater basin managers can improve overall understanding of interconnectivity and opportunities for regional initiatives that help meet the CWP target to **increase groundwater recharge and storage by enhancing regional facility recharge by 250,000 AFY.**



Facilities like the Santa Fe Spreading Grounds can be operated to leverage the recharge potential of local surface and recycled water supplies as well as additional imported water when available.



STRATEGY 10

Facilitating natural infiltration of precipitation

Collectively, local stormwater efforts can work to increase the overall permeability of County lands, create nature-based recharge opportunities, and potentially allow for local supply development while providing multiple benefits such as improving environmental water quality, ensuring adequate water supplies to ecosystems, and providing greening and recreational opportunities. Certain programmatic initiatives to increase decentralized stormwater recharge are managed locally and through the Los Angeles County Flood Control District's Safe, Clean Water Program. Further regional collaboration between stormwater and groundwater managers will help to facilitate implementation and maximize benefits.

Why this strategy is needed

Large parts of Los Angeles County are urbanized with impermeable surfaces like buildings, roads, and parking lots. Impermeable surfaces do not allow precipitation or stormwater runoff to infiltrate naturally into groundwater basins and may reduce local stormwater capture and groundwater recharge. Implementing projects that increase stormwater recharge of groundwater basins can be challenging due to limited understanding of and/or disagreement over surface water rights as well as concerns about the infiltration of poor-quality surface water impacting groundwater basin water quality.



Although the majority of the Los Angeles River flows within engineered flood control channels, there are sections that allow for natural infiltration to occur.



Actions to support this strategy

10.1 Facilitate recharge partnerships between stormwater and groundwater managers by enhancing understanding of surface water rights and stormwater.

10.2 Conduct decentralized facility infiltration water quality impact analysis for groundwater basins to determine parameters for facility implementation and/or mitigation for changes to water quality.

LA COUNTY WATER PLAN
Target Link

Improving collaboration between stormwater and groundwater managers can improve the feasibility of implementing projects that will help meet the target to **increase groundwater recharge and storage by increasing decentralized infiltration by 80,000 AFY.**



STRATEGY 11

Providing regional support for small, at-risk water systems

A regional program to identify and support small, at-risk, potentially at-risk, and failing systems within Los Angeles County, including independent systems and private wells, would provide a better understanding of each system’s unique needs, improve drinking water equity, increase workforce training, leverage funding opportunities, and tailor strategies to create longer-term resilience and higher-quality supplies.

Why this strategy is needed

	Failing	At-Risk	Potentially At-Risk
Water Systems	11	23	33
Population	11,722	249,198	512,463
Funding Since 2017	\$995,000	\$500,000	\$2,738,793

Source: State Water Resource Control Board SAFER Program as of June 2022 (data updated daily)

There are a number of smaller, at-risk systems in Los Angeles County that could benefit from a regional support program.

Many small, at-risk systems serve under-resourced communities within Los Angeles County. As a result, these communities are at a higher risk of not receiving the same level of drinking water quality and reliability as other communities within Los Angeles County. Compliance with regulated drinking water standards can still result in inequities in the taste, color and odor of water served. Although small, at-risk systems in Los Angeles County can be regulated by multiple entities, the SWRCB Division of Drinking Water is the only entity currently documenting underperforming systems through reporting of maximum contaminant level exceedances (e.g., Safe and Affordable Funding for Equity and Resilience program). Identifying systems that are at risk of providing poor water quality, unreliable supply, cybersecurity threats, and excessive cost to ratepayers can be more challenging at the state level. Additionally, there is limited regulatory oversight to ensure that these water systems are receiving enough revenue to adequately maintain their infrastructure. Currently, the primary strategy fostered by the SWRCB to mitigate underperforming water systems is consolidation

into larger, adjacent systems. This strategy is not always applicable in more rural areas of Los Angeles County given the isolated locations of some small water systems (e.g., those in the Antelope and Santa Clarita Valleys), nor necessary if adequate supportive strategies are in place.

LA COUNTY WATER PLAN
Target Link

Providing direct support to smaller at-risk water systems through a focused, voluntary regional program will greatly increase the ability to meet the CWP target that seeks to **reduce at-risk systems by 100%**.

Actions to support this strategy

11.1 **Initiate a voluntary Small, At-Risk System Support Program or programs to promote small water system resiliency**, not just address near-term emergency needs.

11.4 **Develop program to map, monitor, address, and alert the public to drinking water quality issues** that originate from on-site plumbing issues including monitoring for color and odor issues in premise plumbing, especially in under-resourced communities.

11.2 **Identify “at-risk” systems and technical, managerial, and financial needs** by collecting existing data (such as the County Department of Public Health’s ongoing system inspection (i.e., annual sanitary surveys)) and assessment program reports, drawing upon the United States Environmental Protection Agency technical, managerial, and financial assessment guidance.

11.5 **Encourage all Los Angeles County water agencies to adopt and implement hazard mitigation plans** and to join the California Water/Wastewater Agency Response Network (CalWARN).

11.3 **Facilitate Small, At-Risk System Support Program** to provide administrative and technical advisory support to purveyors identified in Action 11.2 to take a range of resiliency actions (e.g., create Water Master Plan and asset management program, ensure workforce succession planning, establish and check interconnections, ensure emergency storage, enhance cybersecurity, acquire emergency generators, provide resources for grant applications, regulatory compliance, and existing operations and maintenance, etc.).

11.6 **Expand local agency participation in Water Information Sharing and Analysis Center** to access the latest cybersecurity strategies.

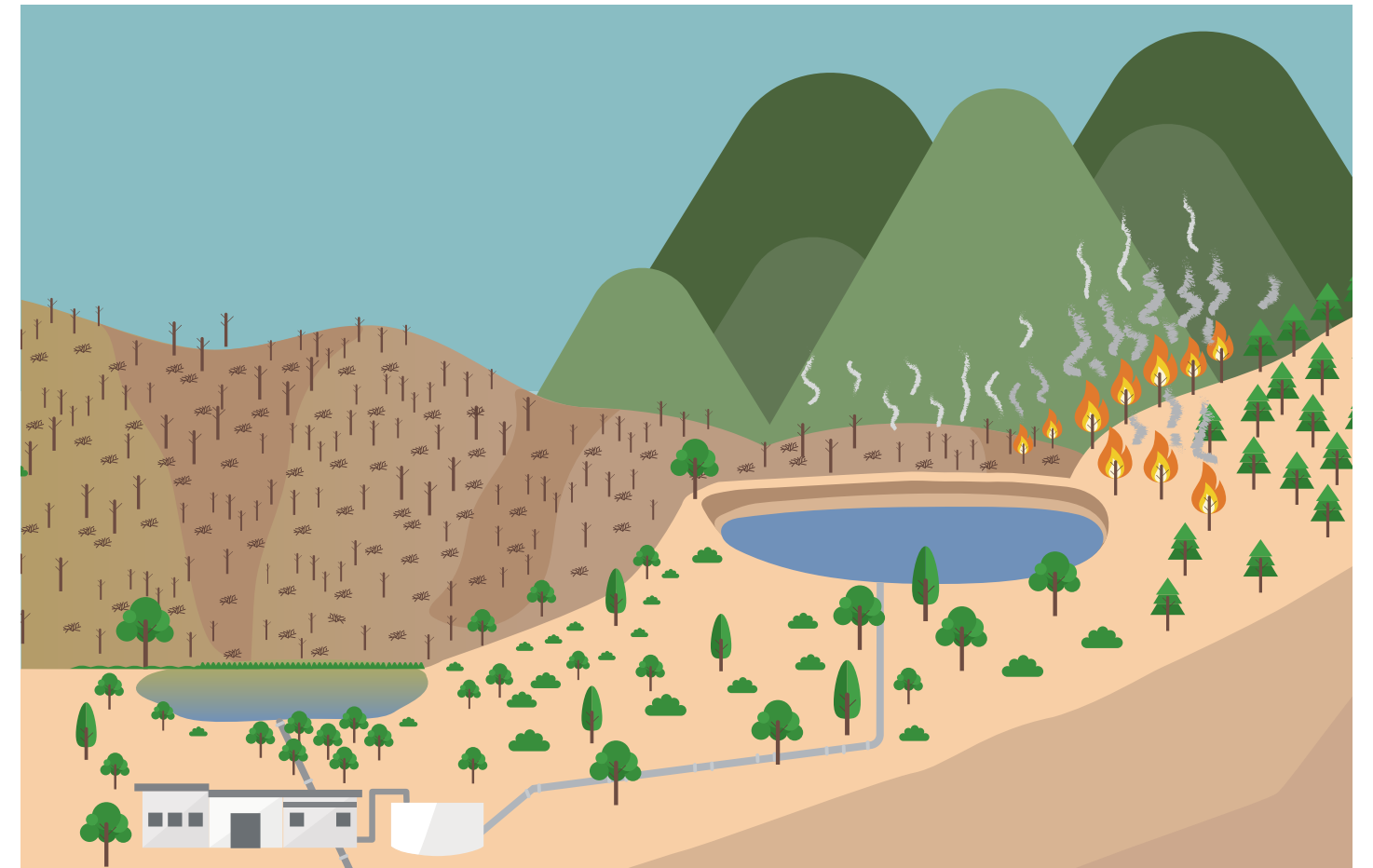


STRATEGY 12

Mitigating wildfire effects on water supply and quality

Collaboration between water and land management entities on sharing information, planning ahead, supporting existing efforts, and implementing measures can leverage regional resources to help mitigate the impacts of wildfire on both drinking water supply and environmental water quality. Land management entities and fire management groups have the primary responsibility for wildfire prevention, however there are ways that the water management community can support and enhance those efforts.

Why this strategy is needed



Ash, debris, fire retardant, and other contaminants can impair surface water supplies during and after wildfire events through erosion and sediment transport.

Wildfire frequency and intensity has been increasing across Los Angeles County and is a cause of great concern for water supplies and environmental water quality. Wildfires can interrupt power supply and damage infrastructure, directly impacting the ability to maintain water and wastewater systems during and after events. Wildfires increase pollutant loads and decrease watershed infiltration that can lead to flooding, erosion, and mass wasting of watershed lands – impacting communities as well as the quantity and quality of water resources.

LA COUNTY WATER PLAN Target Link

Working with land and fire managers on reducing the potential for and the water resource impacts from wildfires starts with the CWP target to **confirm 100% of water management agencies within the wildland-urban interface are implementing a wildfire resilience or mitigation plan.**

Actions to support this strategy

- 12.1 Organize a regional wildfire prevention collective** that brings together water, land, and fire managers and Tribes to collaborate, share information, and explore opportunities for mutually beneficial watershed management programs and projects (e.g., fuel reduction, invasive species removal, healthy headwaters, post-fire monitoring) for both riparian and upper watershed areas.
- 12.2 Create a programmatic permitting tool/process with the United States Army Corps of Engineers for the 404 permit** for fuel reduction measures that applies to the entire County, with the Regional Water Quality Control Boards for the 401 Water Quality Certification, and with the Coastal Commission for the Coastal Development Permit.
- 12.3 Enhance existing low water use landscaping education programs** to include fire-scaping with information on species that contribute to wildfire spread (e.g., eucalyptus, palms, rosemary), fire starts, firesafe planting standards, landscaping choices, and water collection systems for use during fires.
- 12.4 Collaborate on identifying and pursuing funding opportunities** to support regional wildfire prevention programs.
- 12.5 Enhance existing hazard mitigation plans to include regional fire management strategies** for agencies located within wildland-urban interfaces.
- 12.6 Advocate for modifications to existing air quality regulations** that allow water agencies to run emergency generators longer during fire events to maintain water supply.
- 12.7 Explore potential land, trail, and forestry management efforts** on wildfire prevention in upper watershed areas as well as along transportation and utility corridors to remove ignition sources as well as existing firefighting efforts to minimize dispersal in riparian areas.
- 12.8 Support efforts exploring alternatives to fire retardants containing PFAS/PFOA** that may run off into streams and spreading grounds.



STRATEGY 13

Managing invasive species in riparian areas

As many water resources related agencies also manage some watershed riparian areas, there is an opportunity for regional collaboration between watershed land and water management entities on invasive species removal done in an ecologically sensitive manner that restores native habitat. Removal of invasive species can be facilitated by wildfires and flooding if additional measures are taken following these events to fully remove and replant native species within damaged areas.

Why this strategy is needed

While any type of invasive species can create watershed issues, those that infiltrate riparian corridors are of particular concern to Los Angeles County's water resources. Riparian invasives (e.g., *Arundo donax*, tamarisk, black mustard, etc.) can dramatically deplete surface water supplies relative to native species and are also known contributors to wildfire ignition and spreading potential. Removal of invasives and replanting with native species in riparian areas is a time-sensitive and cost-intensive process that needs to be maintained over time to remain effective.

Actions to support this strategy

13.1 Enhance existing Weed Management Area for Greater Los Angeles to serve as an overall invasive management decision team with tiers of information sharing to support coordination among agencies (permitting, resource sharing, defensible space guidelines, etc.) with state and federal involvement and an invasive land coordinator.

13.4 Explore collaboration with United States Army Corps of Engineers, United States Forest Service, state and national parks, individual cities, nonprofits, Tribes, and private landowners in invasive species removal and native planting in watershed areas managed by water and flood control agencies.

13.2 Share information on areas with invasive species of mutual concern across Los Angeles County as well as planning initiatives, programs, and measures being taken to reduce invasives in riparian areas.

13.3 Consider initiating an annual regional invasive species removal program and post-fire program to improve soil quality and reduce repropagation, further spreading, and biomass fuels.

LA COUNTY WATER PLAN
Target Link

Enhancing and growing existing efforts to reduce invasive species as well as taking advantage of post-fire conditions will help to meet our targets to **reduce fire-contributing species in riparian areas by 2,900 acres.**



Invasive plant species, such as *Arundo donax*, can increase the potential for wildfire ignitions as well as contribute to increased rates of wildfire spread and intensity.

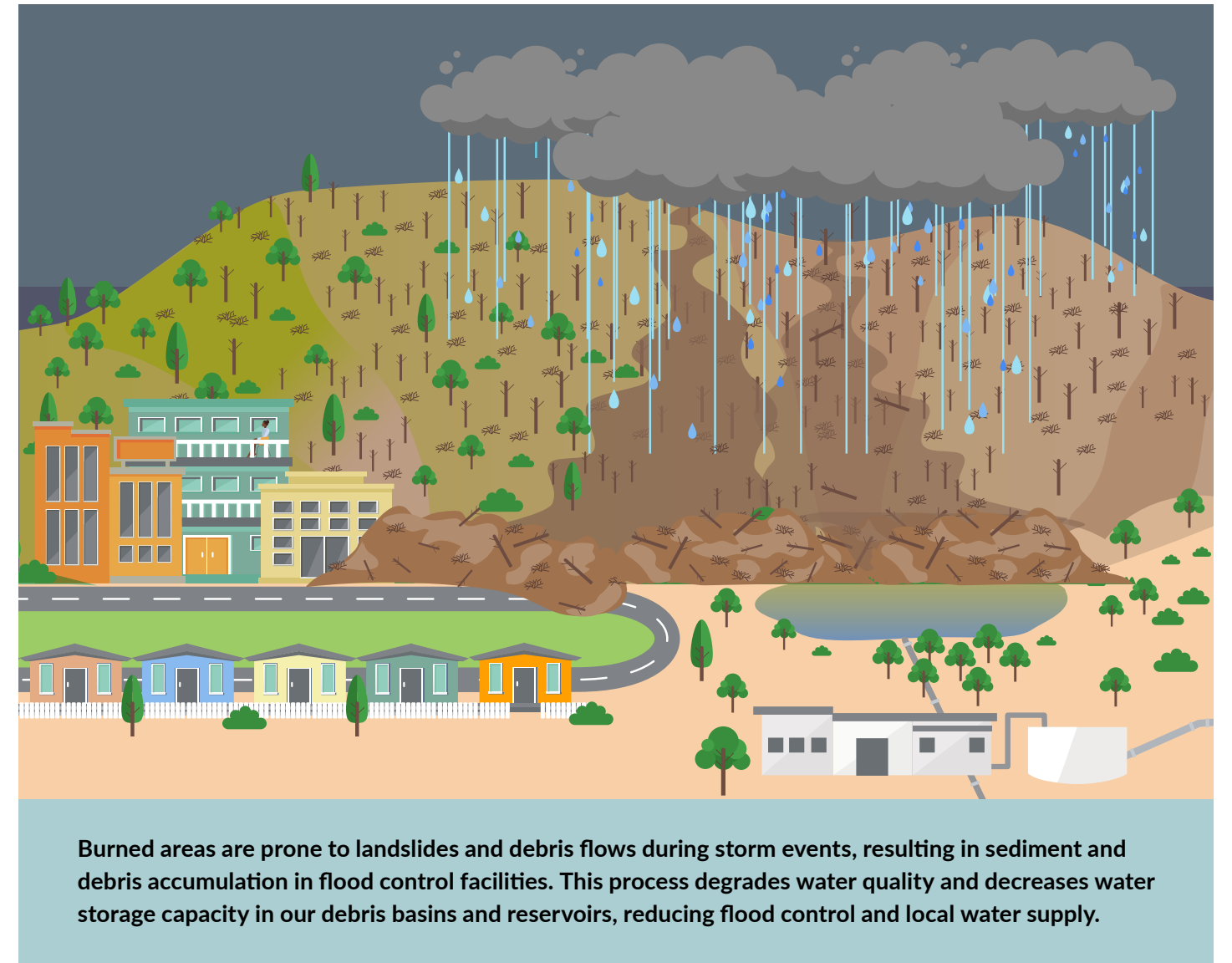


STRATEGY 14

Facilitating sediment management and debris removal from flood control facilities

Regular and enhanced post-wildfire maintenance (e.g., removal of debris and management of sediment) of debris basins and reservoir facilities is critical to maximizing post-wildfire protection and enhancing regional water supplies. Improving prediction of wildfire-related sediment and debris loading impacts, as well as fostering regional support of the actions necessary to mitigate those impacts, will allow for enhanced flood risk mitigation and water supply benefits for the entire region.

Why this strategy is needed



Burned areas are prone to landslides and debris flows during storm events, resulting in sediment and debris accumulation in flood control facilities. This process degrades water quality and decreases water storage capacity in our debris basins and reservoirs, reducing flood control and local water supply.

Burned areas are vulnerable to flash flooding and debris flows. Following large storm events, sediment and debris can accumulate in flood control facilities, resulting in reduced water storage capacity. The Los Angeles County Flood Control District captures and manages the majority of stormwater flows across Los Angeles County to protect communities from flood damage and increase capture of local water supplies. Eroded sediment and debris are collected and retained by a network of debris basins, reservoirs, and flood control channels, which support recharge of stormwater, recycled and imported water. The ability for the facilities to retain post-wildfire flows as well as facilitate recharge requires consistent removal of accumulated debris and vegetation growth which is often challenging given regulatory constraints and community concerns.

Actions to support this strategy

14.1 **Improve modeling and weather forecasting** to predict the risk of sediment-laden flows after wildfires.

14.4 **Promote continuous dialogue and engagement with Tribes, communities, and other stakeholders to learn about community needs and exchange ideas** on the importance of sediment management to maintain flood protection.

14.2 **Increase understanding of how debris flows and fires** impact percolation rates.

14.3 **Work collaboratively with regulatory agencies** to develop flexible approaches that recognize and allow for the removal of vegetation necessary for maintaining effective water supply and flood management infrastructure.

LA COUNTY WATER PLAN
Target Link
 Improving the understanding of post-fire impacts as well as facilitating effective debris basin management will help to achieve our target to **maintain a minimum of 75% of available capacity in all debris basins and 80% of average available capacity in reservoirs.**

ALIGNING TARGETS AND STRATEGIES

Strategies	Targets															
	A. Achieve 100% compliance with State Urban Water Use Objectives	B. Increase local supply sources by 580,000 AFY	C. Meet 100% of water demands even in times of drought	D. Maintain access to 6 months of emergency supply	E. Maintain at least 700,000 AFY baseline groundwater production	F. Increase production in areas overlying impaired groundwater by 18,000 AFY	G. Enhance regional facility recharge by 250,000 AFY	H. Increase decentralized infiltration by 80,000 AFY	I. Reduce at-risk systems by 100%	J. Improve drinking water equity and affordability	K. Reduce color, taste, and quality issues by 50%	L. Confirm 100% of small water systems have access to alternative sources of supply	M. Reduce fire-contributing species in riparian areas by 2,900 acres	N. Reduce human-caused ignitions by 50%	O. Maintain 75% capacity in all debris basins and 80% capacity in reservoirs	P. Implement a wildfire resilience or mitigation plan
1: Achieving the most efficient water use possible countywide	✓		✓						✓							
2: Collaborating on consistent drought preparedness and response messaging	✓		✓						✓							
3: Coupling local supply development with regional conveyance		✓	✓	✓	✓		✓		✓	✓		✓		✓		
4: Managing salt and concentrate regionally		✓	✓		✓	✓	✓			✓		✓				
5: Leveraging regional groundwater storage potential		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓			✓	
6: Collaborating on water quality needs and treatment technologies		✓	✓		✓	✓	✓	✓	✓	✓	✓				✓	
7: Enhancing cost-effectiveness of pumping and treating impaired groundwater		✓	✓		✓	✓	✓		✓	✓	✓	✓			✓	
8: Protecting coastal groundwater basins from seawater intrusion		✓	✓	✓	✓	✓	✓		✓							
9: Facilitating regional groundwater recharge understanding and initiatives		✓	✓	✓	✓	✓	✓		✓	✓	✓	✓			✓	
10: Facilitating natural infiltration of precipitation		✓	✓	✓	✓			✓	✓				✓		✓	
11: Providing regional support for small, at-risk water systems	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
12: Mitigating wildfire effects on water supply and quality		✓			✓	✓	✓	✓	✓				✓	✓	✓	✓
13: Managing invasive species in riparian areas		✓	✓				✓	✓	✓				✓	✓	✓	✓
14: Facilitating sediment management and debris removal from flood control facilities		✓	✓	✓	✓		✓			✓			✓	✓	✓	

Additional information about Targets is available in Appendix B.



CHAPTER 4 WORKING TOGETHER FOR A RESILIENT WATER FUTURE

The CWP is more than this initial document – it is a dynamic planning and policy platform rooted in the spirit of fostering ongoing regional collaboration.

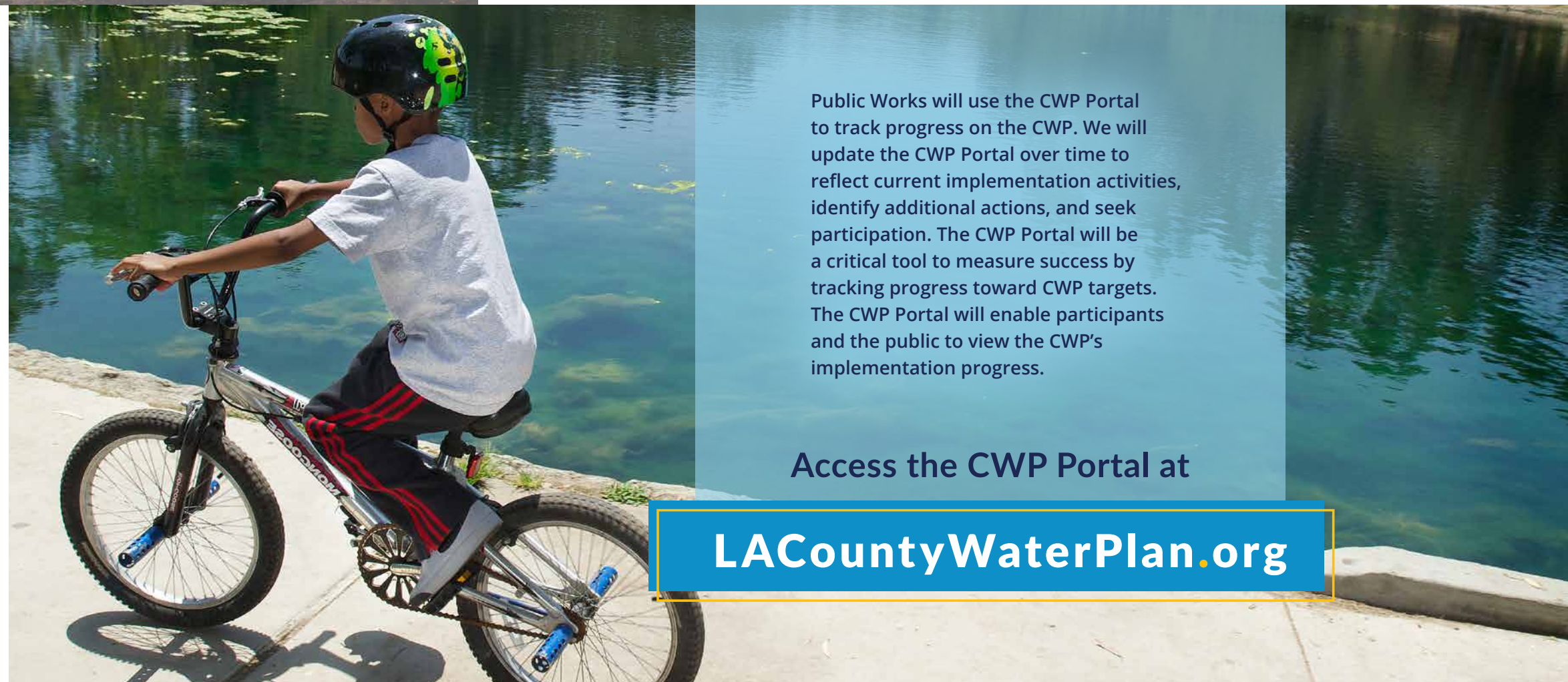
Our values, including considering equitable benefits and comprehensive impacts of water resource management decisions, will continue to drive our progress. The success of this planning effort will continue to involve water management entities and stakeholders working together with facilitation by Public Works, to realize our shared vision for future water resilience.

Facilitating CWP Implementation

Public Works is committed to facilitating continued collaboration and success toward CWP targets, strategies, and actions, and tracking and reporting progress. Following CWP adoption, Public Works will initiate implementation of the CWP. Our overall focus will be on bringing together participants and resources to fulfill the vision of the CWP. Our role is to lead and facilitate the CWP implementation, which will consist of three primary tasks: (1) develop and implement two-year Action Plans, (2) continue collaboration with stakeholders, and other planning efforts, and (3) track and share progress.

Public Works will actively solicit participation in the CWP implementation from stakeholders, leveraging the IRWM programs as well as other forums. The CWP Portal will be used to seek and facilitate participation, highlighting opportunities for interested parties to get involved. Plan implementation will be adaptively managed and informed by engagement with stakeholders.

As water resource needs and opportunities in Los Angeles County continue to evolve, so will the CWP. Based on valuable input from stakeholders, other topics are expected to be explored in future iterations.



Public Works will use the CWP Portal to track progress on the CWP. We will update the CWP Portal over time to reflect current implementation activities, identify additional actions, and seek participation. The CWP Portal will be a critical tool to measure success by tracking progress toward CWP targets. The CWP Portal will enable participants and the public to view the CWP's implementation progress.

Access the CWP Portal at

LACountyWaterPlan.org

IMPLEMENTING TWO-YEAR ACTION PLAN

Additional resources will be required to implement the Plan. Public Works' first implementation step will therefore be to pursue resources to establish and facilitate task forces that could advance specific actions. As part of CWP implementation, Public Works will maintain an Action Plan, which identifies the specific steps to advance progress on CWP actions within a two-year period. Where appropriate, Public Works may directly lead an action. More often, Public Works will primarily serve to encourage the collaboration among the Task Force, including engagement with other water management entities and stakeholders to support each action, as applicable. Public Works, in collaboration with partners and stakeholders, will aim to update the Action Plan every two years, building on prior accomplishments and considering the evolving water management needs, interests,

other long-term stable funding sources. The CWP is intended to provide general direction, including collaborative targets, strategies, and actions. Nothing in the CWP should be construed as a commitment by any participating entity to fund the implementation of any specific actions identified herein. Adoption of the CWP is not intended to serve as approval or authorization for any specific activity that would be considered a project under the California Environmental Quality Act (CEQA).

CONTINUING COLLABORATION

Public Works will continue to work in concert with IRWM regions to implement the CWP, in particular to engage stakeholders and enhance the dialogue on additional opportunities to build resilience through regional collaboration. To support progress on the Los Angeles County targets established in the OurCounty Sustainability Plan, we will coordinate with the County Chief Sustainability Office on implementing strategies and actions to advance our mutual goals. We will also coordinate with and leverage Infrastructure LA, an existing countywide initiative leading regional collaboration to bring resources, including funding, to Los Angeles County. As a sister program to other Public Works-led programs like the Safe, Clean Water Program, the CWP implementation will also seek opportunities to work collaboratively with those efforts.

SHARED PROGRESS

Public Works will track continued progress toward the CWP targets and share this progress on the CWP Portal. To track long-term progress towards meeting the CWP targets, Public Works will lead a collaborative process to collect data and information from entities throughout the County and State, leveraging the CWP Portal as well as outside data management platforms.

To encourage continued participation and highlight CWP successes, CWP annual implementation updates will be provided on the CWP portal. The updates will highlight specific programmatic or project accomplishments throughout Los Angeles County that support CWP regional targets and strategies, including both those undertaken through the CWP and through other local and regional efforts.



and opportunities of Los Angeles County. The current Action Plan is included as Appendix A. The two-year Action Plan provides specifics to support the pursuit of the necessary resources to advance each action. The CWP is intended as a planning tool, or guide, for the development of a shared, inclusive, regional path forward to sustainably and equitably achieve safe, clean, and reliable water resources for Los Angeles County. The CWP is a living document which contains concepts that will only become a reality if agencies, Tribes, and stakeholders continue to collaborate effectively and secure corresponding resources. The CWP is subject to change based on the changing needs of the region, new technologies, future legislation and regulations, the continued cooperation of participating entities, and the availability of state, federal, and

Engaging in CWP Implementation

All stakeholders with an interest in water resources management in Los Angeles County have a role to play in realizing the vision of the CWP. There are opportunities to participate and engage in all three tasks of CWP implementation.

CWP IMPLEMENTATION TASK	HOW TO GET INVOLVED
Implement Two-Year Action Plan	<ul style="list-style-type: none"> Leading or participating in an action or Task Force Sharing information and resources
Continue Partnership	<ul style="list-style-type: none"> Leveraging local and regional efforts to support the CWP vision Participating in opportunities for collaboration
Share Progress	<ul style="list-style-type: none"> Reporting successes that align with CWP strategies and actions Providing data to support tracking progress on targets

Our Road to Water Resilience Together

This edition of the CWP is the work of a dedicated group of agencies, organizations, and individuals who truly care about the best interests of Los Angeles County's residents and are working to bring the CWP's vision to fruition. These contributors are acknowledged in Appendix F. As entities came together to produce this plan, they understood that Los Angeles County water managers, Tribes, other stakeholders, and the public are all in this together and have the opportunity to make things better for generations to come.

To achieve our collective vision of equitable, sustainable, resilient, safe, clean, and reliable water resources for Los Angeles County, it will be critical that we continue to work together. Public Works is committed to fostering continued collaboration on regional opportunities to generate innovative solutions to complex problems as water management in Los Angeles County evolves. **It will take all of us to achieve water resilience.**








equity
local
resilience

sustainability
opportunity

water
resources
collaboration
relationships
regional

LA COUNTY WATER PLAN
LACountyWaterPlan.org

Prepared by LA County Public Works with support from Woodard & Curran | December 2023

RESOLUTION NO. 2637

A RESOLUTION OF THE BOARD OF DIRECTORS OF LAS VIRGENES MUNICIPAL WATER DISTRICT ADOPTING THE LOS ANGELES COUNTY WATER PLAN

WHEREAS, Climate change is establishing a “new normal” of more frequent and intense droughts, as well as less frequent and more torrential rains; and

WHEREAS, Recognizing a new climate reality and the need to be thoughtful stewards of future water supplies, a water resilience plan focused on collaborative management of the region’s water resources was developed by Los Angeles County Public Works in partnership with countless other agencies, stakeholders, and tribes; and

WHEREAS, Las Virgenes Municipal Water District, in partnership with Los Angeles County Public Works, together with water resources organizations and an array of diverse stakeholders, collaborated deeply to secure the region’s water future; and

WHEREAS, this collaborative effort crafted a water resilience plan known as the Los Angeles County Water Plan and established the path to realizing a future which is rooted in cross-sector collaboration and coalition building; and

WHEREAS, The Los Angeles County Water Plan articulates a shared, inclusive, regional path forward to sustainably and equitably achieve safe, clean, and reliable water resources for Los Angeles County; and

WHEREAS, Las Virgenes Municipal Water District has reviewed the Los Angeles County Water Plan and affirms that the plan will ensure that the region has resilient, sustainable, and equitable water resources to meet its demand, particularly, during times of scarcity or crisis; and

WHEREAS, The Los Angeles County Water Plan was adopted unanimously by the Los Angeles County Board of Supervisors on December 5, 2023.

NOW THEREFORE, BE IT RESOLVED that the Board of Directors of Las Virgenes Municipal Water District hereby:

1. Adopts the Los Angeles County Water Plan as a guiding document to inform pertinent and relevant aspects of Las Virgenes Municipal Water District’s water resilience strategies.
2. Authorizes and empowers the General Manager of Las Virgenes Municipal Water District, or designee, to continue collaborating and pursuing regional water resilience with the Los Angeles County Public Works and other water resource organizations, and engaging stakeholders regarding matters related to the Los Angeles County Water Plan.

3. Authorizes and empowers the General Manager of Las Virgenes Municipal Water District, or designee, to actively engage in coalition building with water agencies, stakeholders, communities, and tribes to effectively establish relationships and bolster regional collaboration related to regional water resilience.

PASSED, APPROVED, AND ADOPTED this 16th day of April, 2024.

Jay Lewitt, President

ATTEST:

Gary Burns, Secretary

(SEAL)

APPROVED AS TO FORM:

W. Keith Lemieux, District Counsel



DATE: April 16, 2024
TO: Board of Directors
FROM: Finance and Administration

SUBJECT: Annual Review of the District's Investment, Financial and Debt Management Policies

SUMMARY:

The District's Investment, Financial and Debt Management Policies require an annual review with any recommended changes to be presented to the Board. The review has typically occurred at the Board's annual Strategic Planning Workshop; however, due to the change in format for this year's workshop the review is being presented at this time. Staff proposes no revisions or updates to the Investment, Financial and Debt Management Policies.

RECOMMENDATION(S):

Review and provide feedback on the District's Investment, Financial and Debt Management Policies.

DISCUSSION:

Investment Policy:

The District has historically maintained a very conservative approach to its investments, effectively limiting the majority of its investments to pooled funds, agency bonds, highly-rated municipal bonds and insured certificates of deposit. The approach is supportive of the focus on the safety and liquidity of ratepayer funds. Additionally, the Director of Finance and Administration, acting as Deputy Treasurer, invests consistently through all market cycles and conditions, minimizing risk associated with timing the market, and the District typically holds its investments to maturity.

Annually, the Deputy Treasurer reviews the District's Investment Policy, regulatory changes and current best practices to determine if any changes to the policy are warranted. Based on the District's investment philosophy, there are no changes recommended to the District's Investment Policy at this time.

Financial Policies:

The District's budget is closely aligned with its approved financial policies. The policies serve to strengthen the current and long-term financial health of the District and are reviewed at least annually to ensure they represent the most current and realistic framework for decision-making. At this time, staff proposes no revisions to the financial policies.

Debt Management Policy:

The Debt Management Policy provides debt management objectives for the District and establishes general parameters for issuing and administering the District's debt. The policy applies to all debt issued or incurred by the District, including, but not limited to loans, private placements, municipal bonds and lines of credit. At this time, staff proposes no revisions to the Debt Management Policy.

GOALS:

Ensure Effective Utilization of the Public's Assets and Money

Prepared by: Donald Patterson, Director of Finance and Administration

ATTACHMENTS:

[Investment Policy](#)

[Financial Policies](#)

[Debt Management Policy](#)



Investment Policy

Approved June 13, 2017

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**Las Virgenes Municipal Water District
Investment Policy
Adopted June 13, 2017**

1.0 AUTHORITY

This Investment Policy was adopted by the Board of Directors of the Las Virgenes Municipal Water District at its regular meeting on June 13, 2017. Any modifications to this policy must be approved by the Board of Directors at a duly noticed public meeting.

2.0 POLICY STATEMENT

It is the policy of Las Virgenes Municipal Water District (“District”) to invest public funds in a manner that provides the maximum security and best investment return, while meeting the daily cash flow demands of the District and conforming to laws governing the investment of public funds.

3.0 SCOPE

This Investment Policy applies to all investment activities and financial assets of the District. Funds held by trustees or fiscal agents are excluded from this policy; however, such funds are subject to regulations established by the State of California. Funds subject to this policy are accounted for in the District’s audited Comprehensive Annual Financial Report (CAFR).

3.1 Funds Covered by this Policy:

- A. Potable Water
- B. Recycled Water
- C. Sanitation
- D. Rate Stabilization
- E. Internal Services
- F. Insurance Reserve
- G. Joint Powers Authority
- H. Any new fund created by the District unless specifically exempted.

3.2 Funds Excluded From This Policy:

- A. Pension Funds
- B. Other Post-Employment Benefit Funds
- C. Funds related to debt issues controlled by specific provisions of the issuance documents
- D. Deferred compensation program funds

The District commingles its funds to maximize investment earnings and increase efficiencies for investment pricing, safekeeping, and administration. Investment income is allocated to the various funds proportionally and in accordance with Generally Accepted Accounting Principles (GAAP).

4.0 OBJECTIVES

The primary objectives, in priority order, of the District's investment activities shall be:

4.1 **Safety:** Safety of principal is the foremost objective of the investment program. Investments of the District shall be undertaken in a manner that seeks to ensure the preservation of capital in the overall portfolio. To attain this objective, the District will diversify its investments in a manner that reduces credit and duration risks. Also, the District will invest funds among a variety of securities offering independent returns and financial institutions.

4.2 **Liquidity:** The District's investment portfolio will remain sufficiently liquid to enable the District to meet all operating requirements that may be reasonably anticipated.

4.3 **Return on Investment:** The District's Investment Policy shall be designed with the objective of attaining a benchmark rate of return throughout budgetary and economic cycles, commensurate with the District's investment risk constraints and the cash flow characteristics of the portfolio in a manner that reduces interest rate risk.

5.0 DELEGATION OF AUTHORITY

The Treasurer is a member of the Board of Directors and responsible for the investments. Daily management responsibility for the investment program is delegated to a Deputy Treasurer, normally the Director of Finance and Administration. The Deputy Treasurer shall establish written procedures for the operation of the investment program consistent with this Investment Policy. Procedures should include reference to safekeeping, wire transfer agreements, banking service contracts and collateral/depository agreements. Such procedures shall include explicit delegation of authority to persons responsible for investment transactions.

No person may engage in an investment transaction except as provided under the terms of this policy and the procedures established by the Deputy Treasurer. The Deputy Treasurer shall establish a system of controls to regulate the activities of subordinate designees.

Unless otherwise specifically designated by the District’s Board of Directors, the only officials authorized to undertake investment transactions on behalf of the District are the:

- Treasurer (Board Member)
- Deputy Treasurer
- Deputy Treasurer Designee(s)

Further, no person may engage in an investment transaction except as provided under the terms of the District’s Investment Policy.

6.0 STANDARD OF CARE

In compliance with California Government Code Section 53600.3, the standard of care to be used by investment officials shall be the “prudent investor” standard and applied in the context of managing an overall portfolio. Investment officers acting in accordance with written procedures and the Investment Policy and exercising due diligence shall be relieved of personal liability for an individual security’s credit risk or market price changes, provided deviations from expectations are reported in a timely fashion and appropriate action is taken to control adverse developments.

The “prudent investor” standard states that:

“When investing, reinvesting, purchasing, acquiring, exchanging, selling, or managing public funds, a trustee shall act with care, skill, prudence, and diligence under the circumstances then prevailing, including, but not limited to, the general economic conditions and the anticipated needs of the agency, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the agency.”¹

7.0 ETHICS AND CONFLICTS OF INTEREST

The Treasurer, Deputy Treasurer and other employees involved in the investment process shall refrain from personal business activity that could conflict with proper execution of the investment program or which could impair their ability to make impartial investment decisions.

The Treasurer, Deputy Treasurer and other employees involved in the investment process shall disclose any material interests in financial institutions with which they conduct business. They shall further disclose any personal financial/investment positions that could be related to the performance of the investment portfolio and shall not undertake personal investment transactions through the same institution with whom business is conducted on behalf of the District.

The Treasurer, Deputy Treasurer and all District staff with delegated authority for any aspect of the investment process are required to file annual disclosure statements as required by the California Fair Political Practices Commission ("FPPC"), including Forms A-1 and A-2. During the course of the year, if an event subject to disclosure could impair the ability of the Treasurer, Deputy Treasurer or others to make impartial decisions, the Board of Directors will be notified in writing by the General Manager within 10 days of the event.

8.0 AUTHORIZED FINANCIAL DEALERS AND INSTITUTIONS

The District shall transact business only with banks, savings and loans, and registered investment securities dealers. The purchase of any investment, other than those purchased directly from the issuer, shall be purchased either from an institution licensed by the State as a **broker/dealer**, as defined in Section 25004 of the Corporations Code, who is a member of the National Association of Securities Dealers, a member of a Federally regulated securities exchange, a National or State-Chartered Bank, a Federal or State Association (as defined by Section 5102 of the Financial Code), or a brokerage firm designated as a **primary dealer** by the **Federal Reserve Bank**. In addition, a list shall also be maintained by the Deputy Treasurer of approved security broker/dealers who are authorized to provide investment services in California. The District may only conduct business with entities considered "primary" or "regional" dealers that qualify under Securities and Exchange Commission Rule 15C3-1 (uniform net capital rule).

The Deputy Treasurer and his/her assigned staff shall investigate all institutions that wish to do business with the District, in order to determine if they are adequately capitalized, make markets in securities appropriate to the District's needs, and agree to abide by the conditions set forth in this Investment Policy. All financial institutions and broker/dealers that desire to become qualified bidders for investment transactions must provide the District with the following:

- Current audited financial statements;
- Proof of FINRA certification;
- Proof of National Association of Security Dealers (NASD) certification;
- Proof of California registration;
- Completed District questionnaire - Appendix "D" or Appendix "E";
- Evidence of adequate insurance coverage; and
- Certification of having read, understood, and agreed to comply with the District's Investment Policy.

The Deputy Treasurer shall conduct an annual review of the financial condition of all approved financial institutions and broker/dealers in order to determine whether they continue to meet the District's guidelines for qualifications as defined in this section. In addition, the District shall give all approved broker/dealers a copy of the District's Investment Policy on an annual basis. The Deputy Treasurer shall keep current audited annual financial statements on file for each

approved financial institution and broker/dealer with which the District does business with for a minimum period of three years.

9.0 AUTHORIZED AND SUITABLE INVESTMENTS

The District shall only invest in instruments authorized pursuant to Sections 16429.1, 53600 et seq., and 53638 of the Government Code **and** explicitly authorized by the Board subject to the prohibitions set forth in Section 9.1 of this Investment Policy. Appendix A includes a listing of all authorized types of investment securities.

9.1 Prohibited Investments and Transactions

Any investment not specifically authorized in Appendix A is ineligible. The use of derivatives, options, futures or buying on margin is also specifically prohibited. Security transactions shall be conducted on a delivery-versus-payment basis. Securities purchased or acquired by the District shall be held in safekeeping by a third party only pursuant to a custodial agreement as required by Government Code Section 53601.

Also, Government Code Section 53601.6 prohibits local agencies from investing in certain instruments, including inverse floaters, range notes, and mortgage-derived interest only strips. Additionally, the District shall not invest funds in securities that could result in zero interest if held to maturity.

10.0 INVESTMENT POOLS / MUTUAL FUNDS

The Treasurer shall thoroughly investigate any pooled investment funds, including mutual funds. To accomplish this, a questionnaire (Appendix F) is to be used to evaluate the suitability of the pooled fund. The questionnaire will address the following:

- A description of eligible investment securities, and a written statement of investment policy and objectives;
- A description of interest calculations and how it is distributed, and how gains and losses are treated;
- A description of how the securities are safeguarded (including the settlement processes), and how often the securities are priced and the program is audited;
- A description of who may invest in the program, how often, what size of deposits and withdrawals are allowed;
- A schedule for receiving statements and portfolio listings;
- A description of how reserves and retained earnings are utilized by the pool/fund;
- A fee schedule, and when and how fees are assessed; and
- Whether the pool/fund is eligible for bond proceeds and/or if it will accept such proceeds?

The State of California Local Agency Investment Fund (LAIF) established by Government Code 16429.1 et seq. is explicitly authorized and, therefore, not subject to the provisions of this section.

11.0 COLLATERALIZATION

Pursuant to Government Code Sections 53652 through 53667, the District requires depositories to post certain types and levels of collateral for public funds above the Federal Deposit Insurance Corporation ("FDIC") insurance amounts. The collateral requirements apply to bank deposits, both active (checking and savings accounts) and inactive (non-negotiable time certificates of deposit).

The Treasurer shall require collateralization on two other types of investments: repurchase and reverse agreements. In order to anticipate market changes and provide a level of security for all funds, the collateralization level will be 110% of market value of principal and accrued interest and the value shall be adjusted no less than quarterly. The District requires the collateral to be in the form of U.S. Treasuries or a similar highly liquid instrument.

Collateral will always be held by an independent third party with whom the entity has a current written custodial agreement. A clearly marked evidence of ownership (safekeeping receipt) must be supplied to the District and retained throughout District retention of the investment. The right of collateral substitution is granted.

12.0 SAFEKEEPING AND CUSTODY

To protect against fraud, embezzlement, or losses caused by collapse of individual securities dealers, all securities owned by the District shall be held in safekeeping by the District's custodial bank acting as agent for the District under the terms of a custody agreement. Such custodial bank must be a federal or state association (as defined by Section 5102 of the Financial Code), a trust company or a state or national bank located within this state or with the Federal Reserve Bank of San Francisco or any branch thereof within this state, or with any Federal Reserve bank or with any state or national bank located in any city designated as a reserve city by the Board of Governors of the Federal Reserve System. Collateral for repurchase agreements will be held by a third party custodian under the terms of a Public Securities Association ("PSA") master repurchase agreement.

All security transactions entered into by the District shall be conducted on a delivery-versus-payment (DVP) basis. This procedure ensures that securities are deposited with the third party custodian prior to the release of funds. Securities will be held by a third party custodian designated by the Treasurer or Deputy Treasurer and as evidenced by safekeeping receipts with a written custodial agreement. Pooled Investments, such as LAIF and other local agency pooled investments or money market mutual funds as described in Appendix A are undeliverable and, therefore, not subject to delivery or third party safekeeping. The Deputy Treasurer shall

not be responsible for securities delivered to and received for by a financial institution until they are withdrawn from the financial institution by the Deputy Treasurer or the Deputy Treasurer's designee.

Investment trades, shall be verified against the bank transactions and broker confirmation tickets to ensure accuracy. On a monthly basis, the custodial asset statement shall be reconciled with the month-end portfolio holdings. On an annual basis, the external auditor shall confirm investment holdings.

13.0 DIVERSIFICATION

The District will diversify its investments by security type, institution, and maturity. With the exception of U.S. Treasury securities and authorized pools, no more than 50% of the District's total investment portfolio will be invested in a single security issuer or with a single financial institution. The Treasurer shall to the greatest extent possible:

- Limit investments to avoid over-concentration in securities from a specific issuer or business sector (excluding U.S. Treasury securities),
- Limit investments in securities that have higher credit risks,
- Invest in securities with varying maturities, and
- Continuously invest a minimum amount equal to six months operating budget in readily available funds such as local government investment pools (LAIF), money market funds or overnight repurchase agreements to ensure that appropriate liquidity is maintained in order to meet the District's on-going financial obligations.

13.1 Portfolio Rebalancing

In the event that portfolio percentage constraints are violated due to a temporary imbalance in the portfolio, the District shall hold the affected securities to maturity in order to avoid capital losses. However, if no capital losses would be realized upon sale, the Treasurer, Deputy Treasurer or his/her designee shall consider rebalancing the portfolio after evaluating the expected length of time the portfolio would remain unbalanced. Since portfolio percentage limits are in place to ensure diversification of the District Investment portfolio, a small, temporary imbalance will not significantly impair the strategy.

14.0 MAXIMUM MATURITIES

To minimize the impact of market risk, it is intended that all investments be held to maturity.

The Deputy Treasurer shall match the District's investments with anticipated cash flow requirements known at the time of purchase. The District will not directly invest in securities maturing more than five (5) years from the settlement date. Any investment that is further limited is noted in Appendix A, Authorized Investments. Also, Appendix B provides a listing of

maximum maturities by investment vehicle. The weighted average maturity of the investment portfolio will be limited to three years or less, exclusive of the funds held in investment pools and mutual funds. Investments may be sold prior to maturity for cash flow, appreciation purposes or in order to limit losses; however, no investment shall be made based solely on earnings anticipated from capital gains.

15.0 INTERNAL CONTROL

The Deputy Treasurer shall ensure that all investment transactions comply with the District's Investment Policy and establish internal controls that are designed to prevent losses due to fraud, negligence or third-party misrepresentation. These controls shall be designed to avoid collusion; ensure separation of duties and administrative controls; maintain separation of transaction authority from accounting and record keeping; provide custodial safekeeping; delegate authority clearly; ensure management approval and review of investment transactions; provide specific limitations regarding securities loss and remedial action; document investment transactions and strategies; and monitor investment performance results.

The Deputy Treasurer shall establish an annual process of independent review by an external audit firm. The external auditor shall review the management of the District's investment program in terms of compliance with the internal controls previously established.

The external auditor, serving as an independent reviewer, will review and verify the District's investment activity, holdings and compliance with this Investment Policy on an annual basis and submit a report to the District's Board of Directors relating thereto.

16.0 PERFORMANCE STANDARDS

The investment portfolio shall be designed with the objective of obtaining a rate of return throughout budgetary, economic, or weather cycles, commensurate with the investment risk constraints and cash flow needs. The District's investment portfolio, exclusive of investment pools and mutual funds, shall utilize the three-year Treasury note as its benchmark. It is understood that due to the District's policy to hold investments to maturity, short-term yields will lag the direction of the three-year Treasury note in changing interest rate environments.

17.0 CREDIT DOWNGRADE

If a security is downgraded below the minimum credit risk criteria specified in the Investment Policy, the Deputy Treasurer shall evaluate the downgrade and bring their evaluation back to the Treasurer and General Manager to evaluate and decide what action to take: continue to monitor and hold through maturity or sell the security on the secondary market.

18.0 REPORTING

The District's Investment Policy shall be reviewed on an annual basis by the Treasurer, Deputy Treasurer, and General Manager with recommendations for changes, if any, made to the Board of Directors.

The District shall maintain a complete and accurate record of all investment transactions.

18.1 Monthly Reports: The Deputy Treasurer shall prepare and submit a monthly investment report of funds directly controlled and managed by the District, including a detailed listing of all investment transactions opened and closed during a reporting period or, if none, a statement to that effect. The report shall be submitted monthly to the Board of Directors.

Each investment report shall be submitted within 45 days following the end of the period covered by the report and must also include certification by the General Manager that investment actions executed since the last report are in compliance with the Investment Policy or state areas of non-compliance; and the District will meet its expenditure obligations for the next six months or state why sufficient money shall, or may, not be available as required by law.

Schedules in the monthly report should include the following:

- The type of investment, name of the issuer, date of maturity, the par value, book value, yield to maturity or yield to call, and cost of all funds invested and subject to this policy;
- Coupon, discount or earnings rate;
- Percentage of the portfolio represented by each investment category; and
- The market value with the source of the market valuation for all securities held by the District, and under management of any outside party that is not also a local agency or the State of California Local Agency Investment Fund.

18.2 Quarterly Report: Within 30 days of the end of each quarter, the Deputy Treasurer shall prepare and submit a quarterly investment report to the Board that includes the information required in the monthly investment report, plus the following additional information:

- A description of any investments, including loans and security lending programs, that are under the management of contracted parties;
- A description of the compliance with the statement of Investment Policy, or manner in which the portfolio is not in compliance;
- A statement denoting the District's ability to meet its expenditure requirements for the next six months, or an explanation as to why sufficient money shall, or may, not be available;
- A benchmark comparison;
- A statement of cash and investments held and compliance with adopted reserve policies; and

- A narrative analysis with supporting graphs and/or charts that provide information on performance of the portfolio, as well as general economic and operational trends affecting the portfolios size and/or performance.

The investment portfolio will be managed in accordance with the parameters specified within this policy and monitored and evaluated by the Deputy Treasurer and his/he designated employees involved in the investment process.

19.0 INVESTMENT POLICY ADOPTION

The District's Investment Policy shall be adopted by the Board of Directors. The policy shall be reviewed at least annually to ensure its consistency with the overall objectives of preservation of principal, liquidity, and return on investment, and its relevance to current law, financial and economic trends, and to meet the needs of the District. Any modifications made hereto must be approved by the Board of Directors.

Appendix A - AUTHORIZED INVESTMENTS

1. **UNITED STATES TREASURIES:**

United States Treasury notes, bonds, bills, or certificates of indebtedness, or those for which the faith and credit of the United States are pledged for the payment of principal and interest.

There is no limit as to the amount of the investment portfolio that may be invested in United States Treasury notes. Maximum maturity is five years from the settlement date.

2. **FEDERAL AGENCIES:**

Obligations issued by the United States Government Agencies, such as the Federal Farm Credit Bank System (FFCB), the Federal Home Loan Bank Board (FHLB), the Federal National Mortgage Association (FNMA), Federal Home Loan Mortgage Corporation (FHLMC), the Tennessee Valley Authority (TVA), or obligations, participation, or other instruments of, or issued by a federal agency or a United States government-sponsored enterprise.

There is no limit as to the amount of the investment portfolio that may be invested in federal agencies. Maximum maturity is five years from the settlement date.

3. **STATE BONDS:**

Registered state warrants, treasury notes or bonds of this state and any of the 50 states and the District of Columbia, including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by the state or by a department, board, agency, or authority of the state. The long-term ratings of such bonds should have at least AA- by Standard and Poor's (S&P), AA- by Fitch or Aa1 by Moody's, or the short-term ratings should have at least A-1 by S&P, and P-1 by Moody's.

There is no limit as to the amount of the investment portfolio that may be invested in state bonds. Maximum maturity is five years.

4. **LOCAL AGENCY BONDS:**

Bonds and notes issued by local agencies (cities, counties, special districts, or schools) of the United States, including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by the local agency, or by a department, board, agency, or authority of the local agency, such as Las Virgenes Municipal Water District. The maturity of such bonds or notes should not exceed five years from the date of purchase. The long-term ratings of such bonds should be

investment grade (at least AA- by Standard and Poor's (S&P), KBRA or Fitch or Aa3 by Moody's, or the short-term ratings should have at least A-1 by S&P, and P-1 by Moody's).

There is no limit as to the amount of the District's portfolio may be invested in local agency bonds. Maximum maturity is five years.

5. **LOCAL GOVERNMENT INVESTMENT POOLS:**

Local government investment pools, that adhere to the California Government Code parameters for eligible investments.

A. LAIF:

State managed Local Agency Investment Fund ("LAIF") pursuant to Government Code Section 16429.1 and Resolution No. 01-04-2291 of the Las Virgenes Municipal Water District.

The maximum amount an agency may invest in LAIF is \$65,000,000 pursuant to the LAIF policy.

B. Local Agency Pooled Investment Funds: Other local agency pooled investment funds that invest pursuant to California Government Code Section 53601 or 53635, as authorized by the Board.

No more than 25 percent of the District's total portfolio value may be invested in other local agency pooled investment funds.

6. **REPURCHASE/REVERSE REPURCHASE AGREEMENTS:**

a.) Investments in repurchase agreements or reverse repurchase agreements of any securities authorized by this section, so long as the agreements are subject to this subdivision, including, the delivery requirements specified in this section. All transactions in repurchase agreements or reverse repurchase agreements shall require a master repurchase agreement executed by the contra-party.

b.) Investments in repurchase agreements may be made, on any investment authorized in this section, when the term of the agreement does not exceed 30 days. The market value of securities that underlies a repurchase agreement must be valued at 102 percent or greater of the funds borrowed against those securities and the value shall be adjusted no less than quarterly.

- c.) Investments in reverse repurchase agreements or similar investments in which the District sells securities prior to purchase, may only be made upon prior approval of the Board of Directors and with a maximum maturity of 30 days.
- d.) (1) "Repurchase agreement" means a purchase of securities by the District pursuant to an agreement by which the counter-party seller will repurchase the securities on or before a specified date and for a specified amount and the counter-party will deliver the underlying securities to the District by book entry, physical delivery, or by third party custodial agreement. The transfer of underlying securities to the counter-party bank's customer book-entry account may be used for book-entry delivery.
- (2) "Securities," for purpose of repurchase under this subdivision, 4 means securities of the same issuer, description, issue date, and maturity.
- (3) "Reverse repurchase agreement" means a sale of securities by the District pursuant to an agreement by which the District will repurchase the securities on or before a specified date and includes other comparable agreements.
- (4) For purposes of this section, the base value of the District's pool portfolio shall be that dollar amount obtained by totaling all cash balances placed in the pool by all pool participants, excluding any amounts obtained through selling securities by way of reverse repurchase agreements or other similar borrowing methods.
- (5) For purposes of this section, the spread is the difference between the cost of funds obtained using the reverse repurchase agreement and the earnings obtained on the reinvestment of the funds.
- (6) Repurchase agreements and reverse repurchase agreements shall only be made with primary dealers of the Federal Reserve Bank of New York.

Repurchase agreements may not exceed 25 percent of the District's investment portfolio value. Reverse repurchase agreements may not exceed 10 percent of the District's investment portfolio value.

7. **MONEY MARKET MUTUAL FUNDS:**

Shares of beneficial interest issued by diversified management companies (otherwise known as “mutual funds”), as defined in Section 23701 of the Revenue and Taxation Code, investing in the securities and obligations as authorized by subdivisions (1) to (12), inclusive, of this section and that comply with the investment restrictions of Article 1 (commencing with Section 53600) and Article 2 (commencing with Section 53630). To be eligible for investment pursuant to this subdivision, these companies shall either:

a) Attain the highest ranking or the highest letter and numerical rating provided by not less than two of the three largest nationally recognized rating services.

b) Commission with not less than five years' experience investing in the securities and obligations as authorized by this Investment Policy, inclusive, and with assets under management in excess of five hundred million dollars (\$500,000,000).

The purchase price of shares of beneficial interest purchased pursuant to this subdivision shall not include any commission that these companies may charge.

The purchase of money market mutual funds shall not exceed 20 percent of the District's total portfolio value; however, no more than 10 percent of the District's investment portfolio value may be invested in shares of beneficial interest of any one money market mutual fund.

8. **CERTIFICATES OF DEPOSIT:**

A. Negotiable, non-negotiable, and placement service certificates of deposits issued by a nationally or state-chartered bank or a state or federal association (as defined by Section 5102 of the Financial Code) or by a state-licensed branch of a foreign bank. The issuing firm should have been in existence for at least five years.

1. Federally insured negotiable Certificates of Deposits up to \$250,000.
2. Certificates of Deposit that are fully collateralized. To collateralize such deposits, an institution shall maintain in the collateral pool securities having a market value of at least 10% in excess of the total amount deposited. Real estate mortgages may not be accepted as collateral. The maximum term for deposits shall be five years. In general, the issuer must have a minimum tier one risk-based capital ratio of 6% as determined by the FDIC and their operation must have been profitable during their last reporting period.

The term of a Certificate of Deposit shall not exceed 5 years from the settlement date. Purchases of all types of certificates of deposit may not exceed 25 percent of the District's portfolio value which may be invested pursuant to this section.

9. **PLACEMENT SERVICE DEPOSITS** - Service that allows a local agency to purchase in excess of \$250,000 in deposits, placing monies with other institutions while maintaining FDIC insurance. Placement service deposits may not exceed 25 percent of the District's investment portfolio value.

Appendix B - SUMMARY OF AUTHORIZED INVESTMENTS:

Authorized Investments	District Policy Legal Limit (% or \$)	Maximum Maturity Constraints	Limits
United States Treasuries	Unlimited	5 years	None
U.S. Agencies	Unlimited	5 years	None
State Bonds	Unlimited	5 years	Rated AA-
Local Agency Bonds	Unlimited	5 years	Rated AA-
LAIF	\$65,000,000	N/A	Limited to 15 transactions per month, per State policy
Local Agency Pooled Investments	25%	N/A	Prior Board of Directors approval required
Voluntary Investment Fund	Unlimited	N/A	None
County Pooled Investment Fund	Unlimited	N/A	None
Repurchase Agreements	25%	30 days	Requires a Master Repurchase agreement, market value of underlying securities must be greater than 102%
Reverse Repurchase Agreements	10%	30 days	Prior Board of Directors approval required
Money Market Mutual Funds	20%	N/A	No more than 10% will be invested in any one mutual fund
Non-Negotiable Certificates of Deposit	25%	5 years	None
Negotiable Certificates of Deposit	25%	5 years	All CDs over \$250,000 must be collateralized at 110%.
Placement Service CD	25%	5 years	None
Placement Service Deposits	10%	5 years	None

Appendix C - GLOSSARY OF TERMS

ACCRUED INTEREST: The interest owed to the seller of a coupon bearing issue from the last coupon date up to the sale date.

AGENCIES: Federal agency securities and/or Government-sponsored enterprises.

ASKED: The price at which securities are offered.

BANKERS' ACCEPTANCE (BA): A draft of bill or exchange accepted by a bank or trust company. The accepting institution guarantees payment of the bill, as well as the issuer-evidencing a loan created by the accepting bank.

BASIS POINT: 1/100 of one percent (decimally, .0001)

BENCHMARK: A comparative base for measuring the performance or risk tolerance of the investment portfolio. A benchmark should represent a close correlation to the level of risk and the average duration of the portfolio's investments.

BID: The price offered by a buyer of securities. (When you are selling securities, you ask for a bid.) See OFFER.

BROKER: A broker brings buyers and sellers together for a commission.

CALLABLE BOND: A bond that can be bought back from a holder by the issuer at a specific price after a specific date prior to the maturity date.

CERTIFICATE OF DEPOSIT (CD): A time deposit with a specific maturity evidenced by a certificate. Large-denomination CD's are typically negotiable.

CMO (COLLATERALIZED MORTGAGE OBLIGATION): Mortgage-backed bond that separates mortgage pools into short-, medium-, and long-term portions.

COLLATERAL: Securities, evidence of deposit, or other property that a borrower pledges to secure repayment of a loan. Also refers to securities pledged by a bank to secure deposits of public monies.

COMMERCIAL PAPER (CP): An unsecured promissory note issued by a corporation. Maturity may not exceed 270 days. Usually sold in discount form.

COMPREHENSIVE ANNUAL FINANCIAL REPORT (CAFR) The official annual report for Las Virgenes Municipal Water District. It includes the presentation of required financial

statements in conformity with GAAP. It also includes supporting schedules necessary to demonstrate compliance with finance-related legal and contractual provisions, extensive introductory material, and a detailed Statistical Section.

COUPON: a) The annual rate of interest that a bond's issuer promises to pay the bondholder on the bond's face value. b) A certificate attached to a bond evidencing interest due on a payment date.

DEALER: A dealer, as opposed to a broker, acts as a principal in all transactions buying and selling for his own account.

DEBENTURE: A bond secured only by the general credit of the issuer.

DEFAULT: The failure of a debtor to make timely payments of interest and principal as they come due or to meet some other provision of a bond indenture.

DELIVERY VERSUS PAYMENT (DVP): There are two methods of delivery of securities: delivery versus payment and delivery versus receipt. Delivery versus payment is delivery of securities with an exchange of money for the securities. Delivery versus receipt is delivery of securities with an exchange of a signed receipt for the securities.

DERIVATIVE: (1) Financial instruments whose return profile is linked to, or derived from, the movement of one or more underlying index or security, and may include a leveraging factor, or (2) financial contracts based upon notional amounts whose value is derived from a underlying index or security (interest rates, foreign exchange rates, equities or commodities).

DISCOUNT: The difference between the cost price of a security and its maturity when quoted at a lower than face value. A security selling below original offering price shortly after sale also is considered to be at a discount.

DISCOUNTED SECURITIES: Non-interest bearing money market instruments that are issued at a discount and redeemed at maturity for full face value, e.g. U.S. Treasury Bills.

DIVERSIFICATION: Dividing investment funds among a variety of securities offering independent returns.

DURATION: A measure of the sensitivity of the price of a fixed income security to interest rate changes.

FEDERAL CREDIT AGENCIES: Agencies of the Federal government set up to supply credit to various classes of institutions and individuals, e.g., S&L's, small-business firms, students, farmers, farm cooperatives, and exporters.

FEDERAL DEPOSIT INSURANCE CORPORATION (FDIC): A federal agency that insures bank deposits, currently up to \$250,000 per deposit.

FEDERAL FUNDS RATE: The rate of interest at which Fed funds are traded. This rate is currently pegged by the Federal Reserve through open-market operations.

FEDERAL HOME LOAN BANKS (FHLB): Government sponsored wholesale banks (currently 12 regional banks) that lend funds and provide correspondent banking services to member commercial banks, thrift institutions, credit unions, and insurance companies. The mission of the FHLBs is to liquefy the housing related assets of its members who must purchase stock in their district Bank.

FEDERAL NATIONAL MORTGAGE ASSOCIATION (FNMA): FNMA, like GNMA was chartered under the Federal National Mortgage Association Act in 1938. FNMA is a federal corporation working under the auspices of the Department of Housing and Urban Development (HUD). It is the largest single provider of residential mortgage funds in the United States. Fannie Mae, as the corporation is called, is a private stockholder-owned corporation. The corporation's purchases include a variety of adjustable mortgages and second loans, in addition to fixed-rate mortgages. FNMA's securities are also highly liquid and are widely accepted. FNMA assumes and guarantees that all security holders will receive timely payment of principal and interest.

FEDERAL OPEN MARKET COMMITTEE (FOMC): Consists of seven members of the Federal Reserve Board and five of the twelve Federal Reserve Bank Presidents. The President of the New York Federal Reserve Bank is a permanent member, while the other Presidents serve on a rotating basis. The Committee periodically meets to set Federal Reserve guidelines regarding purchases and sales of Government Securities in the open market as a means of influencing the volume of bank credit and money.

FEDERAL RESERVE SYSTEM: The central bank of the United States created by Congress and consisting of seven member Board of Governors in Washington, D.C., 12 regional banks and about 5,700 commercial banks that are members of the system.

GOVERNMENT NATIONAL MORTGAGE ASSOCIATION (GNMA or Ginnie Mae): Securities influencing the volume of bank credit guaranteed by GNMA and issued by mortgage bankers, commercial banks, savings, and loan associations, and other institutions. Security holder is protected by full faith and credit of the U.S. Government, Ginnie Mae securities are backed by the FHA, VA or FmHA mortgages. The term "pass-throughs" is often used to describe Ginnie Maes.

INVERSE FLOATER; A structured note in which the coupon increases as rates decline and decrease as rates rise.

IO (INTEREST ONLY): A class of mortgage derivative in which the cash flow consists solely of the interest payments from a CMO.

LIQUIDITY: A liquid asset is one that can be converted easily and rapidly into cash without a substantial loss of value. In the money market, a security is said to be liquid if the spread between bid and asked prices is narrow and reasonable size can be done at those quotes.

LOCAL GOVERNMENT INVESTMENT POOL (LGIP): The aggregate of all funds from political subdivisions that are placed in the custody of the State Treasurer for investment and reinvestment.

MARKET PRICE: In general business, the price agreed upon by buyers and sellers of a product or service, as determined by supply and demand.

MARKET VALUE: The price at which a security is trading and could presumably be purchased or sold.

MASTER REPURCHASE AGREEMENT: A written contract covering all future transactions between the parties to repurchase – reverse repurchase agreements that establishes each party’s rights in the transactions. A master agreement will often specify, among other things the right of the buyer-lender to liquidate the underlying securities in the event of default by the seller-borrower.

MATURITY: The date upon which the principal or stated value of an investment becomes due and payable.

MONEY MARKET: The market in which short-term debt instruments (bills, commercial paper, banker’s acceptances, etc.) are issued and traded.

NEGOTIABLE CERTIFICATES OF DEPOSIT: Large denomination interest bearing deposits with a fixed maturity date that may be sold in the money market.

OFFER: The price asked by a seller of securities. (When you are buying securities, you ask for an offer.) See ASKED and BID.

OPEN MARKET OPERATIONS: Purchases and sales of government and certain other securities in the open market by the New York Federal Reserve Bank as directed by the FOMC in order to influence the volume of money and credit in the economy. Purchases inject reserves into the bank system and stimulate growth of money and credit; sales have the opposite effect. Open market operations are the Federal Reserve’s most important monetary policy tool.

PAR: 1) 100% of the face amount of an issue. 2) The principal amount a holder will receive at the maturity of an issue.

PORTFOLIO: Collection of securities held by an investor.

PREMIUM: 1) The amount by which the market price of an issue exceeds par. 2) The amount in excess of par that an issuer must pay to call in its bonds. 3) In the money market, the rate higher than the norm that one bank must pay to attract CD depositors.

PRIMARY DEALER: A group of government securities dealers who submit daily reports of market activity and positions and monthly financial statements to the Federal Reserve Bank of New York and are subject to its informal oversight. Primary dealers include Securities and Exchange Commission (SEC)-registered securities broker-dealers, banks, and a few unregulated firms.

PRIME RATE: The loan rate for the best customers of a bank.

PRINCIPAL: 1) The dollar cost of an issue excluding accrued interest. 2) The one who takes ownership in a transaction, as opposed to brokering or acting as agent.

PRUDENT PERSON RULE: An investment standard. In some states the law requires that a fiduciary, such as a trustee, may invest money only in a list of securities selected by the custody state-the so-called legal list. In other states the trustee may invest in a security if it is one which would be bought by a prudent person of discretion and intelligence who is seeking a reasonable income and preservation of capital.

QUALIFIED PUBLIC DEPOSITORIES: A financial institution which does not claim exemption from the payment of any sales or compensating use of ad valorem taxes under the laws of this state, which as segregated for the benefit of the commission eligible collateral having a value of not less than its maximum liability and which has been approved by the Public Deposit Protection Commission to hold public deposits.

RATE OF RETURN: The yield obtainable on a security based on its purchase price or its current market price. This may be the amortized yield to maturity on a bond the current income return.

REPURCHASE AGREEMENT (RP OR REPO): A holder of securities sells these securities to an investor with an agreement to repurchase them at a fixed price on a fixed date. The Security “buyer” in effect lends the “seller” money for the period of the agreement, and the terms of the agreement are structured to compensate him for this. Dealers use RP extensively to finance their positions. Exception: When the Fed is said to be doing RP, it is lend money that is, increasing bank reserves.

SAFEKEEPING: A service to customers rendered by banks for a fee whereby securities and valuables of all types and descriptions are held in the bank's vaults for protection.

SECONDARY MARKET: A market made for the purchase and sale of outstanding issues following the initial distribution.

SECURITIES & EXCHANGE COMMISSION: Agency created by Congress to protect investors in securities transactions by administering securities legislation.

SEC RULE 15C3-1: See Uniform Net Capital Rule.

SPREAD: 1) The yield or price difference between the bid and offer on an issue. 2) The yield or price difference between different issues.

STRUCTURED NOTES: Notes issued by Government Sponsored Enterprises (FHLB, FNMA, SLMA, etc.) and Corporations that have imbedded options (e.g., call features, step-up coupons, floating rate coupons, derivative-based returns) into their debt structure. Their market performance is impacted by the fluctuation of interest rates, the volatility of the imbedded options and shifts in the shape of the yield curve.

SWAP: The sale of one issue and the simultaneous purchase of another for some perceived advantage.

TRADE DATE: The date on which the buyer and seller agree to a transaction. The trade date may or may not be the day on which the securities and money changes hands.

TREASURY BILLS: A non-interest bearing discount security issued by the U.S. Treasury to finance the national debt. Most bills are issued to mature in three months, six months, or one year.

TREASURY BONDS: Long-term coupon-bearing U.S. Treasury securities issued as direct obligations of the U.S. Government and having initial maturities of more than 10 years.

TREASURY NOTES: Medium-term coupon-bearing U.S. Treasury securities issued as direct obligations of the U.S. Government and having initial maturities from two to 10 years.

UNIFORM NET CAPITAL RULE: Securities and Exchange Commission requirement that member firms as well as nonmember broker-dealers in securities maintain a maximum ratio of indebtedness to liquid capital of 15 to 1; also called net capital rule and net capital ratio. Indebtedness covers all money owed to a firm, including margin loans and commitments to purchase securities, one reason new public issues are spread among member so underwriting syndicates. Liquid capital includes cash and assets easily converted into cash.

YIELD: The rate of annual income return on an investment, expressed as a percentage.

INCOME YIELD is obtained by dividing the current dollar income by the current market price for the security. (b) **NET YIELD or YIELD TO MATURITY** is the current income yield minus any premium above par or plus any discount from par in purchase price, with the adjustment spread over the period from the date of purchase to the date of maturity of the bond.

***LAS VIRGENES MUNICIPAL WATER DISTRICT
DEPARTMENT OF FINANCE & ADMINISTRATION***

BANK/SAVINGS AND LOAN QUESTIONNAIRE AND CERTIFICATION

1. Name of Firm: _____
2. Address: _____
3. Telephone No: _____
Direct Nat. Headquarters
4. Primary Representative: _____ Manager: _____
Name: _____ Name: _____
Title: _____ Title: _____
Telephone No: _____ Telephone No: _____
5. What is your Community Reinvestment Act ("CRA") Rating? _____
6. What are the Total Assets of the Bank/Savings and Loan? _____

7. What is the current Net Worth Ratio of your institution? _____
8. What was the Net Worth Ratio for the Previous Year? _____
9. What are your required Capital Ratios?
 - A. Tangible Capital Ratio _____
 - B. Core Capital Ratio _____
 - C. Risk-Based Capital Ratio _____
10. What are your Ratings (i.e., S&P, Moody's, Fitch)? _____
11. What is the date of your Fiscal Year-End? _____
Has there been a year during the past three years in which the Bank/Savings and Loan did not make a profit? Yes No
12. Have you read the California Government Code Section 53630 through 53684 pertaining to the State's requirements governing the deposit of monies by Local Agencies? Yes No
13. Amounts above the FDIC insurance coverage must be collateralized as specified in the Government Code. Where is the collateral for Deposits held?

Has there ever been a failure to fully collateralize? If Yes, please attach explanation.
Yes No
14. What is the education level of the Primary Contact(s)? _____
15. How many years of related experience does the Primary Contact(s) have? _____
16. What other banking services would you be interested in providing the District?

17. What transaction documents and reports would we receive? _____

18. What information would you provide to our Treasurer and/or Deputy Treasurer?

19. Describe the precautions taken by your Bank/Savings and Loan to protect the interest of the public when dealing with government agencies as depositors or investors. _____

20. Please provide your Contract of Deposit of Moneys pre-signed and sealed by your institution, as well as, any signature cards that you may require.
21. Please provide your Wiring Instructions: _____

22. Please provide your Bank/Savings and Loan most recent certified financial statement. In addition, an audited financial statement must be provided within 120 days of your fiscal year-end.

- CERTIFICATION -

I hereby certify that I have personally read Las Virgenes Municipal Water District's (the "District") Investment Policy and the California Government Codes pertaining to the investments and deposits of the District, and have implemented reasonable procedures and a system of controls designed to preclude imprudent investment activities arising out of transactions conducted between our firm and the District. **I understand however, that our firm is not obligated to monitor the percentage limits on the investments as described in the policy.** All sales personnel will be routinely informed of District investment objectives, horizon, outlook, strategies and risk constraints whenever we are so advised. We pledge to exercise due diligence in informing District Investment Officers of all foreseeable risks associated with financial transactions conducted with our firm. I attest to the accuracy of our responses to your questionnaire.

NOTE: Completion of Questionnaire is only part of District's Certification process and DOES NOT guarantee that the applicant will be approved to do business with the District.

Signature: _____ Date: _____

Name: _____ Title: _____

Countersigned: _____ Date: _____

Name: _____ Title: _____

**LAS VIRGENES MUNICIPAL WATER DISTRICT
DEPARTMENT OF FINANCE & ADMINISTRATION**

BROKER/DEALER QUESTIONNAIRE AND CERTIFICATION

1. Name of Firm: _____
2. Address: _____
3. Telephone No: _____
Direct _____ Nat. Headquarters _____
4. Primary Representative: _____ Manager/Partner-in-Charge: _____
Name: _____ Name: _____
Title: _____ Title: _____
Telephone _____ Telephone _____
Telephone No: _____ No: _____
Sales: _____ Sales: _____
No. of Years with Firm: _____ No. of Years with Firm: _____
5. Are you a Primary Dealer in U.S. Government Securities? Yes No
6. Are you a Regional Dealer in U.S. Government Securities? Yes No
7. Are you a Broker instead of a Dealer? (i.e. You DO NOT own positions of securities)
Yes No
8. Are you FINRA certified and licensed to sell in California Municipalities?
Yes No
9. What is the net capitalization of your firm? _____
10. What is the date of your Fiscal Year-End? _____
11. Is your firm owned by a Holding Company? Yes No
If so, what is its name and net capitalization? _____
12. Please provide your Wiring and Delivery Instructions: _____
13. Which of the following instruments are offered regularly by your local desk?
 T-Bills Treasury Notes/Bonds
 NCD's Agencies (specify) _____
 BA's (Domestic) BA's (Foreign)
 Mid-Term Notes Commercial Paper
 Repurchase Agreements Reverse Agreements
14. Which of the above does your firms specialize in Marketing? _____
15. Please identify your most directly comparable Local Agency clients in our geographical area:
Contact Person: _____

Telephone No: _____ Client Since: _____

16. What reports, transactions, confirmations and paper trail would we receive?

17. Please include samples of research reports or market information that your firm regularly provides to local agency clients.
18. What precautions are taken by your firm to protect the interest of the public when dealing with government agencies as investors? _____

19. Have you or your firm been censured or punished by a Regulatory State or Federal Agency for improper or fraudulent activities, related to the sale of securities? Yes No
20. If yes, please explain: _____

21. Attach certified documentation of your capital adequacy and financial solvency. In addition, an audited financial statement must be provided within 120 days of your fiscal year-end.

- CERTIFICATION -

I hereby certify that I have personally read Las Virgenes Municipal Water District's (the "District") Investment Policy and the California Government Codes pertaining to the investments and deposits of the District, and have implemented reasonable procedures and a system of controls designed to preclude imprudent investment activities arising out of transactions conducted between our firm and the District. **I understand however, that our firm is not obligated to monitor the percentage limits on the investments as described in the policy.** All sales personnel will be routinely informed of District investment objectives, horizon, outlook, strategies and risk constraints whenever we are so advised. We pledge to exercise due diligence in informing District Investment Officers of all foreseeable risks associated with financial transactions conducted with our firm. I attest to the accuracy of our responses to your questionnaire.

NOTE: Completion of Questionnaire is only part of District's Certification process and DOES NOT guarantee that the applicant will be approved to do business with the District.

Signature: _____ Date: _____

Name: _____ Title: _____

Countersigned: _____ Date: _____

Name: _____ Title: _____

***LAS VIRGENES MUNICIPAL WATER DISTRICT
DEPARTMENT OF FINANCE & ADMINISTRATION***

INVESTMENT POOL QUESTIONNAIRE

SECURITIES

1. Does the pool provide a written statement of investment policy and objectives?
Yes No
2. Does the statement contain the following (check all that apply):
 - A description of eligible investment instruments
 - The credit standards of investments
 - The allowable maturity range of investments
 - The maximum allowable dollar weighted average portfolio maturity
 - The limits of portfolio concentration permitted for each type of security
 - The policy of reverse repos
3. Are the changes in the policies communicated to the pool participants?
Yes No

INTEREST

4. Does the pool disclose the following about yield calculations (check all that apply):
 - Methodology is used to calculate interest (simple maturity, yield to maturity, etc.)
 - Frequency of interest payments
 - How interest is paid
 - How gains/losses are reported (factored monthly or only when realized)
5. How often is the yield reported to participants of the pool? _____
6. Are expenses of the pool deducted before quoting the yield? Yes No
If no, please explain: _____
7. Is the yield generally in line with the market yields for securities in which you usually invest? Yes No

SECURITY

8. Does the pool disclose safekeeping practices? Yes No
If yes, what are they? _____

9. Is the pool subject to audit by an independent auditor? Yes No
10. Is a copy of the audit available to participants? Yes No
11. Who makes the portfolio decisions? _____

12. How does the manager monitor the credit risk of the securities in the pool?

13. Is the pool monitored by someone on the board or a separate, neutral party external to the investment function to ensure compliance with written policies?

14. Does the pool have specific policies with regard to repurchase agreements?

Yes No

If yes, what are those policies? _____

15. Does the pool report the portfolios market value? Yes No

16. Does the pool disclose the following about portfolio valuations (check all that apply):

Frequency with which the portfolio securities are valued

Method used to value the portfolio (cost, current value, or other method)

17. Are statements for each account sent to participants? Yes No

Do statements show balances, transactions and yield? Yes No

18. How does the pool distribute detailed reports of its holdings?

Regularly

Upon Request Only

FEES

19. Is there a written schedule of administrative costs? Yes No

What are the fees? _____

How often are they assessed? _____

How are they paid? _____

Are there additional fees for wiring funds? _____

20. Are expenses deducted before quoting the yield? Yes No

OPERATIONS

21. Does the pool limit eligible participants? Yes No

What entities are permitted to invest in the pool? _____

22. Does the pool allow multiple accounts and subaccounts? Yes No

23. Is there a minimum or maximum account size? Yes No

If yes, what is minimum/maximum? _____

24. How many transactions are permitted each month? _____

25. Is there a limit on transaction amounts permitted each month? Yes No

What is the minimum and maximum withdrawal amount permitted? _____

What is the minimum and maximum deposit amount permitted? _____

26. Does the pool require one or more day/s notice for deposits and/or withdrawals?

Yes No

27. Is there a cutoff time for deposits and withdrawals? Yes No

If yes, what is it? _____

28. Are the funds 100% withdrawable at any time? Yes No

29. Are there procedures for making deposits and withdrawals? Yes No

What paperwork required, if any? _____

What are the wiring procedures? _____

30. Can an account remain open with zero balance? Yes No

31. Are confirmations sent following transactions? Yes No

Appendix G - LIST OF PRIMARY GOVERNMENT SECURITIES DEALERS

List of the Primary Government Securities Dealers Reporting to the Government Securities Dealers Statistics Unit of the Federal Reserve Bank of New York:

Bank of Nova Scotia, New York Agency
BMO Capital Markets Corp.
BNP Paribas Securities Corp.
Barclays Capital Inc.
Cantor Fitzgerald & Co.
Citigroup Global Markets Inc.
Credit Suisse Securities (USA) LLC
Daiwa Capital Markets America Inc.
Deutsche Bank Securities Inc.
Goldman, Sachs & Co.
HSBC Securities (USA) Inc.
Jefferies LLC
J.P. Morgan Securities LLC
Merrill Lynch, Pierce, Fenner & Smith Incorporated
Mizuho Securities USA Inc.
Morgan Stanley & Co. LLC
Nomura Securities International, Inc.
RBC Capital Markets, LLC
RBS Securities Inc.
SG Americas Securities, LLC
TD Securities (USA) LLC
UBS Securities LLC.
Wells Fargo Securities LLC.

NOTE: This list has been compiled and made available for statistical purposes only and has no significance with respect to other relationships between dealers and the Federal Reserve Bank of New York. Designation of an entity as a primary dealer by the New York Fed in no way constitutes a public endorsement of that entity by the New York Fed, nor should such designation be viewed as a replacement for prudent counterparty risk management and due diligence.

Government Securities Dealers Statistics Unit
Federal Reserve Bank of New York
April 18, 2016



FINANCIAL POLICIES

The District's budget is closely aligned with the financial policies established. These policies serve to strengthen the current and long-term financial health of the District and are visited, at a minimum, on an annual basis to ensure they represent the most current and realistic framework for decision making.

POLICY 1: Restricted Cash

The District will maintain cash, to be used solely for its intended purpose, in an amount equal to funds restricted by legal requirements, contractual agreements and trustee requirements.

The District is limited in the means in which it may use certain cash ("restricted cash") due to legal and contractual requirements.

Other reserves/funds are unrestricted; they are established by Board direction to address potential needs as defined in the policies that follow. Unrestricted reserves may be adjusted in amount and directed for needs other than those initially contemplated, but funds described in Policy 7 for replacement/major maintenance must be used only for needs of the enterprise from which the funds were generated.

AB 1600 requires that development impact fees ("capacity fees") and interest generated from such can only be used for capital projects related to expansion, not replacement or enhancement. These funds are maintained separately in the appropriate enterprise **Construction Fund**.

Vested sick leave results from contractual obligations with employees. Cash is maintained in an amount equal to the vested sick leave obligation. Upon voluntary termination, retirement or death of an employee, the vested sick leave accrual is paid to the employee or their beneficiary.

Trust funds hold cash that has been deposited with the District for future obligations that may or may not occur. These obligations include developer/customer deposits and pre-funding by Triunfo Water and Sanitation District for their portion of JPA capital projects and 3 months operating expense.

A **Bond covenant** is cash held as a surety that the annual bond payment and interest will be made. The official documents of the bond transactions require that funds be deposited and maintained with the trustee until the final bond payment is made or the bond issue is defeased. If the District had to draw on this reserve to pay any portion of the debt service payment before the issue had fully matured, the District would be in technical default and the trustee could require the District to pay off the bondholders at once. The District's refunding bond reserve has been deposited through the bond trustee, Bank of New York, in the state of California's Local Agency Investment Fund ("LAIF"). The current bond coverage required for the district is that net operating income must be at least 110% of the maximum annual debt service.

POLICY 2: Balanced Budget/Annual Board Review

The District will maintain a balanced operating budget for each enterprise fund with annual revenues equal to or greater than annual expenditures. However, the Board may determine that reserves be used to augment operating revenues under certain circumstances. The Board will review annually the working capital, cash, projected income and bond coverage levels to determine the adequacy of each.

If in any given fiscal year operating expenditures will exceed the operating revenue projected in the same year, causing a budget imbalance, cost cutting measures or revenue enhancements may be addressed before spending *reserves* to support ongoing operations. Cost cutting measures may include reductions in capital improvement projects, reductions in staff or reductions in expenditures for materials, services, or supplies. Such expenditure or staff reductions may result in reduced service levels. Alternatively, the Board may determine that circumstances warrant taking money from reserves to offset expenses larger than operating income.

At year-end, net revenue after expenses ("income") will be transferred to funds as directed by the Board, subject to any legal limitations on the Board's discretion. Funds balances are addressed annually as part of the budgeting process.

Available cash in the various funds reflects the District's ability to pay current bills and commitments, as well as underwriting the risk level the District is willing to accept.

**POLICY 3: Rate Stabilization Fund**

The District will maintain a Rate Stabilization Fund in an amount of \$8 million to maintain rate stability for customers in times when short or mid-term cash needs are volatile.

The District's potable water operating revenue *can vary greatly* based on climatic conditions. During periods of heavy rain, potable water revenue drops significantly from the three year average at which revenues are budgeted. During significantly hot, dry periods, a reverse trend is seen wherein significant revenue is generated by higher sales than the three year average. During periods of extended water shortage, when customers are asked to reduce consumption, the impact on potable water revenue is similar to the effect of heavy rain. Rather than raising water rates on a temporary basis to cover expenses during these times, the Rate Stabilization Fund (RSF) allows the Board to balance operating revenue to operating expenses by a transfer.

POLICY 4: Financing Alternatives

As part of the annual Infrastructure Investment Plan (IIP) budgeting process, the District will examine options available to pay for the proposed projects, including the option of financing.

Each year the Board reviews needs for capital improvements and major maintenance over the next five years (the capital improvement plan "CIP"). Expenditures are projected on an annual basis, but the available fund balance for replacement or major maintenance is not always adequate to cover the need when it arises. The Board favors a pay-as-you-go program for the IIP program, but the District may not have funds available to pay for projects in any given year, or projects anticipated in future years may be of a type that would be difficult to finance. Such considerations may dictate financing as the preferred alternative. If a project requires substantial expenditures over several years and interest rates are low, the District may consider issuing financing now and reserving the available funds for need at times when interest rates are higher.

The Board has determined that debt service should not exceed 15% percent of reliable revenue sources.

POLICY 5: Fiscal Impact Analysis

Staff shall prepare a fiscal impact analysis for each budget appropriation request not included as part of the Annual Budget. Available fund balances are intended to be appropriated only for "one-time" nonrecurring expenditures not covered by the current annual budget.

When non-budgeted items are brought before the Board for consideration, the resulting fiscal impact will be analyzed. The Board requires all requests for new or supplemental budget appropriations to be accompanied by a fiscal impact statement including:

- Amount of funds requested
- Source of funds requested
 - New revenue
 - Reallocation of existing appropriations
 - Grants
- Impact of Request
 - New rates or fees
 - Decrease in one activity to support another activity
 - Effect on fund balance

POLICY 6: Operating Funds Cash Requirement

The District will maintain cash (net of restricted cash) in the Operations Fund of each enterprise equivalent to 25% of the operating budget (and eliminate the requirement for one-year's debt service obligation. This change in policy will increase the potable water reserve balance but should be tempered with a requirement to maintain a working capital reserve for operations and one year's debt service in the sanitation operating fund each year, which would be approximately \$5.2 million.)

An available cash reserve to cover operating shortfalls is a prudent management practice to be used for both short term cash flow and contingency planning for unforeseen situations. Examples Include:

- Unexpected increases in costs or declines in revenues
- Legislative or judicial mandate to provide a new or expanded service or program
- Natural disaster emergencies which exceed the Emergency/Insurance Fund
- One-time Board approved non-capital expenditures or capital need if the IIP fund is inadequate
- Interruptions in billing process to customers

If such unforeseen circumstances occur, staff will present the Board with options for curing the deficiency, including use of this fund.

POLICY 7: Replacement and Major Maintenance Fund by Enterprise (potable water, sanitation, recycled water)

Each of the District's three enterprises will maintain a Replacement Fund for major maintenance, replacement and improvement of facilities and infrastructure not related to growth. The source of funds will be current user fees. Each Replacement Fund will maintain cash levels equal to the most current three- years of actual depreciation expense. If a replacement fund's cash target is exceeded, the Board will consider using the excess for prepayment of outstanding debt, if appropriate.

Prudent stewardship of assets requires that maintenance be performed to postpone or decelerate the aging process. As a general rule, maintenance costs for an item become more expensive as the asset ages. Also, changes in technology could result in replacing an asset with one which provides lower operating expenses or greater revenues or replacement of assets may be required due to changes in regulatory standards.

Major maintenance and replacement are on-going operating costs that should be paid for by user fees. Appropriate cash levels within a Replacement Fund enables the District to pay for planned or unplanned projects in any given year.

The water stand-by charge is levied against developed and undeveloped land and is dedicated to maintenance and replacement of potable water infrastructure and facilities. Recognizing that undeveloped land has added value because of the availability of potable water service, these owners have a vested interest in seeing the system maintained.

POLICY 8: New Construction Fund by Enterprise

The District will pay for expansion or new facilities necessitated by growth from capacity fees collected from new development and maintained in the appropriate enterprise's Construction Fund.

Current ratepayers should not be burdened with costs associated with growth due to new development. The fair share of cost of expansion will be borne by the developers through capacity fees.

The District has a master plan that identifies projected infrastructure and facility needs through build-out and is used as the basis for determining capacity fees. Capacity fees may be pledged for debt service payments, if the need for the expansion occurs before adequate capacity fees can be collected.

Prepaid capacity fees not used are subject to refund with interest, provided the developer has not started his project and the District has not begun construction on the system.

POLICY 9: Internal Service Replacement Fund for Buildings, Vehicles and Equipment

The Internal Service Fund will have revenues (i.e. user charges, interest income and all other income) sufficient to meet operating expenses, maintenance costs, depreciation expense, an inflation factor for other needs not exclusive to one of the three enterprises.

The District uses the internal service fund as an internal accounting and budget mechanism to equitably distribute general operating costs such as for buildings, vehicle and equipment replacement and maintenance costs among District user programs and to assure that adequate funding is on hand to replace or maintain these assets.

POLICY 10: Emergency/Insurance Fund

The District will maintain an Emergency/Insurance Fund to cover claims not covered by insurance, fines and penalties imposed by regulatory agencies and disaster repairs and expenses. The target for this Fund is two percent (2%) of the total value of capital assets, including LVMWD's share of the Joint Power's Authority capital assets. The Board must approve any expenditure from this Fund. Self-insurance retentions will be paid out of operating budgets.

To protect the investment in assets and to ensure continuation of District operations, the District purchases insurance for general liability, property and worker's compensation. The District has the responsibility to pay for deductibles or self-insurance retentions. Also, the District has some risks that may not be economically or actually insured, such as certain types of pollution (odor), flood, and mold. Also, the insurance on District's sewer lines or water lines is limited to the cost of emergency clean-up and does not include the cost of repairing the failure. Because of this potential exposure, the District has established the Emergency/Insurance Fund at two- percent of the value of capital assets less the value of land, which amount will be determined annually after the audit. The Fund can only be used when approved by the Board.

This policy is in line with our experience in having to pay damages that are not covered by insurance and cover expenses that are not reimbursed on a timely basis by FEMA. Like the Rate Stabilization Fund, not having the Emergency/Insurance Fund available in the event of a disaster could significantly impact our cash flow and possibly impact future utility rates during troublesome times.

POLICY 11: Assignment or Commitment of Reserves in Excess of Target Balances

When the operating reserves for an enterprise fund exceed the amounts required by these Financial Policies, the Board may assign or commit the funds in excess of the established reserve balance targets for use by the Pure Water Project.

The Board has a policy favoring pay-as-you-go for capital projects. The District considers cash on hand in excess of the reserve levels established by Policy 6 as available for capital or any one-time project. Additionally, GASB 54 establishes specific designations related to the use of fund balance as follows:

- *Assigned Fund Balance* – The assigned fund balance is a designation by the Board or its authorized designated official specifying an intended use of certain funds. These funds are committed for a specific purpose but not necessarily to a specific project or program and its use is not restricted.
- *Committed Fund Balance* – The committed fund balance has stronger restrictions than assigned fund balance in that its use is constrained by the Board and any use of the funds must have explicit approval of the Board, usually in the form of an ordinance or resolution. Committed funds cannot be used for any other purpose without action by the Board.

Funds that are available after the Enterprise has met its requirements for having a cash balance equivalent to 25% of the operating budget and for having funds available for replacement and major maintenance as specified in the annual Infrastructure Investment Plan (reserves equivalent to three years of capital improvement projects) can, at the Board's discretion and upon approval, be assigned or designated for use by the Pure Water Project.



Debt Management Policy

Approved April 7, 2020

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Las Virgenes Municipal Water District Debt Management Policy

1.0 AUTHORITY

This Debt Policy was adopted by the Board of Directors of the Las Virgenes Municipal Water District at its regular meeting on April 7, 2020. Any modifications to this policy must be approved by the Board of Directors at a duly noticed public meeting.

2.0 SCOPE

This debt policy sets forth debt management objectives for the District and establishes general parameters for issuing and administering the District's debt. This policy applies to all debt issued or incurred by the District, including, but not limited to, loans, private placements, municipal bonds, and credit lines. This policy does not cover credit or purchasing card debt or pension and Other Post-Employment Benefits (OPEB).

3.0 POLICY STATEMENT

Las Virgenes Municipal Water District favors a pay-as-you-go program for capital projects. However, the District will consider debt financing under the following conditions:

- 1) When the project's expected useful life will exceed the term of the financing.
- 2) When the project revenues or specific resources will be sufficient to service the long-term debt.

The District shall consider the following factors prior to issuing debt:

- 1) Revenues have been identified to service the long-term debt.
- 2) Impact on District reserves and operating budget.
- 3) The impact on customer rates.
- 4) The project securing the debt is of the type that will support a good credit rating.
- 5) Market conditions present favorable financing terms.
- 6) The project is mandated to meet State or Federal standards.
- 7) The project is required to meet current or projected capacity requirements.
- 8) The project's useful life.
- 9) The project's cost.

The District shall not utilize debt for operations or maintenance activities.

4.0 METHODS OF FINANCING

The Director of Finance and Administration will investigate all possible financing alternatives including, but not limited to, grants, loans, and bonds.

4.1 Cash

The District favors pay-as-you-go and funds a significant portion of its capital projects through this strategy that utilizes current cash on hand.

4.2 Grants

The District will first look to grants to supplement capital project financing.

4.3 Interfund Borrowing

The District may borrow funds from an enterprise that has sufficient cash in excess of the District's reserve policy for the following purposes:

- 1) For short-term borrowing due to imbalances caused by timing of grants or other borrowing methods.
- 2) For projects under \$10 million.
- 3) For repayment terms of five years or less.

For interfund borrowing, the Director of Finance shall determine that the loan will not negatively impact the enterprise that is loaning the funds and that the loan will not cause reserve levels to be below policy limits. Interfund loans will have a floating interest rate based on the "Total Portfolio Yield" as reported on each month's Monthly Cash & Investment Report, a loan agreement, and a repayment schedule approved by the Board of Directors.

4.4 Bank Loans/Lines of Credit

The District may seek out bank loans or lines of credit when such terms are beneficial to the District over other financing methods.

4.5 Other Loans

The District will evaluate other loan programs, including but not limited to, State Revolving Fund (SRF) programs, Water Infrastructure Finance and Innovation Act (WIFIA), California Special Districts Association (CSDA), and other specialized loan programs.

4.6 Lease – Purchase Agreements

The District will evaluate lease-purchase agreements as a means to finance capital projects.

4.7 Debt Financing

The District may issue debt as allowed under federal and state law either. Debt financing through a Public Finance Authority (PFA) or through a Joint Powers Authority (JPA) shall

also be evaluated.

(a) **Bond Anticipation Notes and Refunding Agreements**

Bond Anticipation notes and other interim financing methods may be utilize to cover short-term financing needs in anticipation of long-term future debt issuance.

5.0 PROHIBITED DEBT

The District shall not issue debt for purposes not expressly allowable under this policy. The District shall not issue utilize financing methods not expressly allowed under this policy.

6.0 FINANCING TEAM

The Financing Team is the working group of staff and consultants necessary to complete a debt issuance. The team includes bond counsel, disclosure counsel, underwriter, and financial advisor, and may include trustee, pricing consultants, and/or arbitrage analyst. The team also typically includes the General Manager, Director of Finance and Administration, and the Finance Manager.

6.1 Consultant Selection

The District will consider the professional qualifications and experience of consultants as it relates to the specific debt issuance. The District recognizes the benefits of long-term relationships with the financial advisor and bond counsel and will seek proposals for these services at least once every ten years. All other consultants will be reviewed with each debt issuance to insure that the expertise for the particular debt instrument is available.

7.0 STRUCTURE AND TERM OF DEBT

7.1 Term of Debt

The District will structure debt for the shortest possible period. In no case will debt exceed 30 years. Considerations for the term of the debt shall be:

- 1) Anticipated useful life of the project.
- 2) Ability to fund with pay-as-you-go funds.
- 3) Current and future revenue available to make debt payments.

7.2 Debt Repayment Structure

The District will seek to structure the debt with a level repayment schedule to ensure budget certainty.

7.3 Debt Maturity Options

For each issuance, the District will select either serial, term bonds, or both.

7.4 Interest Rate Structure

The District will issue long-term debt and enter into other forms of debt arrangements with a preference for fixed interest rate to ensure budget certainty.

7.5 Call/Put Options

A call option is utilized to allow the District to retire debt earlier than its stated maturity. For new debt, the District will consider the cost and benefits of providing a call option.

A put option provides the holder of the debt the option to require the District to pay back the principal of a debt prior to its stated maturity date. The District will not utilize put options.

7.5 Credit Enhancements

Credit enhancements such as bond insurance, letters of credit, and surety policies may be utilized to improve credit ratings when total cost savings can be achieved.

7.6 Reserve Fund

Debt service reserve funds are held by a trustee or the District and are utilized to make debt service payments should the District fail to generate sufficient annual revenues or fail to fund the Rate Stabilization Fund. The District will seek to minimize the use of reserve funds and may consider substituting letters of credit, bond insurance, or surety policies.

7.7 Debt Limits

The District will not issue debt in excess of that provided for by State or Federal limits. Annual debt service obligation shall not exceed 15% of each enterprises' annual operating revenue.

7.8 Use of Derivatives

The District shall not utilize derivatives.

8.0 REFUNDINGS

The District will refinance debt to achieve cost savings or to modify debt covenants. When refinancing for cost savings, the District will target a 5% reduction in net present value. Refunding to lengthen the term of the debt will only be permissible if the new term does not exceed the expected useful life of the project the debt was issued for.

9.0 DEBT MANAGEMENT

9.1 Method of Sale

The District, with its financial advisor, will evaluate the most cost efficient method of issuing debt. Debt may be issued through a competitive sale, a negotiated sale, or other placement, including placements with local, state, or federal agencies.

9.2 Initial Disclosure Requirement

The District recognizes its disclosure responsibilities and will hire disclosure counsel for debt sales. The District will comply with Securities and Exchange Commission Rule 10b-5 and all other applicable rules.

9.3 Ratings

The District will seek to manage its finances in a manner that results in high bond ratings to reflect high credit worthiness of the District. The District recognizes that the District's fiscal status, reserve levels, rate schedule, credit history, and management capabilities are reflected in bond ratings and evaluations of credit worthiness. The financing team will evaluate whether and when one or more ratings will be sought. The Director of Finance and Administration will be the primary point of contact to ratings agencies.

9.4 Investment of Proceeds

The Director of Finance and Administration shall invest proceeds and reserve funds in accordance with the indenture and in compliance with the District's Investment Policy. The Director of Finance and Administration shall also ensure compliance with arbitrage requirements.

9.5 Use of Proceeds

The Director of Finance and Administration shall ensure that debt proceeds are utilized for the intended purpose.

9.6 Ongoing Disclosure

The Director of Finance and Administration shall ensure compliance with all continuing disclosures requirements, including but not limited to SB 1029, Securities and Exchange Commission Rule 15c2-12, and required disclosure to the Municipal Securities Rulemaking Board's Electronic Municipal Market Access (EMMA) system.



DATE: April 16, 2024
TO: Board of Directors
FROM: Engineering and External Affairs

SUBJECT: Potable Water Pipeline Condition Assessment, Rehabilitation and Replacement Study: Award

SUMMARY:

The District's 400 miles of potable water transmission and distribution pipelines are an integral component of the drinking water system that delivers water to households and businesses 24 hours per day, seven days per week. A reliable network of piping is essential to provide water service. Without plans in place to rehabilitate and replace aging pipes, the water system is prone to leaks and breaks that can be increasingly disruptive and costly, deteriorating the level of service to provided to customers.

The Potable Water Pipeline Condition Assessment, Rehabilitation and Replacement Study will provide guidance on the proactive rehabilitation and replacement of the District's potable water pipelines. The study will identify, in priority order, rehabilitations and replacements for decades to come and inform future Capital Improvement Plans, along with the rates studies necessary to fund the investments. With a plan and adequate funding for its implementation, the District's can ensure that its network of piping will remain reliable for future generation.

Staff recommends authorization to execute a professional services agreement with HDR Engineering, Inc., in the amount of \$263,940, for conducting the Potable Water Pipeline Condition Assessment, Rehabilitation and Replacement Study.

RECOMMENDATION(S):

Accept the proposal from HDR Engineering, Inc., and authorize the General Manager to execute a professional services agreement, in the amount of \$263,940, for the Potable Water Pipeline Condition Assessment, Rehabilitation and Replacement Study.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

The cost of the work is \$263,940. Sufficient funds for the work are available in the adopted Fiscal Year 2023-24 Budget from CIP Job No. 10728, Potable Water System Pipe Rehabilitation and Replacement Program. No additional appropriation is required.

DISCUSSION:

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

The District's Mission Statement is as follows: *Dedicated to Providing Reliable, High-Quality Water Service in a Cost-Effective and Environmentally Sensitive Manner*. More specifically, the District's Strategic Plan includes two strategic objectives that are relevant to ensuring the integrity of its network of pipelines: *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 its 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. A Pipeline Condition Assessment, Rehabilitation and Replacement Plan will inform future Capital Improvement Plans and the rate setting studies necessary to ensure sufficient funding for the investments.

The District's current Capital Improvement Plan includes approximately \$2.8 million per year (starting in Fiscal Year 2024-25 and increasing with inflation) for potable water pipeline rehabilitation or replacement work. The purpose of the study is to identify the order of priority for rehabilitations and replacements and develop a long-term plan for scheduling individual rehabilitations and replacements. The plan will be based on current funding levels and provide guidance for an adjusted funding level projection that would reflect a maximum pipeline life expectancy consistent with standard industry practices (i.e. 75 or 100 years), or as recommended based on current infrastructure age and pipe failure records.

The study will utilize industry standards and best practices for establishing priorities, as well as data from District and other local agency projects for establishing rehabilitation and replacement costs. Priorities will be based on a combination of pipe age, material, leak history, cathodic protection, pressure, importance/risk (i.e. large transmission mains serving a large area versus small neighborhood supply lines on a looped system), likelihood of failure (LOF), consequence of failure (COF), and other pertinent factors including, but not limited to, pavement maintenance/street repaving schedules and/or Pavement Condition Index (PCI) to group projects and minimize duplicative construction costs.

On February 1, 2024, a Request for Proposals was issued to solicit proposals from qualified consultants. Proposals were received from HDR Engineering, Inc. (HDR) and Kennedy/Jenks

Consultants. A selection committee consisting of staff from Engineering and Operations reviewed the proposals and determined HDR's proposal to best fit the District's needs. The total fee for HDR's performance of the work, not including optional tasks, is \$263,940, compared to Kennedy/Jenks Consultants at \$244,740. HDR was deemed to be more qualified based on their team's extensive experience conducting similar studies. A copy of HDR's proposal is attached for reference.

The ultimate deliverable will be a final report that includes the plan. A draft plan will be presented to staff and the Board for comment and feedback before the final plan is produced. The study is scheduled to start in May 2024 and be completed by the end of the calendar year.

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 HDR Engineering, Inc., and authorizing the General Manager to execute a professional services agreement, in the amount of \$263,940, for the Potable Water Pipeline Condition Assessment, Rehabilitation and Replacement Study.

GOALS:

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

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

ATTACHMENTS:

[Proposal by HDR Engineering, Inc.](#)



PROPOSAL FOR

Potable Water Pipeline Condition Assessment, Rehabilitation and Replacement Study

March 1, 2024





March 1, 2024

Las Virgenes Municipal Water District (LVMWD)
Joe McDermott, PE, Project Manager
4232 Las Virgenes Road
Calabasas, CA 91302

RE: Proposal — Potable Water Pipeline Rehabilitation and Replacement Study

Dear Mr. McDermott and Members of the Selection Committee,

Thank you for inviting HDR Engineering, Inc. (“HDR”) to propose on your Potable Water Pipeline Rehabilitation and Replacement Study. LVMWD has consistently met its mission to provide high quality water to customers but this has become more challenging as pipeline infrastructure ages and deteriorates. We look forward to helping you cost-effectively maintain desired service levels. HDR is uniquely positioned to help you achieve this by providing:

A NATIONALLY RECOGNIZED, LOCALLY BASED TEAM. The foundation of our approach relies on ongoing, direct communication between LVMWD Staff and our industry experts. Our Team Leader, **Dave Spencer, PE**, has implemented aging infrastructure pipeline management programs for more than 100,000 miles of pipe around the country and has co-authored four Water Research Foundation studies on the topic. This includes evaluating the efficacy of satellite leak detection, machine learning, and traditional risk assessment and CIP development methodologies. Dave has assembled a strong team of Task Leads and Advisors who are all based in Southern California. This allows us to regularly collaborate in-person, so we can listen to your unique challenges, share our lessons learned, and work together to define the best solutions for LVMWD.

KNOWLEDGE OF YOUR SYSTEM LEADS TO EFFICIENT PROJECT DELIVERY. Our team knows your infrastructure and is well known by your staff. For more than 20 years, **Dan Ellison, PE** has served as LVMWD’s planning engineer, writing dozens of “System Design Reports”, managing the development of Master Plans in 1999 and 2007, and assisting with the 2014 Master Plan update. The HDR/Schiff group, led by **Brien Clark, PE, NACE/AMPP CP-4**, has supported LVMWD’s corrosion protection and rehabilitation program since 1998. This knowledge, in conjunction with our experience implementing similar programs around the country, will enable us to hit the ground running and focus limited LVMWD Staff time on key decisions.

PROVEN APPROACH TO GAIN STAKEHOLDER SUPPORT FOR PRUDENT INVESTMENT LEVELS. Our team has **helped over 50 utilities gain political support to adjust investment levels and rates to respond to aging pipeline infrastructure.** Our approach forecasts service levels at various CIP investment alternatives to quantify what the ratepayer gets for that investment. Then we collaborate with you to identify budgets that strike the appropriate balance between near-term costs and desired long-term service levels for your customers. Results are communicated in a clear and concise manner to Board members and other stakeholders and identify optional strategies and associated outcomes. For example, at Suburban Water Systems, where the system was performing poorly and investment levels were low; this approach was used to justify a six-fold increase in long-term pipeline replacement rates. Conversely at Sweetwater Authority, near-term pipeline replacement rates were reduced by 30% to strike the right balance between desired service levels and affordability.

hdrinc.com

200 E Santa Clara Street, Suite 220, Ventura, California 93001-2795
T 805.765.0803

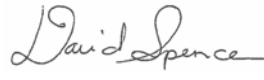
A DATA-DRIVEN CIP THAT WILL ADAPT TO CHANGING NEEDS. LVMWD has collected large quantities of useful risk assessment data. Our team specializes in leveraging that data to make **prudent and transparent infrastructure management decisions that target the RIGHT pipe, at the RIGHT time, using the RIGHT technology.** These transparent decision processes will enable staff to adapt to changing needs and maximize the value of CIP investments while minimizing community impacts. For example, at Bellevue, Washington, HDR developed a YouTube style How-to training video that enabled staff to efficiently refine project boundaries and priorities as lessons are learned and new data are incorporated, including breaks, CP test station readings, and pavement renewal projects.

HDR has been partnering with LVMWD for decades, helping plan the system and devise its corrosion protection. We are excited for the opportunity to bring this knowledge and to collaborate and partner with you on this project. Please contact David Spencer at 858.245.0771 or David.R.Spencer@hdrinc.com if you have any questions regarding our proposal.

Sincerely,
HDR Engineering, Inc.



Anna Lantin, PE
Vice President



Dave Spencer, PE
Project Manager

COMPANY DETAILS

LEGAL NAME OF FIRM	HDR Engineering, Inc.
ADDRESS	200 E Santa Clara, St. Suite 220
CITY/STATE/ZIP	Ventura, CA 93001
AUTHORIZED SIGNATORY (PRINCIPAL)	Anna Lantin, PE
PHONE	714.368.5691

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A



About HDR



About HDR

Founded in 1917, HDR is headquartered in Omaha, Nebraska, and maintains more than 225 offices throughout the U.S. and abroad. We are an employee-owned corporation and have grown to more than 12,000 employees, making HDR one of the nation's leading consulting firms. We have been part of the Southern California business landscape since 1960, and over time, have expanded to nine Southern California offices: Ventura, Los Angeles, Long Beach, Claremont, Irvine, Santa Ana, Riverside, and two in San Diego. As an integrated firm, we provide a total spectrum of services for our clients. HDR's operating philosophy is to apply our national expertise to deliver tailored solutions through a strong local presence. **Our ability to draw upon company-wide resources is the basis of our ability to meet and exceed our clients' expectations.**

Partnering with You

HDR's local team comprised of national technical leaders, including our Project Manager Dave Spencer, will greatly benefit LVMWD through incorporation of lessons learned from around the country balanced with an understanding of local issues. HDR's team for this Project has authored more than eight books on pipeline condition assessment and rehabilitation, led the creation of AWWA Manual M77, and is **currently conducting training on these subjects for AWWA.**



HDR/Schiff performing soil corrosivity testing along Calabasas Road.

Dave is supported by other technical experts (e.g. Dan Ellison and Brien Clark) who have a long working relationship with LVMWD staff and access to more than 30 pertinent corrosion studies we performed for LVMWD as M. J. Schiff. Based on this unique experience and our understanding of your needs, we have developed a clear approach, scope, schedule, and budget that will help you achieve your objectives.

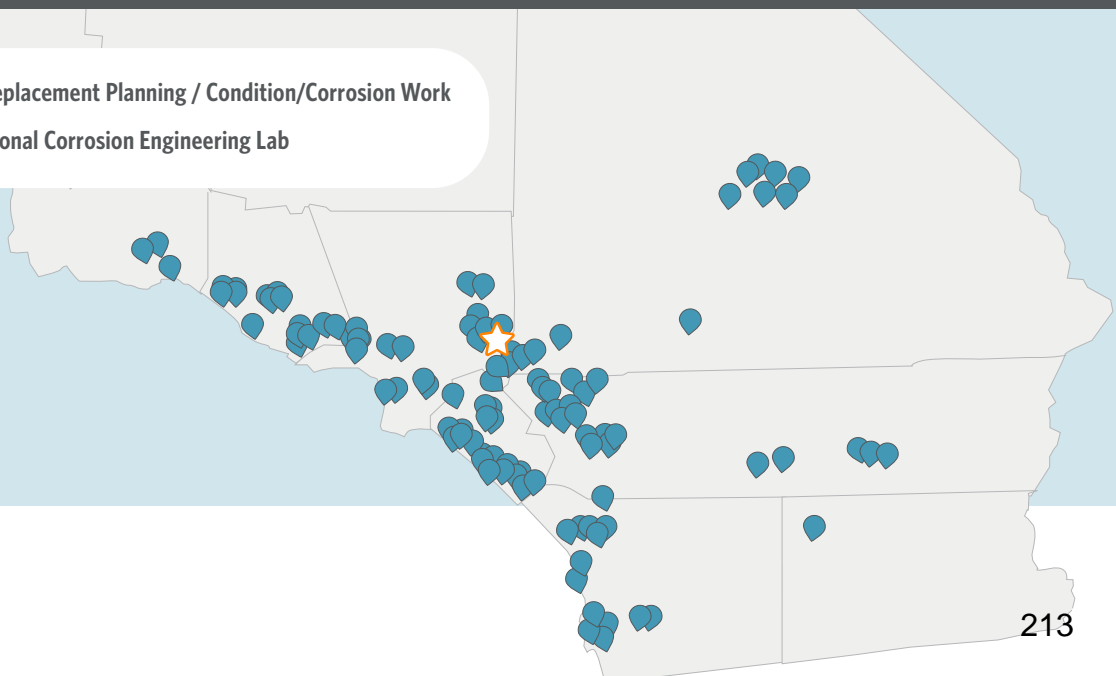
NATIONAL EXPERTISE, LOCAL TO LVMWD

AWWA engaged Dave Spencer and Dan Ellison to devise and conduct comprehensive, in-depth training classes for utilities on water main condition assessment. These 3-day classes are planned for twice per year, and presented in major cities across the U.S.. The next class is planned for Boston, in October 2024.

Last week, the AWWA publication Opflow asked Dave and Dan to write a special 50th-anniversary article on pipeline condition assessment, to be published this July.

In the last ten years, HDR has performed more than **100 pipeline replacement planning, condition assessment, and corrosion projects in Southern California alone.**

- Pipeline Replacement Planning / Condition/Corrosion Work
- HDR's National Corrosion Engineering Lab



B

Scope of Work



Scope of Work

Project Understanding

The current replacement cost of Las Virgenes Municipal Water District’s (LVMWD’s) potable water pipeline infrastructure is approximately \$1.2 billion dollars. As the system continues to age and deteriorate, one of LVMWD’s primary goals is to cost effectively sustain desired service levels through proactive infrastructure management and replacement. The purpose of this project is to leverage readily available data to determine prudent investment levels and a risk-based order of priority for pipeline rehabilitations and replacements. This will inform future Capital Improvement Plans and rate setting studies.

The LVMWD system is predominantly made up of asbestos cement (AC), cement mortar lined steel (CMLC), and polyvinyl chloride (PVC) pipe. Based on LVMWD’s 2017 study, PVC pipe is relatively new and performing well. In contrast, 93% of main breaks have occurred on either AC or CMLC pipe. Therefore, particular attention will be given to those materials.

Currently, LVMWD is spending roughly \$3 million dollars per year in aging infrastructure management focused on pipeline rehabilitation and replacement. However, this investment hasn’t been able to sustain service levels as breaks have roughly doubled in the past 25 years. An age-based pipeline renewal budget using AWWA’s published useful life information would suggest a replacement program of roughly \$15 million dollars per year over the next 30 years. However, with significant investments on the horizon (e.g. LVMWD’s Advanced Purification Facility and Conveyance) and good system performance relative to national averages (LVMWD’s break rates is roughly half of the national average), large age-based investment levels are neither reasonable nor affordable.

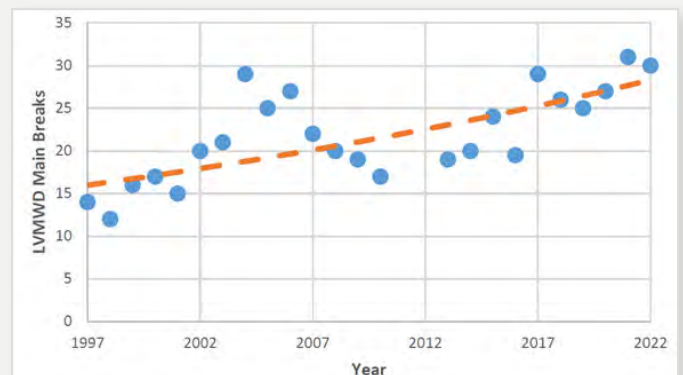


2002 Failure of 10" Steel Pipe Near Hidden Hills

THIS PROJECT WILL HELP LVMWD ANSWER THE FOLLOWING QUESTIONS:

- How long will our pipes last?
- What service levels should we be providing?
- How much should we be investing to maintain desired service levels in the future?
- How can we leverage the data we have to prioritize rehabilitation and replacement investments and cost effectively extend the life of our infrastructure?
- How can we enhance the way we collect and manage data today to make sure we can efficiently leverage it tomorrow to make prudent decisions?
- What new technologies should we be leveraging to make sure we have a sustainable, staff owned program?

The answer to these questions will establish a path forward for improved management of potable water pipelines.



LVMWD breaks have roughly doubled in the past 25 years suggesting historic renewal has not kept pace with aging pipeline infrastructure.

For example, AWWA's published useful life for AC pipe ranges from 70 to 105 years. However, LVMWD's AC pipe are expected to last, on average, much longer because one of the three prominent mechanisms for AC deterioration (salt cracking), is not prevalent. Salt cracking occurs where salts migrate into the pipe wall through capillary and evaporation processes and then crystallize and expand when hydrated. Figure 1 shows the San Antonio service area (on the left) and the southern portion of LVMWD's service area (on the right) with salt concentration levels shown on a red (high salt content) to green (low salt content) scale. LVMWD's AC pipe is exposed to much lower levels of salts and as a result, even though the average age of AC pipes in both systems is similar, LVMWD's AC break rate is roughly 8 times better and will have a much longer average useful life than AC pipes in San Antonio. Even though LVMWD's pipes should last longer on average, some will fail prematurely, such as:

- Substandard AC pipe imported from overseas
- Pipes inherited from mutual water companies (e.g., cast iron in Calabasas Highlands)
- The Hidden Hills area where elevated demands has produced higher stress
- Other areas where ground water and ground movement affect the mains

LVMWD's soils are amenable to longer life for AC pipes. As a result, industry useful life estimates and the resulting age-based investments levels (\$15M/yr) are not appropriate for LVMWD.



Failure of 20" LVMWD Steel Pipe in 2002

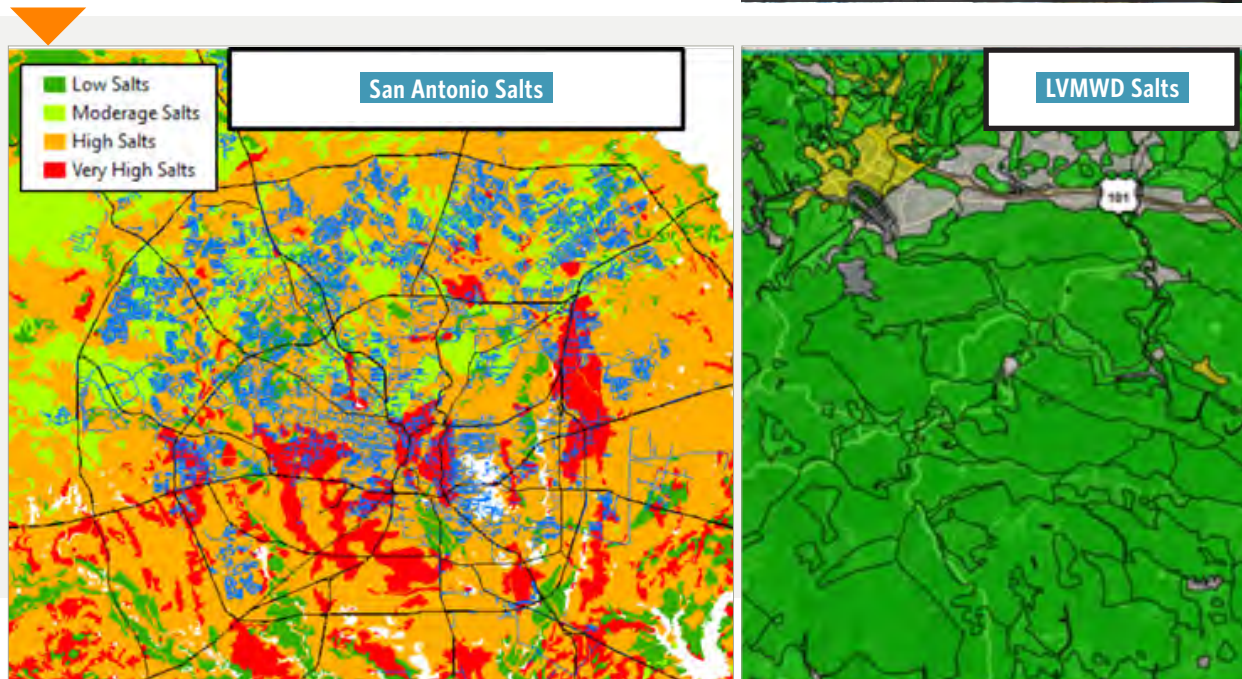


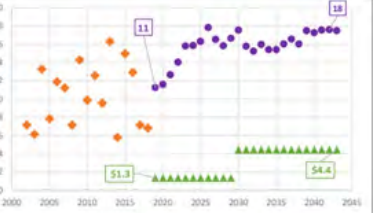






Figure 1

We Understand Your Challenges.

CHALLENGES	METHOD TO OVERCOME	BENEFIT	WE'VE DONE THIS BEFORE
Achieving Project schedule goals	Leverage HDR's understanding of your data and systems to hit the ground running. During the critical first month of the project when data is being requested and reviewed, we anticipate weekly meetings to fast-start the Project to maintain project schedule.	Proactive schedule management and on-time delivery	 <p>This approach was used at Sweetwater Authority in developing their Water Distribution System Master Plan and contributed to delivering the project on schedule. Dave Spencer, Brian Clark and Dan Ellison will leverage their experience from prior projects with LVMWD to "fast start" project delivery.</p>
Determining which systems to use	Our approach includes a workshop within a month of NTP to share lessons learned from other utilities and decide whether LVMWD will pilot machine learning and satellite leak detection. Fast-tracking the decision to implement machine learning will enable the team to focus on refining LVMWD's risk assessment and project packaging processes within the desired information system.	A system LVMWD can own and carry forward.	 <p>Dave Spencer and HDR have evaluated the efficacy of a variety of different machine learning and satellite leak detection software solutions at utilities such as the cities of Phoenix, St. Petersburg, Santa Cruz, Bellevue, and Tucson Water. This evaluation included measuring the accuracy of break predictions.</p>
Evaluating and communicating level of service targets, costs and benefits to LVMWD Staff and Managers	Develop dynamic forecasting tools to evaluate the impact of different investment levels and associated levels of service targets for pipe failures.	Develop prudent and defensible CIP budgets based on the unique level of service needs of LVMWD customers.	 <p>Investment and level of services alternatives were evaluated Suburban Water System before successfully being presented to the Utilities Commission for rate increase approvals.</p>
Risk model is distorted by high CoF assets, resulting in poor management decisions Recently constructed large diameter pipes can have high consequence of failure so likelihood of failure becomes more important.	We prefer to add CoF and LoF factors (rather than multiplying) so proper weight can be given to each factor. This additive approach was incorporated into AWWA M77 by HDR staff. The additive approach can also incorporate valve failure risk, a leading driver of failure cost.	Risk assessments that are efficient to develop, practical in application and require less LVMWD staff time to evaluate.	 <p>Discovered through our CoF process, a new valve in this Omaha neighborhood would make a break 10 times less consequential.</p>
Identify cost effective replacement or remediation strategies Replacement is expensive and not always the best value.	Evaluate alternative remediation strategies such as cathodic protection retrofits per WRF 4618, pressure reduction, and rehabilitation and rehabilitation methods, per WRF 4473.	Alternatives remediation strategies can provide significant savings to the District.	 <p>HDR recently utilized inspection data to identify rehabilitation of 4 miles of 33-inch CML&C steel water main versus replacement for Eastern Municipal Water District that resulted in significant savings.</p>
Defensible and dynamic updates to CIP recommendations as CIP project costs fluctuate and priorities change over time	We use a data-driven methodology to develop, prioritize and optimize the CIP. The steps are built into tools that can be used by LVMWD staff over time as the CIP changes.	Defensible and objective prioritization of projects so that improvements are made at the right time to extend asset lives.	 <p>Balanced and prioritized CIP budgets delivered for West Basin Municipal Water District.</p>
Asset inventory doesn't support practical decision making	Group short GIS pipes into more meaningful projects	Identification of effective approaches that can be used across the system results in significant cost savings and improved decision making.	 <p>For example, grouping short GIS pipes by original construction record drawing number resulted in more effective and actionable pipe management projects that align with typical project packaging practices for the City and County of Honolulu, City of Phoenix, and Padre Dam Municipal Water District.</p>



Project Approach

LVMWD has a wealth of data to support this objective including GIS, 30 years of breaks, cathodic test station(CTS) readings, and some direct condition assessment data. **Now is the time to pivot toward leveraging this data to drive prudent budgeting and decision making.**

To accomplish this, we have organized our team around six tasks (Figure 2) which include all of the scope of work items within the RFP. Work performed in each task will be documented as a distinct chapter within the comprehensive Potable Water Pipeline Rehabilitation and Replacement Study Report (Report). In addition to the report, tabular and map-based deliverables will be provided in native form (e.g. ESRI GIS, Microsoft Excel, etc.) for key deliverables including the budget forecasting model, risk assessment, prioritized rehabilitation and replacement projects and associated planning level unit cost assumptions.

Our project approach is founded on **industry research and decades of implementation experience.**

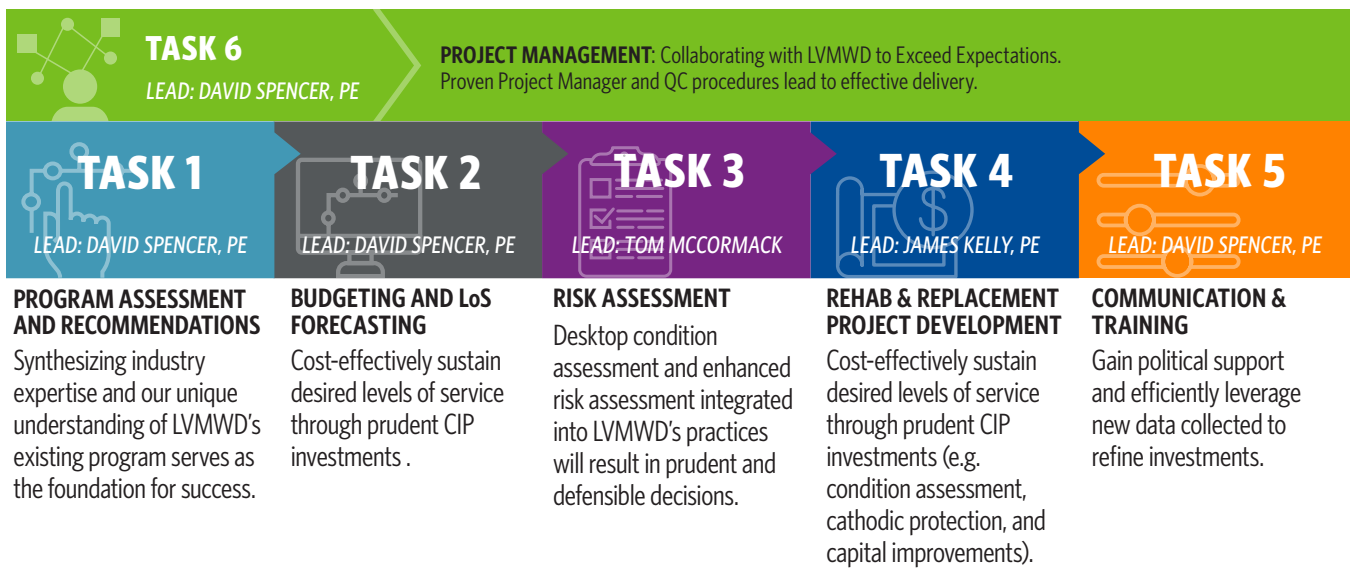


Figure 2



Task 1 Program Assessment and Recommendations

The “right” solution for one utility may not be appropriate for another utility. This task will allow us to listen to your unique challenges and operating context so we can share pertinent lessons learned and potential solutions – that you can own and carry forward. Task 1 includes an assessment of LVMWD’s existing pipeline condition assessment, data management, asset management, CIP development, and information systems and a prioritized list of actionable recommendations for improvements. **HDR’s proposed project manager, David Spencer, has developed over 100 water pipeline asset management and CIP programs around the country and is supported by a team that knows the LVMWD system.** This knowledge will minimize the learning curve and enable the HDR team to hit the ground running. The foundation of our approach relies on ongoing, direct communication with LVMWD staff while engaging our industry experts at appropriate stages. This task will begin with a review of existing data, “hot-spot” break info from staff, practices, and systems and interviews with key staff. Together through a series of analyses and workshops, we will review and refine LVMWD’s existing data management practices, workflow, and information systems based on industry best practices and the unique needs of your program.

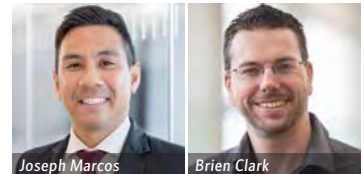
Our knowledge of LVMWD’s practices will reduce the level of effort from both LVMWD and HDR staff. Examples include:

EXAMPLES OF OUR KNOWLEDGE OF LVMWD PRACTICES INCLUDE:

+ Planning and Design
 DAN ELLISON
 JON PAZ
 JOSEPH MARCOS



+ Corrosion Control & Rehab
 BRIEN CLARK
 LUCY JARAMILLO
 ADAM MCGINNIS



+ Rehabilitation
 DAN ELLISON
 JON PAZ



The foundation of our approach relies on efficient communication between our team and your staff. In the picture below, David Spencer and Dan Ellison have highlighted specific areas of risk maps for efficient review by Padre Dam Municipal Water District staff.



Our proven approach applied at over 100 utilities around the country has been tailored to your needs to position you for success.



LISTEN
 to your unique experiences and challenges



DOCUMENT
 your programs, policies, workflow, readily available data, data gaps, and perceived drivers for deterioration and renewal



SHARE
 our experience, lessons learned, and potential solutions

For example, LVMWD’s GIS divides the system into short segments. However, effective and actionable pipe-management projects (e.g. condition assessment, cathodic protection, rehabilitation, replacement) require much longer pipe lengths to be cost-effective and avoid repeated customer disruptions in a single neighborhood. **To address this issue, we suggest that GIS pipes be grouped (through an attribute in GIS) to obtain more useful results.**

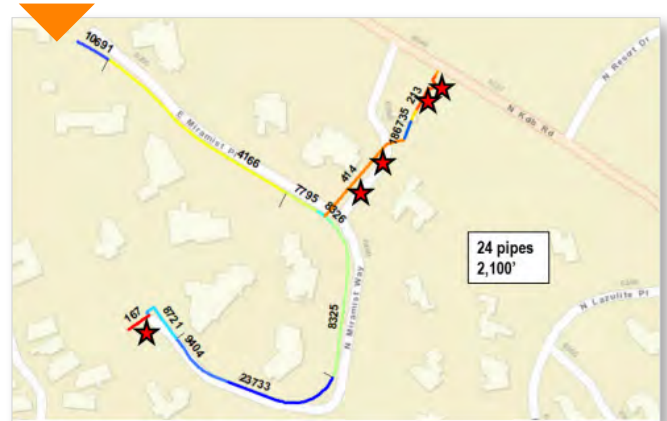
Methods for grouping may include by contiguous attribute (e.g. diameter, material, installation year), valve to valve, original construction project, or a combination of these methods. In particular, LVMWD should consider leveraging the original construction record drawing number which is already included in your GIS. LVMWD data and industry research has shown a strong correlation between original construction project and pipeline performance and condition (e.g., LVMWD staff have reported rock impingement issues in the bedding are prominent in particular construction projects). In theory, this is because of varying manufacturing, transport, and installation quality from project to project. For example, Figure 3 shows pipes that were installed in the 1980s in a neighborhood of Honolulu, HI. Distinct colors show distinct original construction projects. The location of main breaks (red stars) are concentrated in two original construction projects (yellow and pink) while the rest of the pipes in the area are performing well. Leveraging LVMWD readily available construction project data will avoid risk maps that look like confetti and result in more practical and actional risk mitigation projects.



Figure 3

Grouping short GIS pipes by original construction project number will support effective and actionable pipe-management projects.

As at Tucson Water, raw Fracta results can be difficult to interpret. **HDR will help LVMWD group and sort GIS pipes into meaningful projects to support practical risk assessment and decision making.**



In order to efficiently execute this project, it will be important to determine which software will best support the program. LVMWD has expressed interest in evaluating whether satellite leak detection or machine learning could support this program. **HDR has evaluated the efficacy of a variety of different satellite leak detection and machine learning software solutions at utilities such as the cities of Phoenix, St. Petersburg, Santa Cruz, Bellevue, Sweetwater Authority, and Tucson Water.**

The machine learning evaluation included measuring the accuracy of break predictions by future breaks. The break forecasting from each method/ software was then compared to the actual breaks that occurred over the past three years to measure which software was most effective in forecasting break locations. HDR would propose that we present these findings, along with other strengths, weaknesses, and planning level costs to implement satellite leak detection or AI software to LVMWD in an early workshop and determine the appropriate next steps which could include 1) implement an satellite leak detection or AI platform, 2) perform a similar satellite leak detection or AI pilot with the LVMWD’s data 3) implement risk and project packaging standards within LVMWD’s existing software (e.g. Microsoft Excel and ESRI GIS), or 4) augment LVMWD’s software with non-AI tools such as Business Intelligence. The cost of alternative #3 is included in the base-scope. The cost of alternative #2 is included as Optional Task 7 – Satellite leak Detection or Machine Learning Pilot. The cost for implementing any other alternative is not included as cost can vary significantly depending on the business requirements and platform selected.

The LVMWD system is predominantly made up of asbestos cement (AC), cement mortar lined steel (CMLC), and polyvinyl chloride (PVC) pipe. Based on LVMWD’s 2017 study, PVC pipe is relatively young and performing well. In contrast, 93% of main breaks have occurred on either AC or CMLC pipe. Therefore, particular attention will be given to those materials.

While LVMWD has large volumes of useful data, we anticipate some targeted data cleansing will be required to meet the objective of this project. The key to success for any data cleansing activity is have a firm understanding of the value and level of effort to close each data gap and strategically focusing resources on those gaps that will drive decision making.

Brien Clark’s deep understanding of LVMWD’s historic cathodic protection infrastructure, procedures, and data through his work with LVMWD will position our team to efficiently leverage that data to drive prudent decisions.



TASK 1 PROGRAM ASSESSMENT & RECOMMENDATIONS

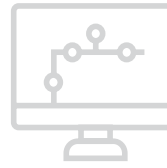
Objective: Review LVMWD’s existing data, hot-spot maps, practices, workflow, and information systems based on industry best practices and the unique needs of your program. Determine which software platform to use in this project. Recommend enhancements to existing practices and systems.

Deliverables:

- Initial Data Request
- Staff Interviews Meeting Minutes
- Leak Detection, AI, & Software Workshop
- Work to be documented as a Chapter in the Draft and Final Report

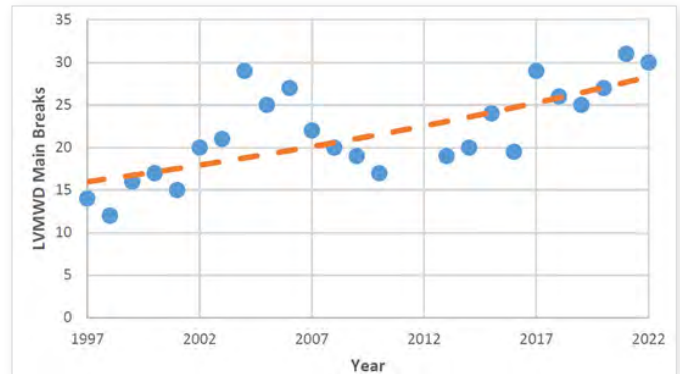
Assumptions:

- LVMWD will provide requested data within three (3) weeks of initial request.
- LVMWD staff will assist in scheduling assessment interviews.



Task 2 Budgeting & LoS Forecasting

Currently, LVMWD is spending roughly \$3 million dollars per year in aging infrastructure management focused on pipeline rehabilitation and replacement. However, this investment hasn’t been able to sustain service levels as breaks have roughly doubled in the past 25 years.



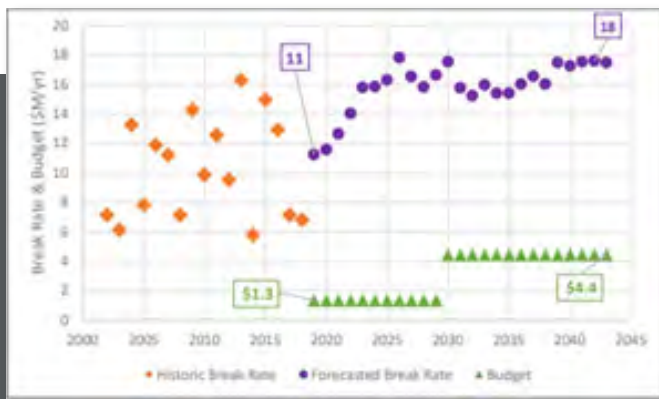
An age-based pipeline renewal budget using AWWA’s published useful life information would suggest a replacement program of roughly \$15 million dollars per year over the next 30 years. However, with significant investments on the horizon (e.g. LVMWD’s Advanced Purification Facility and Conveyance) and good system performance relative to national averages (LVMWD’s break rates is roughly half of the national average), large age-based investment levels are neither reasonable nor affordable.

To develop prudent CIP budgets, HDR proposes to leverage industry best practices and LVMWD’s existing data to develop a dynamic thirty-year service level forecasting model. The model will estimate future service levels (i.e. future annual system-wide break rates) based on various investment level patterns or objectives so the end user can quantify the return of each investment alternative. Common investment scenarios modeled include:

1. What service levels would be expected if we:
 - a. Sustain existing investment levels?
 - b. Sustain existing investment levels until key bonds are paid off and then ramp up investments?
 - c. Increase investment levels to a 100-year replacement cycle?
2. What investment level would be needed to:
 - a. Sustain existing service levels?
 - b. Improve service levels to the County average?
 - c. Allow service level to deteriorate to the State average over the next 30 years?

Investment levels will be placed in the context of national, regional, and local benchmarking to illustrate how the LVMWD’s proposed service levels and investments compare. This information will **leverage HDR’s distribution system performance database, which includes over 500 benchmarks from around the country. This will help you quantify and communicate transparent, defensible, and reasonable budget alternatives and help key stakeholders strike the appropriate balance between near-term costs and long-term service levels for your community.** LVMWD’s water main break rate is roughly two times better than the national average. Therefore, it is likely that LVMWD will choose an investment option that will save tens of millions of dollars relative to large age-based investments.

HDR will review and update LVMWD’s replacement planning unit costs based on observed replacement cost at LVMWD and surrounding communities.



As we did for the Rainbow Municipal Water District, HDR’s dynamic service level forecasting tool will help LVMWD model the impact of various investment levels and develop prudent and defensible CIP budgets based on the unique needs of your community.

TASK 2 BUDGETING & LOS FORECASTING

Objective: Leverage industry best practices and LVMWD’s existing data to develop a dynamic thirty-year service level forecasting model. The model will estimate future service levels (i.e., future annual system-wide break rates) based on various investment level patterns or objectives so the end user can quantify the return of each investment alternative.

Deliverables:

- Service level forecasting model in Excel
- Workshop Meeting Minutes
- Work to be documented as a Chapter in the Draft and Final Report

Lucy Jaramillo’s hands on experience with your cathodic protection infrastructure will help us **hit the ground running without expensive field work.**





Task 3 Risk Assessment

Once prudent investment levels are established, the next step is to prioritize near-term investments to maximize returns. As LVMWD’s system continues to age and deteriorate, development of a staff-owned risk model will serve as the foundation for identifying and prioritizing prudent CIP investments (e.g. rehabilitation and replacement) to cost-effectively sustain desired levels of service. HDR will develop a risk model incorporating likelihood of failure (LoF), consequence of failure (CoF) and other factors¹ that may accelerate a particular project.

DESKTOP CONDITION ASSESSMENT TO DETERMINE LIKELIHOOD OF FAILURE

LVMWD has a wealth of data to quantify LoF including GIS, breaks, cathodic test station (CTS) readings, and condition assessment data. Additionally, HDR has files from more than 30 corrosion studies performed by predecessor M. J. Schiff. HDR will leverage existing LVMWD data to perform a desktop condition assessment to support LoF determination.

For example, LVMWD has collected a wealth of high value CTS readings. For pipe with cathodic protection, these readings quantify how well the pipe is protected and any emerging issues that need to be addressed to cost-effectively extend infrastructure life. For pipe that have CTS and do not have cathodic protection (unprotected pipe), trending this CTS data can be a valuable data source to identify areas of the pipe that are corroding, at an elevated LoF, and identify appropriate mitigation steps such as spot repairs or more thorough but expensive condition assessment.

LVMWD break data is one data set HDR will leverage. Since LVMWD has experienced a relatively small number of breaks to correlate against, LVMWD institutional data and HDR industry knowledge and data will be required to develop the risk model.

HDR has experience integrating institutional data and industry data. For example, industry data such as the data presented in Figure 4 could be used to develop risk model factors in the absence of failure data. In this example, HDR

used historic break data to identify that increased ground movement and pressure changes accelerate deterioration in AC pipe and should be weighted in the risk model at 8% and 5% respectively. This data correlates well with the performance of other AC pipe in the USA and findings in Water Research Foundation Study 4480 “Effective Management of AC Pipe”.

At Contra Costa Water District, HDR found that pipes exposed to high pressure and installed in high shrink swell soils had a shorter useful life than other pipes. We will use LVMWD’s existing data to quantify similar relationships and develop a transparent and data driven risk model which assures ratepayer realize the most return of their investment.

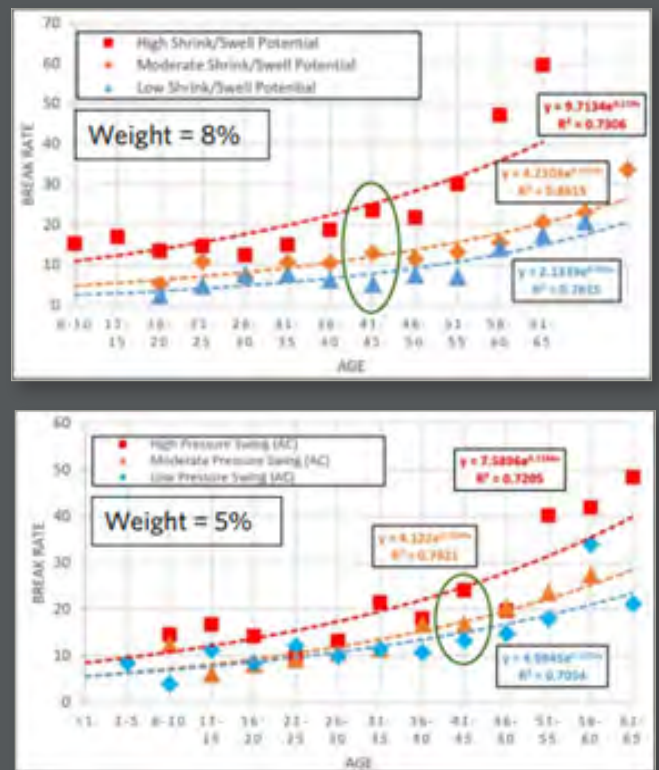


Figure 4

¹These factors may include inoperable valves, LCRR investments, service breaks, water quality issues, hydraulic capacity constraints and planned street restoration or other construction work.

QUANTIFICATION OF CONSEQUENCE OF FAILURE

CoF is another important factor in risk assessment. This may include readily available traditional factors such as roadway type, diameter, pressure, slope, material ductility and proximity to environmentally sensitive areas. We recommend augmenting this (as part of Optional Task 8) with more advanced metrics that account for how many customers are put out of service and the importance of each customer (i.e., loss of service to a single-family home versus loss of service to a hospital) if a failure occurs. This is accomplished by using non-proprietary tools developed by HDR to run LVMWD’s existing hydraulic model one time for each pipe and valve in the system. We assume it has failed for a specified outage duration then measure the number of valves required to isolate the break, the critical customers out of service, the total customers out of service, and the flow not delivered. This provides a more accurate measurement of the impact of a break and can also be used to identify locations in the system where resiliency could be dramatically improved if a valve was added to leverage existing pipe looping. **By automating this process, LVMWD can feel confident that weak points and consequential assets in the system will be identified and prioritized.**

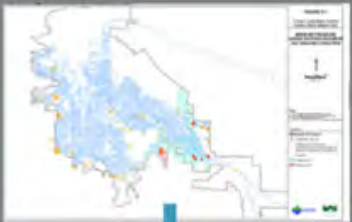


Discovered through our CoF process, a new valve in this Omaha neighborhood would make a break 10 times less consequential.


HOLISTIC RISK ASSESSMENT

Traditionally, the water industry has calculated risk as the product of LoF and CoF. However, utilities and AWWA Manual M77 - Condition Assessment of Water Mains have recognized the added value and flexibility that can be achieved by using a weighted summation. This includes adjusting weights when making different types of decisions and accounting for other factors that do not directly impact the risk of main failure but may influence whether the LVMWD accelerates or decelerates a particular pipe renewal. These factors may include inoperable valves, LCRR investments, service breaks, water quality issues, hydraulic capacity constraints and planned street restoration or other construction work. In this way, the result of the risk model can consider all readily available factors relevant to pipeline risk assessment and provide a more efficient and data-driven approach to identify and prioritize CIP projects.


Hydraulic Model



HDR's Consequence Tool



Measure Consequence



Leveraging Anchorage’s existing hydraulic model enabled us to efficiently measure the CoF of each asset in the system.

Measure Consequence
 -Critical Customer Outages
 -Customers Outages
 -Q not Delivered
 -Low Pressure

TASK 3 RISK ASSESSMENT

Objective: Leverage readily available data to assess pipe LoF, CoF, and risk to prioritize CIP projects and maximize the return on future investments.

Deliverables:

- LoF Workshop Meeting Minutes
- CoF Workshop Meeting Minutes
- Risk Workshop Meeting Minutes
- GIS Results of Analysis
- Work to be documented as a Chapter in the Draft and Final Report

Assumptions:

- HDR will not be required to provide any system integration services.



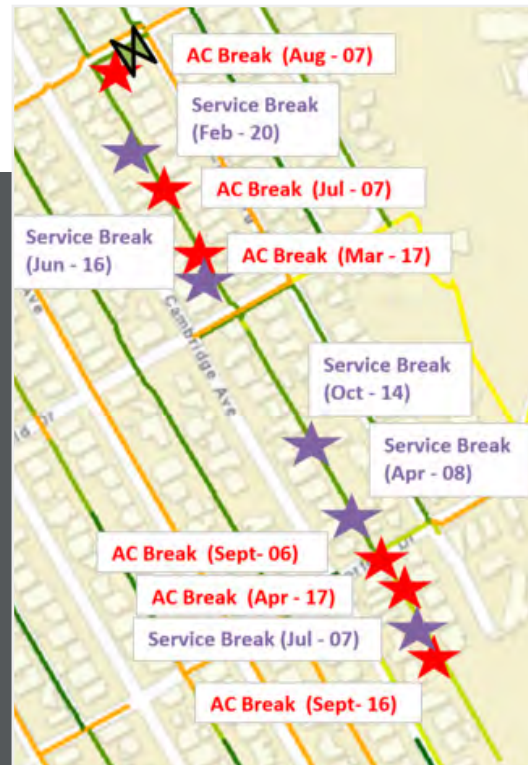
Task 4 Rehabilitation & Replacement Project Development

The purpose of this Task is to develop a prioritized, risk-based list of CIP pipeline projects which is anticipated to include investments in pipeline condition assessment, rehabilitation, and renewal. The Plan will utilize industry standards and best practices for establishing priorities as well as data from LVMWD and other local agency projects for establishing rehabilitation and replacement costs. Priorities will be driven by risk and other pertinent factors including but not limited to pavement maintenance/street repaving schedules and/or pavement condition index (PCI) to group projects in order to minimize duplicative construction costs. Pipeline projects with common vicinities and scopes of work will be grouped to maximize efficiencies and minimize disturbance to the community and costs to the LVMWD.

HDR will develop a decision logic framework which leverages the results from previous tasks to identify, package, and prioritize CIP projects. The framework will enable LVMWD to periodically refresh CIP projects and priorities as new data becomes available.

In addition to pipe replacement, another critical CIP investment area is cathodic protection investments that will extend the life, function, or value of the infrastructure. Cathodic protection improvements are often concentrated in high consequence pipelines and serve as a cost-effective way to extend the life of that infrastructure. David Spencer and Brien Clark (who has an intimate knowledge of these LVMWD's cathodic protection systems) will work with LVMWD staff to determine which improvements should be prioritized and integrated into the CIP Plan.

The Plan will tabulate and geographically illustrate scheduled rehabilitations and replacements using colors for each year(s) of rehab or replacement for both current and adjusted funding levels. While the plan will prioritize the entire system, additional analysis will be performed to define the anticipated extents of individual project within the first 10-years of the plan.



Dave Spencer developed and applied project packaging rules for San Dieguito Water District to develop transparent, defensible, and prudent CIP projects such as replacement of this 6-inch pipe on Edinburg Street.

TASK 4 REHAB & REPLACEMENT PROJECT PACKAGING

Objective: Develop LVMWD's rehabilitation and replacement unit costs based on observed replacement cost at LVMWD and surrounding communities. Develop a decision guideline which leverages the results from previous tasks to identify, package, and prioritize CIP projects. Apply CIP guideline to existing data to identify and package CIP projects.

Deliverables:

- Planning level Rehabilitation and Replacement Unit Cost
- Workshop Meeting Minutes
- 10-Year CIP Maps
- GIS Results of Analysis
- Work to be documented as a Chapter in the Draft and Final Report

Task 5 Program Communication and Training

While the result of this project will include a system-wide pipeline replacement priority, priorities will change as lessons are learned and new data emerges (e.g. breaks, CP test station readings, roadway construction, etc.). In this task, **HDR will develop a video tutorial which shows the steps needed to update the risk model and project packaging and provide support in training and troubleshooting.**

Quite often, the biggest challenge on these types of projects is not technical but gaining political support to fund needed investments. Customers can grow accustomed to the benefits of younger infrastructure including very reliable service at low rates. However, as aging infrastructure needs emerge, it is important to engage key political stakeholders in the process. That engagement can take many forms. In some instances where political bodies have a high interest in the project, we have included them or their representative in key milestone workshops throughout the project. This was the case for Mesa Water District where one of the board members managed utility infrastructure at a local university and was particularly interested in being

TASK 5 PROGRAM COMMUNICATION AND TRAINING

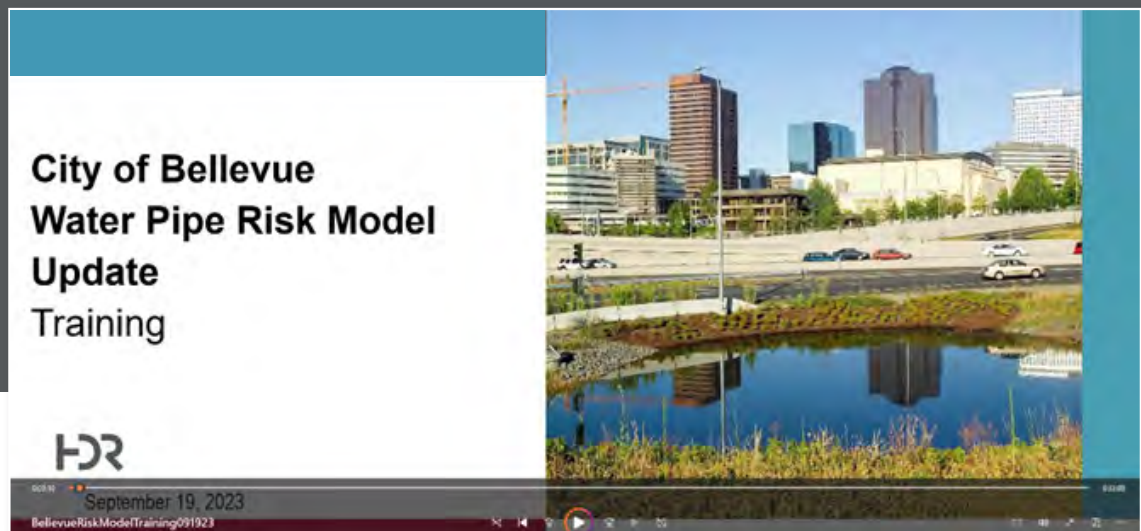
Objective: Provide Training Draft and Final Material for the purpose of updating the Risk Model and Project Packaging. Collaborate with LVMWD staff to develop and present the findings of this study to the Board of Directors.

Deliverables:

- Draft and Final Training Material
- Workshop Meeting Minutes

involved throughout the program development. On the other end of the spectrum, at other utilities where political stakeholder were more interested in outcomes rather than program development, HDR has collaborated with utility staff to present how industry best practices were refined to meet the unique needs of a utility in a presentation at the end of the project. Our scope and approach utilizes the latter approach where we will collaborate with LVMWD staff to develop and present the findings of this study to the LVMWD Board of Directors. However, if additional engagement is warranted, we will work with you to better understand your key political stakeholders and what level of engagement is appropriate over the course of this project.

HDR developed a “You-Tube” style training video that allows the City of Bellevue to efficiently update pipeline project priorities as new data emerges (e.g. breaks, CP test station readings, roadway construction, etc.).





Task 6 Project Management: Collaborating with LVMWD to Exceed Expectations

LVMWD deserves a well-managed Project that includes frequent communication between LVMWD staff and the HDR team, which meets the schedule and stays within the approved budget. The following outlines our approach to managing your project to a successful conclusion.

JOB SET-UP & PROJECT MANAGEMENT PLAN

HDR's internal job set-up will be completed upon receipt of LVMWD's NTP. As part of initial job set-up and in accordance with HDR standards, we will prepare a Project Management Plan (PMP). The PMP guides the project throughout its life to provide effective management of work and delivery.

COMMUNICATION will be largely driven by our Project Manager David Spencer to and from LVMWD. We will define more detailed communication delegation and other protocols at the project kickoff meeting. We will rely heavily on email for informal communications, but we will contact you by phone or meet in person, as more efficient discussions are required.

REGULAR MEETINGS with LVMWD will be the cornerstone of formal project interaction, which falls in line with our proposed progress informal meetings. David Spencer would like to schedule monthly "check-in" meetings with LVMWD's Project Manager, to keep information flowing and to monitor our project risk register that we will include as part of our project management approach. It is anticipated these meetings will last no longer than 30-minutes, but will allow a free flow discussion on key items needing attention. HDR will also lead workshops at each major milestone. This will not only inform the District of project progress but help expedite LVMWD's review of submittals.



Johnson County Wastewater, Pipeline Asset Management Program

COST CONTROL is critical to delivering the scope of work for the approved budget. Project costs are monitored using business intelligence tools to provide a vivid picture of accomplishments, work in progress, milestones and future activities. Weekly project cost reports are generated internally from our Electronic Business System accounting based on actual timesheet charges by project staff. They will also be reviewed by David to assess current budget status. Our invoicing will include a project progress report outlining percent complete by task.

SCHEDULE CONTROL is critical to delivering the scope of work to meet the set project deadline. Project progression is monitored over multiple time frames to track percent complete along with remaining budget. The aggressive schedule set forth will require us to focus on not only delivering quality but meeting the schedule.

We've provided a custom schedule in Section C that identifies key deliverable dates along with key workshops and meetings with LVMWD that is further outlined in our schedule approach.

QUALITY begins with a mindset shared by all members of our team. It starts by clearly understanding your expectations and making a commitment to meeting them every time. At the start of the project, HDR will prepare a four-part Quality Management Plan to provide seamless coordination, communication, and project execution. This document becomes a valuable reference guide for the entire team, including you, whether you want to contact someone on the team, identify milestones or review the budget, this document keeps the team focused on the project and meeting the expectations of LVMWD staff.

Wow! The work Dave Spencer and the team are doing is incredible and so very important to Johnson County's forward progress. Thank you for continuing to fulfill our vision!"

- Susan D. Pekarek, General Manager,
Johnson County Wastewater



MEETING YOUR SCHEDULE

LVMWD has set an aggressive schedule for the scope of work in the RFP. In addition to the custom schedule provided in Section C, David has identified the biggest schedule risks. **The table below summarizes our approach to mitigate those risks and to make sure this project is delivered on-time.**

TASK 6 PROJECT MANAGEMENT

Objective: LVMWD deserves a well-managed Project that includes frequent communication between LVMWD staff and the HDR team, which meets the schedule and stays within the approved budget.

Deliverables:

- Kickoff Meeting Agenda and Minutes
- Project Management Plan
- Project Action Item Tracking Log
- Project Decision Tracking Log
- Workshop Agendas and Minutes

Assumptions for All Tasks:

- All deliverables will be electronic (no hardcopies).
- LVMWD staff will participate in all workshops and interviews.
- LVMWD will consolidate comments from individual reviewers into a single set of comments for HDR to review and incorporate. Comments from LVMWD will be received within 2 weeks of submittal to City.

SCHEDULE RISK	APPROACH AND BENEFIT
UNDERSTANDING YOUR DATA	LVMWD’s proposal provided many of the key data sources that will drive decision making. HDR has reviewed these data sources and evaluating readily available soil data from USGS to make sure we can hit the ground running and will leverage our institutional knowledge of LVMWD data. Dan Ellison and Brien Clark have years of experience working with LVMWD’s pipeline and corrosion data.
EFFICIENT COMMUNICATION	HDR’s local team of industry experts allow us to meet face to face, with lessons learned from around the country, to efficiently make decisions and move forward. HDR’s experts including Dave Spencer, Tom McCormack, Dan Ellison, and Brien Clark are all located in Southern California.
DETERMINE WHICH SYSTEMS TO USE	Our approach includes a workshop within a month of NTP to share lessons learned from other utilities and decide whether LVMWD will pilot machine learning and satellite leak detection. Fast-tracking these decisions will enable the team to focus on refining LVMWD’s risk assessment and project packaging processes within the desired information system. Making this decision early in the project will allow the team to focus on the desired implementation approach. Dave Spencer has utilized this approach successfully with other utilities including Padre Dam MWD, Suburban Water Systems, Phoenix and Tucson.
COMMUNICATION FREQUENCY	We anticipate scheduling monthly coordination meeting with the LVMWD PM to make sure that issues are quickly identified and resolved. During the critical first month of the project when data is being requested and reviewed, we anticipate weekly meetings to fast-start the Project to maintain project schedule. This approach was used at Sweetwater Authority in developing their Water Distribution System Master Plan and contributed to delivering the project on schedule.
UNDERSTANDING LVMWD’S KEY SCHEDULE CONSTRAINTS	During the kickoff meeting, we will identify which deliverables are particularly sensitive to the schedule. For example, if it is important to develop budgets by a particular date so they can be integrated during budget season, we will refine the schedule to deliver those tasks first. This approach was used successfully at Rancho Water District to provide budgets for valve asset management work. Rancho Water District’s budgeting deadline was shortly after Dave received NTP. Therefore, we accelerated the budgeting and level of service task to make sure data driven budgets could be used.

Optional Task 7 Satellite Leak Detection of Machine Learning Pilot

Objective: Evaluate the efficacy of two machine learning software to support the prioritization of distribution system investments. Provide vendors with the GIS and break history in the format specified by the vendors. Three years of break data will be withheld and will serve as the basis to validate the efficacy of the result.

Facilitate planning meeting with LVMWD to make key pilot decisions including the basis of assets to be evaluated, the exact amount of break history to withhold for validation, and the method for independent results validation. Coordinate with and manage vendors and perform an independent review of the efficacy of the vendor result. Document work conducted in this task as a chapter in the Draft Pipeline Management Technical Memorandum (TM). Facilitate a workshop to review the results and elicit feedback. Incorporate LVMWD comments into the Final Pipeline Management Technical Memorandum (TM).

Optional Task 8 Advanced Consequence of Failure Analysis

Objective: Enhance the way the LVMWD estimates Consequence of Failure (CoF) identifying and prioritizing distribution system replacement projects. Leverage LVMWD's existing hydraulic model to support the quantification of the CoF factors by using the model to measure the impact of a pipe failure. Completed using an automated routine that 'breaks' every pipe and valve in the entire distribution system hydraulic model to determine the estimated hydraulic impact of that event. Estimated impact will be based on: the number of customers out of service, the volume of water not delivered, valves required to isolate a break, length of pipe isolated, and the identification of how many critical customers are placed out of service. Identification of existing valve CoF, the analysis will also be used to identify where new valve installation would significantly increase the resiliency of the system.

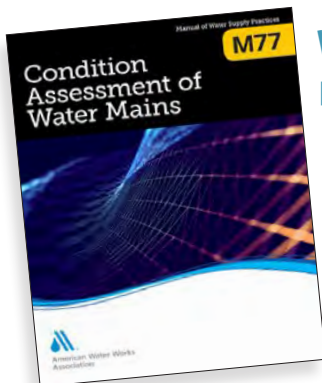
Document work conducted in this task as a chapter in the Draft Pipeline Management Technical Memorandum (TM). Facilitate a workshop to review the results and elicit feedback. Incorporate LVMWD comments into the Final Pipeline Management Technical Memorandum (TM).



Optional Task 9 and 10 Condition Assessment Plan

Pipeline condition assessment can range significantly in cost and in the amount of data collected to support decision making. HDR's technical experts are industry leaders in applying pipeline condition assessment methods and technologies to water pressure pipes to balance cost, risk and benefits of condition assessments.

Several of our staff, including **Dan Ellison and Dave Spencer, were lead authors and major contributors to the AWWA Manual of Practice M77 – Condition Assessment of Water Mains**, which is the guidebook for our industry on everything from desktop evaluations to planning and executing field inspections to analyzing and interpreting inspection data to make prudent, actionable plans for prolonging the service lives of mains. We are also unbiased as it relates to the various technologies; we bring forward the right technology for the situation. Our program's key to success will be combining our industry expertise with LVMWD's institutional knowledge.



We wrote the book on pressure pipeline condition assessment! Dan Ellison and Dave Spencer are lead authors on several pipeline condition assessment books including AWWA Manual of Practice M77 - Condition Assessment of Water Mains.

OPTIONAL TASK 9 OPPORTUNISTIC CONDITION ASSESSMENT

While some proactive condition assessment may be warranted in order to identify pipelines for replacement prior to pipelines experiencing breaks, significant savings could be realized by developing an opportunistic assessment program. Opportunistic assessments are done when the pipe is already exposed for another reason (valve replacement, new service installation, etc.), thereby taking advantage of the pipe exposure. Methods for opportunistic assessment vary by material. This task would collaboratively initiate an opportunistic assessment program tailor-made for LVMWD, including standard operating procedures and custom forms ready for field implementation.


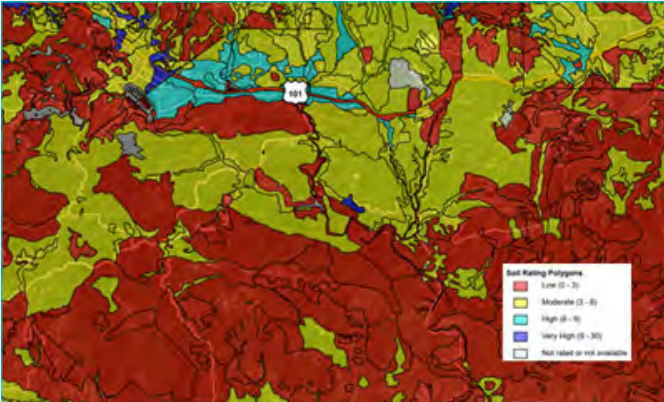
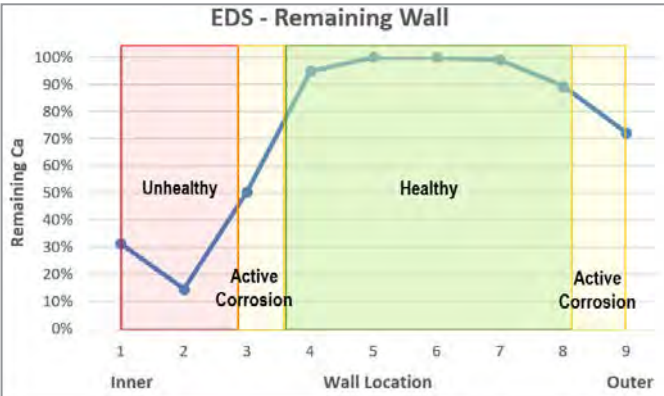
The key to success of these programs is proper training and efficient data collection to make certain these assessments don't impact efficiency nor the ability of LVMWD to restore service as quickly as possible.

Since CMLC and AC pipe makes up almost most of LVMWD's system and breaks, special attention will be focused on these pipe materials. Our project manager, Dave Spencer, has co-authored four Water Research Foundation studies, including the most recent book on condition assessment of AC pipe titled "WRF Project 4480: Development of an Effective Management Strategy for Asbestos Cement Pipe." Our proposed technical approach is based upon the practical application of this research and is summarized on the following page (Exhibit 1).



David Spencer helped train Rancho California Water District crews to perform opportunistic testing when a pipe is exposed — saving the District hundreds of thousands of dollars per year in more expensive and disruptive planned assessment.

In order to develop a cost-effective pipeline renewal plan, it is important to understand the most likely causes of deterioration in the Systems as each mechanism. Exhibit 1 describes each mechanism for AC pipe, how it is measured, anticipated prevalence of the mechanism in your Systems, and our initial recommendation for testing.

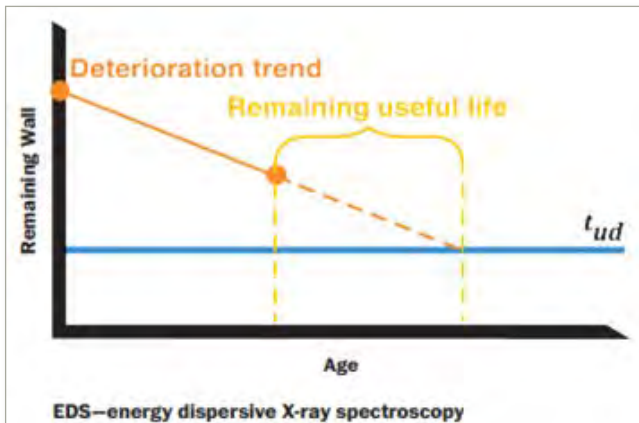
MECHANISM	MEASUREMENT METHOD	ANTICIPATED IMPACT TO SYSTEM FOR LVMWD	TESTING RECOMMENDATION
<p>SALT-CRACKING & SULFATE ATTACK</p> <p>Salt-cracking occurs where salts migrate into the pipe wall through capillary and evaporation processes and then crystalize and expand when hydrated. Sulfate attack occurs when sulfates in the soils react with free lime creating expansive ettringite. Both mechanisms cause cracking and a loss of strength. These mechanisms are accelerated when a pipe installed in the zone of intermittent saturation.</p>	<p>Salt cracking and sulfate attack is measured by extracting a small, pipe wall sample and performing petrographic analysis. Soil samples can also support distinction between various cracking (e.g. salt, ground movement, sulfate attack).</p>	 <p>Figure shows USGS salt content mapping in the LVMWD service area. In general, salt cracking is expected to be rare with a potential exception near Westlake Lake where soil salt content is elevated, and the lake allows for intermittent saturation at the pipe elevation depending on the season. Relative to other utilities outside of Southern California, the low levels of salts and sulfate attack in LVMWD's systems is likely contributing to much longer anticipated useful life. For example, even though the LVMWD's AC pipes are just as old as AC pipes in San Antonio, soils in San Antonio have high concentrations of salts so their AC pipe are breaking 5 times more often and will have a much shorter life than the LVMWD's AC pipe.</p>	<p>Soil sample analysis and petrographic analysis should be collected in near the lake due to moderate likelihood of salt cracking. If data verify no salt-cracking nor sulfate attack, future testing protocols could exclude petrographic and soil sampling to improve program cost-effectiveness.</p>
<p>GROUND MOVEMENT</p> <p>Occurs where ground movement initiates cracks and a loss of strength within the pipe wall. In areas where slopes are steep, the long-term slope creep can drive ground movement cracking. In areas where the groundwater is deep and the moisture content of the soils is variable due to seasonal rainfall patterns, soil shrinkage and swelling is typically the dominant driver for ground movement initiated cracking. In these cases, breaks are often concentrated just before the first significant rainfall of the season because the dry soils between the pipe and the groundwater table shrink no longer supporting the pipe from breaking. For example, at East Bay MUD who owns thousands of miles of AC pipe, AC break rates just before the first significant rain occurs are roughly 5 times higher than during the rainy season, even after accounting for changes in demands and pressures in the system.</p>	<p>Ground movement cracking is measured by extracting a small, pipe wall sample and performing petrographic analysis. Soil samples can also support distinction between various cracking (e.g. salt, ground movement, sulfate attack). Soil is tested for linear extensibility, which measures how much soils expand when saturated. Higher levels of linear extensibility will result in increased stresses and likelihood for ground movement induced cracking.</p>	 <p>Figure shows USGS linear extensibility mapping in the LVMWD service area. The Hidden Hills and Westlake neighborhoods have the most expansive soils. Hidden Hills has deeper groundwater tables and would be at elevated risk for cyclical shrink-swell stresses. Hidden Hills is likely also experiencing ground movement from slow ground creep in the areas where the slope is steep.</p>	<p>No additional testing is recommended for ground movement. However, additional analysis should be performed related to major sources of ground movement (e.g. shrink-swell and slope creep) to understand how these factors will impact remaining useful life.</p>
<p>CALCIUM LEACHING</p> <p>Calcium leaching is a chemical reaction where calcium is dissolved and carried away from the calcium-silicate-hydrate and other cement products in the concrete mix resulting in a loss of strength. While calcium leaching can occur on the external surface (particularly where groundwater is prevalent), it is typically most severe on the inside of the pipe wall where the water conveyed by the pipe is the perfect media to dissolve and carry away the calcium. Industry research shows that water chemistry can have a modest impact on the rate of degradation although manufacturing quality is also important.</p>	<p>Calcium leaching is measured by extracting a small, pipe wall sample and performing energy dispersive spectroscopy (EDS) testing.</p>	 <p>Due to prolonged exposure, it is expected that calcium leaching will be a significant factor in deterioration.</p>	<p>LVMWD should consider an on-going program after this project to sample AC pipes whenever they are exposed for another reason. This would reduce the cost of future condition assessment activities by roughly 90% since the vast majority of the testing cost is in exposing the pipe and restoring the excavation area.</p>

In the past, utilities have used expensive and disruptive testing methods (e.g. crush, burst, tensile, and flexural testing) that require long, full-circumference pipe samples be taken. However, Water Research Foundation Project 4480 showed that these tests are not cost-effective, particularly when much less expensive and less invasive tests (e.g. energy dispersive spectroscopy, hardness, soil, and acoustic testing) provide an equal or better correlation to break performance. Based on this research, utilities² with proactive AC condition assessment programs have now moved away from disruptive testing methods and towards opportunistic assessments.

If the date of the sample is included in the data management standards, remaining useful life can be calculated using a modified version of ANSI/AWWA-C401 which considers the most prominent mechanism for AC pipe failure. This information can be used to validate long-term CIP budgeting and inform risk assessment results.



Dave Spencer and the City of Carlsbad developed a two-year tactical plan and 5-year road map for pipeline condition assessment including opportunistic assessments, low cost and low impact corrosion assessments and high resolution in-pipe assessment of the highest priority pipelines aligned with available budget for best value condition assessment.



At Mesa Water District, remaining wall thickness and the age of the pipe at the time the pipe was tested was used to extrapolate remaining useful life. This award winning³ approach supported data driven decision making **saving \$100K per year in testing costs and \$230M in replacement costs compared to the age-based analysis.**

OPTIONAL TASK 10 CONDITION ASSESSMENT PLANS

There is a smaller portion of the LVMWD system that is so critical, a more proactive condition assessment strategy is warranted. A targeted pipeline condition assessment program on these critical pipes will support cost effective system management and risk mitigation by:

- extending the life of some pipes found to be in good condition,
- preventing breaks in other pipes found to be in poor condition,
- identifying the most cost-effective renewal technology and project extents, and
- increasing confidence in decision making.

HDR will collaborate with LVMWD to develop prudent strategies, policies, **data management and visualization strategies**, and budgets that can be used to manage risk through condition assessment of critical mains. This will include a definition of which pipes qualify for planned condition assessment, policies for how often to inspect those pipes⁴, the appropriate technology to use, planning level unit costs, and long-term budgeting to incorporate into the CIP.

²Walnut Valley WD, Mesa WD, Suburban Water Systems, San Bernardino County, Irvine Ranch WD, Vista Irrigation District, Padre Dam MWD, Sweetwater Authority, City of Carlsbad, San Dieguito WD, Rancho California WD, Orange Water & Sewer Authority, East Bay BUD, Contra Costa WD, City of Santa Cruz, City of Sacramento, and Tucson Water.

³California Municipal Utilities Association award for Outstanding Programs Benefitting Customers and Local Communities (2020), Journal of AWWA Feature Article (2019), and Finalist for ACWA “Claire A. Hill Agency Award for Excellence” for their Pipeline Integrity Testing Program (2018).

⁴For example, at Suburban Water Systems, a policy was adopted to perform condition assessment on critical mains before they reach 80% of their age-based useful life.



The Detailed Condition Assessment Plans will be developed for pipelines that meet the criteria for planned condition assessment. In parallel with condition assessment project prioritization, we will facilitate a workshop to present and discuss phased approaches. **Phased approaches start with lower cost indirect screening methods first to collect information in a way that has less impact on the community and can eliminate higher cost inspection methods. This approach saved Padre Dam Municipal Water District \$1M in unnecessary high resolution inspection.**

The workshop will identify the range of inspection methods and technologies available for the different pipe materials and diameters. Inspection methods will be grouped into the categories shown in the following table.

CONDITION ASSESSMENT INSPECTION METHODS WORKSHOP PRESENTATION AND DISCUSSION TOPICS
Soil Corrosivity Surveys & CP System Evaluations
Assessment Methods for Non-Metallic Pipe
Lower Effort, Limited Data Inspection Methods
High Resolution Inspection Methods
Contracting Options for Condition Assessment
OPTIONAL TOPICS
Leak Detection
Pressure Monitoring

We will also cover the various contracting options that are available to LVMWD for procuring specialty engineering services and construction and inspection services for the assessment projects. A particular emphasis will be placed on materials and diameter ranges associated with projects anticipated to be completed under the Detailed Condition Assessment Plans. **Sufficient upfront planning of field inspection activities is highly critical for yielding safe, organized, efficient, and well-coordinated field activities.** Part of the planning process is identifying key roles and responsibilities for all the parties involved, including consulting engineers, LVMWD staff, the contractor, and the technology provider, which includes identification of individuals who have the authority to make critical and timely decisions in the field to keep the work moving.

LVMWD can reduce the cost of the inspections by as much as 30% by providing "site support" services such as a storage yard, crane, confined space entry support, portable sanitation facilities, etc., in addition to LVMWD provided services for community outreach, traffic control, permitting, and other such items.

District Provided Services	Contractor Provided Services	Civil Site Support Services Required for Inspections
(Some may not apply to all inspection methods)		
<input type="checkbox"/>	<input type="checkbox"/>	Piping modifications for launching or extracting inspection tools (design, fabrication, construction)
<input type="checkbox"/>	<input type="checkbox"/>	Capture devices for inspection tools (design, fabrication, installation)
<input type="checkbox"/>	<input type="checkbox"/>	Excavations for pipe access
<input type="checkbox"/>	<input type="checkbox"/>	Storage yard
<input type="checkbox"/>	<input type="checkbox"/>	Local equipment rental
<input type="checkbox"/>	<input type="checkbox"/>	Cranes/operators
<input type="checkbox"/>	<input type="checkbox"/>	Tagline purchase/install
<input type="checkbox"/>	<input type="checkbox"/>	Lock-out/tag-out
<input type="checkbox"/>	<input type="checkbox"/>	Dewatering
<input type="checkbox"/>	<input type="checkbox"/>	Flow adjustments
<input type="checkbox"/>	<input type="checkbox"/>	Pipe modifications
<input type="checkbox"/>	<input type="checkbox"/>	Air valve removal
<input type="checkbox"/>	<input type="checkbox"/>	Access flange removal
<input type="checkbox"/>	<input type="checkbox"/>	Clean vault
<input type="checkbox"/>	<input type="checkbox"/>	Provide ladders
<input type="checkbox"/>	<input type="checkbox"/>	Confined space entry support
<input type="checkbox"/>	<input type="checkbox"/>	Clean out pipe
<input type="checkbox"/>	<input type="checkbox"/>	On-site power/generators
<input type="checkbox"/>	<input type="checkbox"/>	Lighting for night work
<input type="checkbox"/>	<input type="checkbox"/>	Excavations for verification of defects
<input type="checkbox"/>	<input type="checkbox"/>	Permits
<input type="checkbox"/>	<input type="checkbox"/>	Traffic control
<input type="checkbox"/>	<input type="checkbox"/>	Public relations/ROW access notifications
<input type="checkbox"/>	<input type="checkbox"/>	Portable sanitation facilities
<input type="checkbox"/>	<input type="checkbox"/>	Other general contractor or utility services

LVMWD can reduce the cost of inspections by 30% by taking on some of the tasks that are required for the field work. Before HDR writes a performance spec for contractors to bid on the pipe inspection work, HDR will ask LVMWD which of the following items LVMWD is capable of and willing to take on with your own forces.

The unit cost of pipeline inspections (cost per foot or cost per mile) can also be reduced by bundling groups of small to mid-size pipelines together into a single mobilization by the contractor and technology provider. For larger diameter pipelines, the cost per mile can be reduced by inspecting the entire length of pipeline, not just short segments.

The Detailed Condition Assessment Plans will include the following topics for each pipeline inspection project:

1. Background information on pipe or pipe system
 - a. Location map
 - b. Approximate total length to be inspected; start and end points; access and appurtenances
 - c. As-built drawings
 - d. Manufacturer lay drawings and pipe specs (if available)
 - e. Construction information (if available)
2. Recommended inspection method(s)
 - a. Overview of inspection methods and technologies
 - b. Access requirements
 - c. Potential Impacts to operations
 - d. Other considerations such as public notifications, traffic control needs, permitting requirements, safety, and risk mitigation
3. Roles and responsibilities of parties during inspection planning and field inspections
4. Preliminary budget
5. Overall schedule with budget allocations.
6. Recommended inspection frequency

Optional Task 11 Information System Implementation

The purpose of this Optional Task is to support Implementation of software and data management practices that will position LVMWD to efficiently and continuously collect and leverage data to make good decisions and dashboards that will help to monitor and communicate the program.

Effective data management and software selection will be critical to development of a sustainable, internally driven program. HDR has supported the integration of condition assessment and risk management solutions for utilities around the country. This support can range from advisory support (to augment LVMWD staff knowledge with lessons learned from other utilities) through turn-key implementation of off-the-shelf solutions.

Our team has leveraged a wide variety of software solutions including machine learning, GIS-based scripts, Model Builder, InfoAsset Planner, CMMS-based solutions, business intelligence solutions, and Microsoft based solutions. Each of these solutions may be appropriate for a particular utility depending on their unique challenges and objectives. Unlike other firms, HDR does not partner with nor profit through a particular software vendor. As a result, HDR can provide independent recommendations founded in industry best practice to help you choose the best solution based on your unique needs. The outcome of this task will be a system integration design document and data deliverables that document workflow and data- translation processes required for all input and output data, and ultimately push the final results back into the LVMWD's enterprise systems.

Dan Ellison, Brien Clark and HDR performed condition assessment of 14 miles of 48- to 60-inch potable water pipeline for Western Municipal Water District's Mills Pipeline using lower cost corrosion and leak detection technologies to identify needed repairs and targeting future inspection locations.

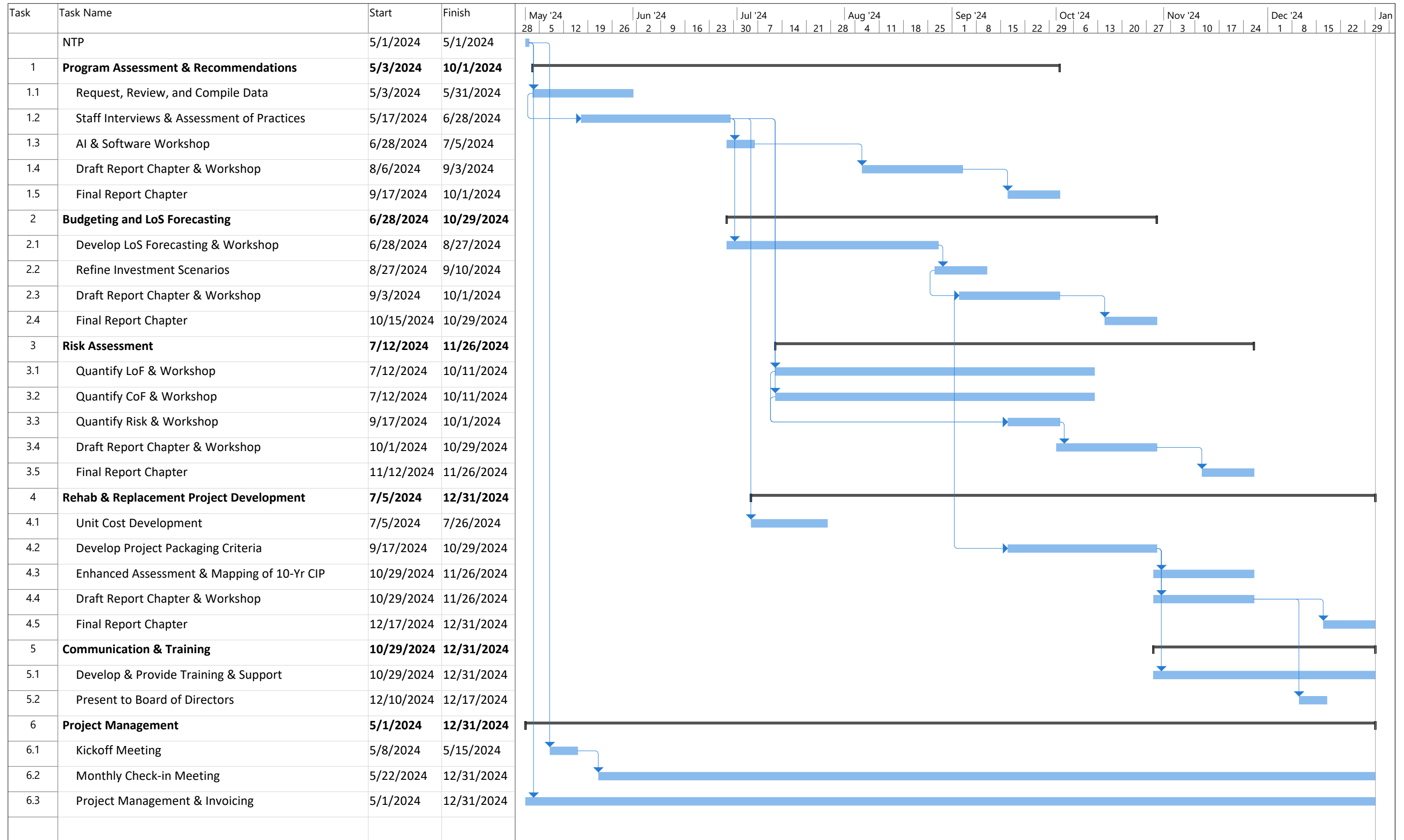


C

Schedule



Schedule



D

Project Team and Key Personnel



Project Team

Taking on this important project requires a team that has worked together successfully, understands your existing program, and has the experience to deliver a staff owned program. The HDR Team was built to deliver just that! Our Team Leader, **Dave Spencer, PE**, has more than 20 years of experience specializing in pipeline condition assessment, risk analysis, level of service forecasting, data management, and CIP program development. **He has helped over 100 utilities and co-written four books on those topics including Water Research Foundation Project 4480 - Development of an Effective Management Strategy for Asbestos Cement Pipe.** This is particularly important because asbestos cement pipe makes up almost half of LVMWD's breaks.

As summarized in Figure 5 on the following page, our team has lead key research and innovative projects in aging pipeline infrastructure management. Our Team is based locally which allows us to regularly collaborate in-person, so we can listen to your unique challenges, share our lessons learned, and work together to define the best solutions for LVMWD.

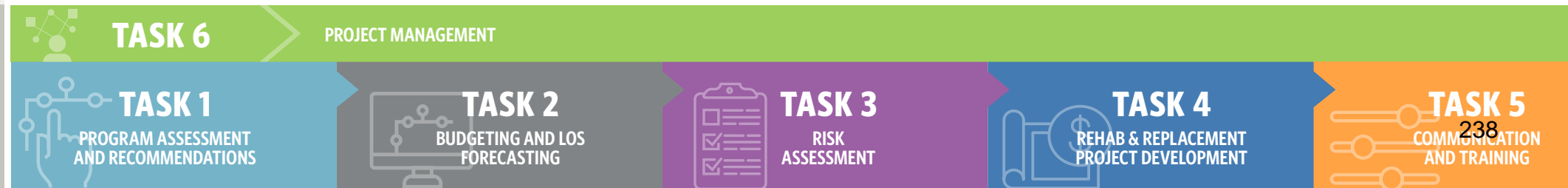
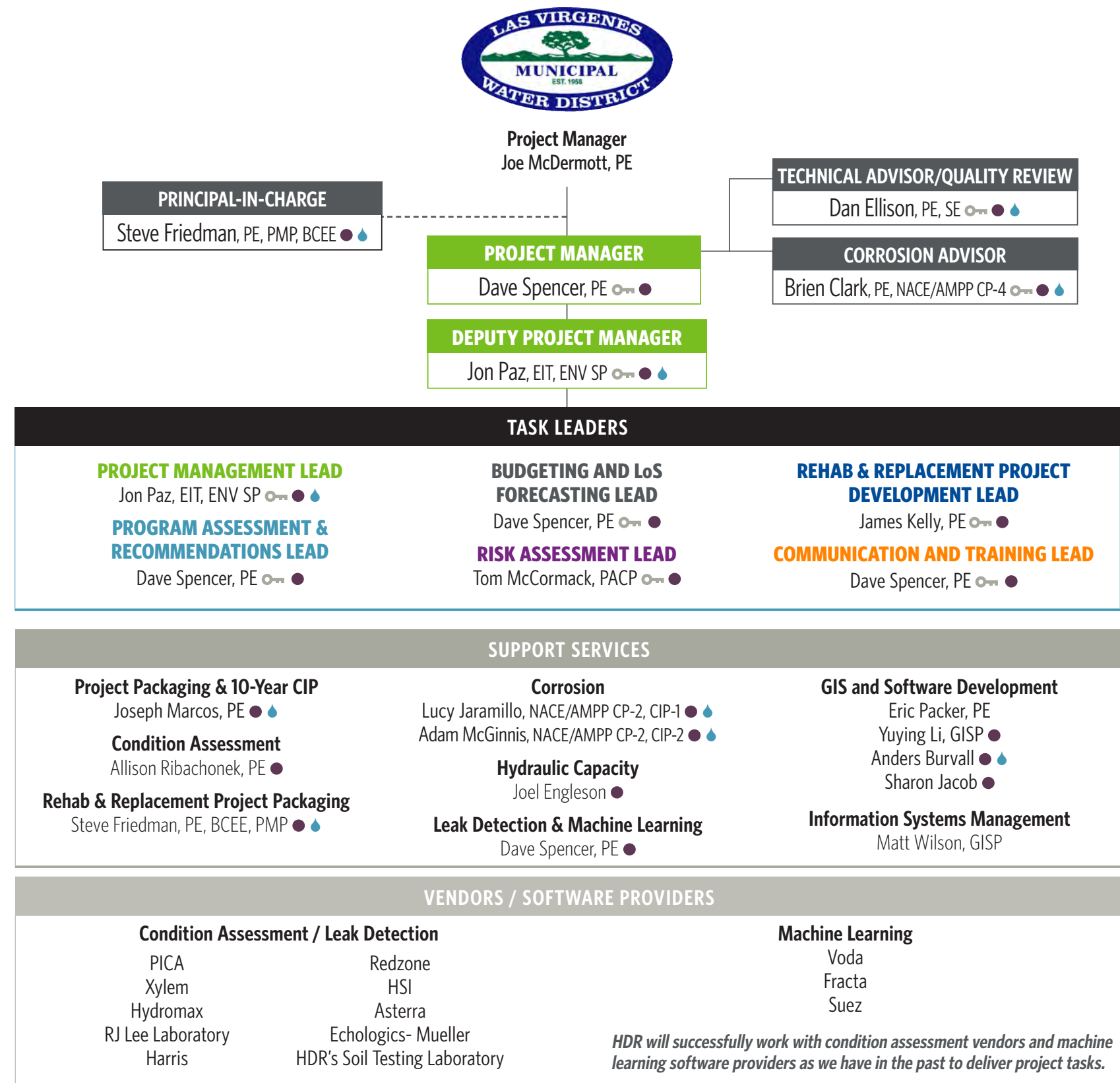
The organization chart summarizes the team that Dave has assembled to meet the unique needs of this project. Dave has worked closely with this team on similar projects and selected team members who know your unique challenges, staff, infrastructure, and data. **Dan Ellison, PE, SE**, lives in Ventura and has served as LVMWD's planning engineer, writing dozens of "System Design Reports", managing the development of Master Plans in 1999 and 2007, and assisting with the 2014 Master Plan update. **Brien Clark, PE, NACE/AMPP CP-4** has supported LVMWD's corrosion protection and rehabilitation program for years. **This knowledge, in conjunction with our experience implementing similar programs around the country, will enable us to hit the ground running and focus limited LVMWD Staff time on key decisions.** Our proposed project leadership and core team will not be reassigned without prior LVMWD approval. Full resumes for staff can be found in the Appendix.

The graphic on the following page (Figure 5) demonstrates our team's extensive industry research and experience in Condition Assessment and Corrosion projects. Our proposed Project Manager, Dave Spencer, has led many projects with this team and has worked hands-on with clients to deliver transparent, decision-making, and cost-saving opportunities.

LEGEND

- Key staff
- History working with LVMWD
- Locally Based (Southern California)

We have included our approach sequence highlighting our six tasks. **Task Leads have been color-coded in the Organizational Chart for easy reference.**



More than 20 Years of Unrivaled Technical Expertise and Leadership in Infrastructure Condition Assessment and Cathodic Protection

A timeline of your Key Expert's key publications, research, cost-savings, and contributions



DAVID SPENCER, PE
 22 Years of Experience
 Project Manager



DAN ELLISON, PE, SE
 42 Years of Experience
 Technical Advisor/Quality Review



BRIEN CLARK, PE, NACE/AMPP CP-4
 23 Years of Experience
 Corrosion Advisor

\$1 BILLION COST-SAVINGS

David has helped save utilities over \$1B in pipeline replacement through data driven condition based programs.

8 BOOKS

David and Dan are the Principal Authors of eight books on the subject of assessment and rehabilitation of water infrastructure.




David has worked with over 100 utilities to develop risk based pipeline programs

RISK ASSESSMENT OF 100+ UTILITIES

OVER 1,000 MILES OF PIPE ASSESSMENT

David and Brien conducted over 1,000 miles of pipe condition assessment and cathodic protection.

LEGEND

-  Cost Savings
-  Key Research and Publications
-  Author or significant contributor to broadly published industry guidance manual or published industry standard

Note: Icons are color-coded on timeline to attribute these accomplishments to Key Personnel mentioned above. Grey-colored icons are attributed to HDR.

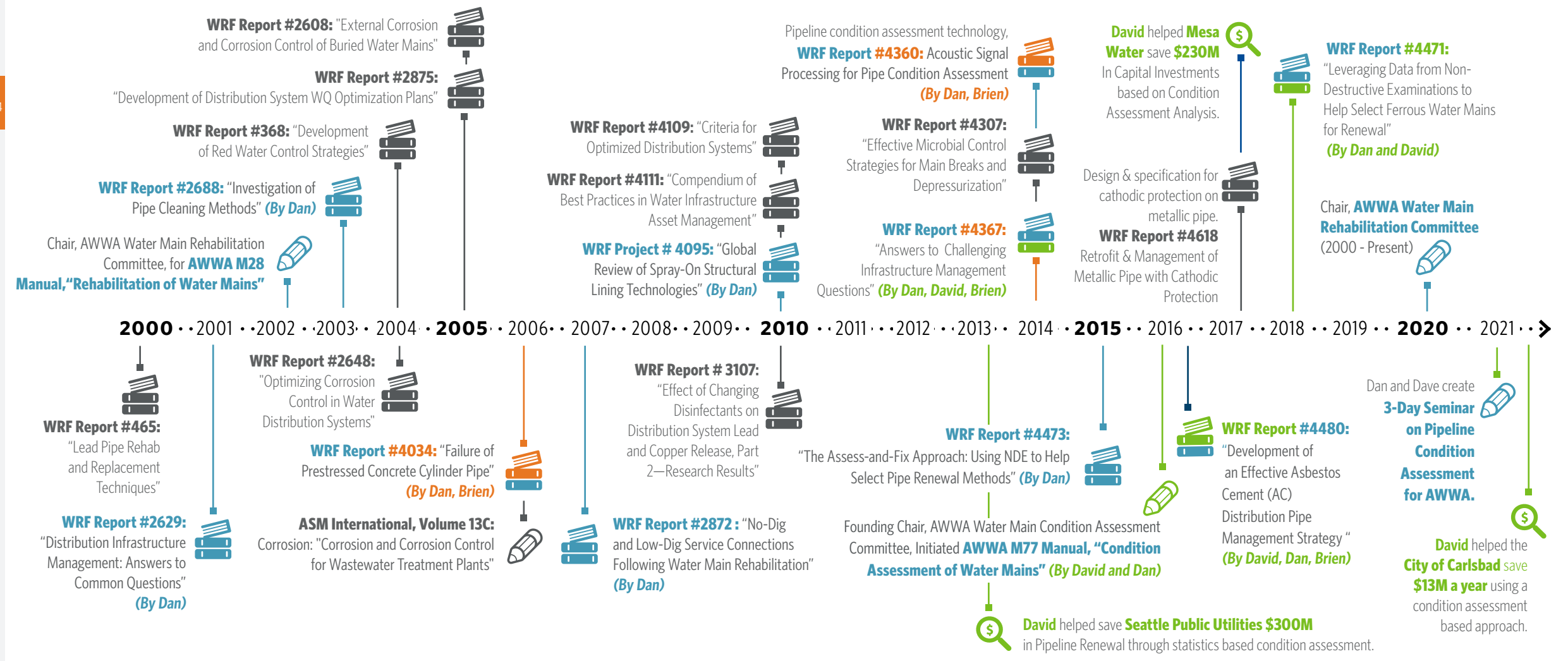


Figure 5

The key to efficient project delivery is assigning qualified professional staff who can deliver results. Our proposed key personnel will not be reassigned without prior approval from LVMWD.



DAVE SPENCER, PE

PROJECT MANAGER | PROGRAM ASSESSMENT & RECOMMENDATIONS | BUDGETING AND LOS FORECASTING | COMMUNICATION & TRAINING

Dave has developed and implemented condition assessment and renewal programs encompassing over 100,000 miles of pipelines around the country. These are practical, results-oriented programs

for aging potable and recycled water infrastructure. He efficiently tailors a program to match the client's size and objectives and is adept in interacting with all levels of a utility organization from field staff to management. Dave has been engaged in the evaluation of several emerging condition assessment technologies including: acoustic testing, non-destructive examinations, an ASCE Manual of Practice, and other Water Research Foundation projects. **Dave's approach to leadership is collaborative and transparent - engaging his clients and key stakeholders to make consensus-driven decisions, resulting in projects and programs that are right-sized and staff-owned. Dave's experience leading prioritization programs for large and small utilities equips him to deliver a process that is right-sized for LVMWD.**

RELEVANT EXPERIENCE

- ✓ IRWD, CIP and Asset Management for Potable & Non-potable Pipelines
- ✓ City of Ventura, 2022 Water Master Plan Update
- ✓ Water Research Foundation 4480, Effective Management of AC Pipe
- ✓ Padre Dam Municipal Water District, Pipeline Risk Prioritization & Condition Assessment
- ✓ Mesa Water District, Integrity Pipeline Testing



DAN ELLISON, PE, SE

TECHNICAL ADVISOR/QUALITY REVIEW

Dan provides innovative ideas and input throughout the project process to improve overall condition assessment program quality. Dan has gained national and international recognition as an expert on pipe assessment, rehabilitation, and trenchless construction, having authored several books on the subject. He is the founding Chair of the Water Main Condition Assessment

Committee of AWWA and is the current Chair of the Water Main Rehabilitation Committee. Dan has written eight different books for the Water Research Foundation and has helped develop infrastructure management programs for utilities across the country. **Dan's history and relationships with the District's staff brings a solid understanding of all of the District's facilities, design standards, culture, and preferences that will increase our team's efficiency and understanding for this project.**

RELEVANT EXPERIENCE

- ✓ City of Ventura, 2022 Water Master Plan Update
- ✓ LVMWD and JPA Potable and Recycled Water Master Plans and updates (2001, 2007, and 2014)
- ✓ Water Research Foundation 4480, Effective Management of AC Pipe



BRIEN CLARK, PE, NACE CP-4

CORROSION ADVISOR

Brien has more than 23 years of corrosion engineering experience and serves as one of HDR's Professional Associates and Corrosion Technical Leads. Brien is certified by AMPP (formerly NACE International) as a Cathodic Protection Specialist. **Over the past 19 years, Brien has supported clients throughout Southern California**

on corrosion protection and pipe sampling programs. Brien's deep understanding of historic cathodic protection infrastructure, procedures, and data will position our team to efficiently leverage that data to drive prudent decisions.

RELEVANT EXPERIENCE

- ✓ IRWD, CIP and Asset Management for Potable & Non-potable Pipelines
- ✓ Water Research Foundation 4480, Effective Management of AC Pipe
- ✓ LVMWD, 18-inch REW Pipeline Rehabilitation



JON PAZ, EIT, ENV SP
DEPUTY PROJECT MANAGER

Jon has worked on a variety of water and wastewater projects throughout California, including LVMWD's Water Supply Alternatives Study for Ventura County Waterworks District 17, and Padre Dam Municipal Water District's Prioritization and Condition Assessment for Potable Water Pipelines. He leads the development of detailed designs, writing specifications,

and writing preliminary design engineering reports, among other activities. Jon is also responsible for project management, resource allocation, budgeting and reporting, and documentation control. **Jon is very familiar with your standards and preferences and recognizes that the institutional knowledge retained by LVMWD's engineering, operations, and maintenance staff is extensive and invaluable.**



TOM MCCORMACK, PACP
RISK ASSESSMENT LEAD

Tom is a utility performance and information technology expert with 12 years of experience working with water and wastewater utilities. His experience includes helping clients implement asset management programs, improving utility operations and maintenance and capital planning work practices, risk modeling, and aging infrastructure renewal forecasting. **Tom recently lead the**

Desktop Condition Assessment for Irvine Ranch Water District's Capital Improvement Plan and Asset Management for Potable and Non-potable Pipelines.



JAMES KELLY, PE
REHAB & REPLACEMENT PROJECT DEVELOPMENT LEAD

James is a Professional Engineer with nearly 10 years of experience in civil land development and pipeline design within Los Angeles and Ventura Counties. He has a strong background in design and construction of water, wastewater, and storm drain systems. **James has a deep understanding of water systems. He has designed conveyance pipelines, tanks, wells, and pump stations all**

throughout Ventura County. He has a working understanding of all water distribution pipe types from CMLC Steel to HDPE and their inherent advantages and disadvantages. James' ability to understand the big picture of a system, yet also pinpoint the details that matter, will be an invaluable asset to LVMWD.

RELEVANT EXPERIENCE

- ✓ LVMWD, Water Supply Alternatives Study for Ventura County Waterworks District 17
- ✓ City of Ventura, 2022 Water Master Plan Update
- ✓ City of Thousand Oaks, Wastewater Interceptor Capital Improvement Project Unit Y2

RELEVANT EXPERIENCE

- ✓ IRWD, CIP and Asset Management for Potable & Non-potable Pipelines
- ✓ Padre Dam Municipal Water District, Potable Water Pipeline Condition Assessment
- ✓ Suburban Water Systems, Water Main Study

RELEVANT EXPERIENCE

- ✓ City of Oxnard, Groundwater Recovery Enhancement and Treatment Line Phase 2
- ✓ Santa Clarita Valley Water Agency, Mission Village Development Project
- ✓ Harvest, Limoneira Water Design Study

E

Subconsultants





Subconsultants

HDR is submitting this proposal as a prime consultant and does not intend to use subconsultants for the base scope of services. Use of subconsultants is contingent on the optional scope items.

F

Experience



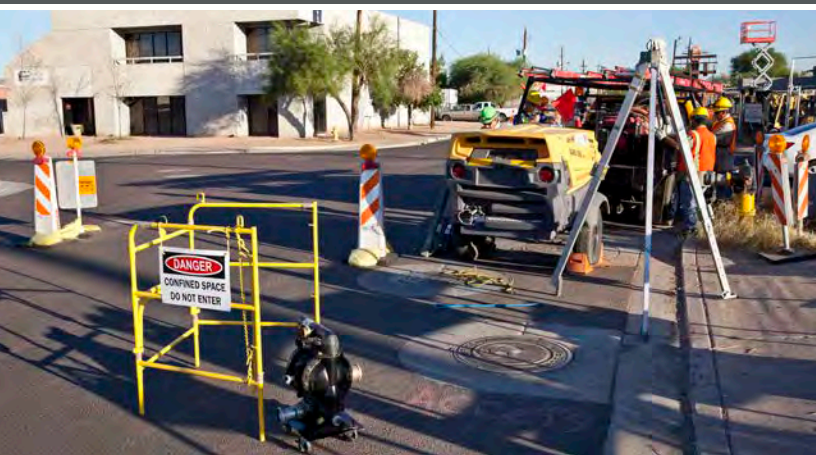
Experience

Our expertise spans more than 12,000 employees, in more than 225 locations around the world—and counting. Our engineering, architecture, environmental, and construction services bring an impressive breadth of knowledge to every project. We consistently rank high in Engineering News Record's (ENR's) Top 500 Water and Water Design firms in the nation. HDR currently ranks No. 5 in Top 20 Water, No. 5 in Water Supply, and No. 6 in Top 500 Design Firms.

For 60 years, HDR has been providing consulting corrosion engineering services to clients in California and across the United States. This makes HDR one of the oldest corrosion engineering firms in the United States. In addition, HDR owns and operates a state-of-the-art Corrosion Laboratory since 1993 in Southern California that specializes in soil and water corrosivity analysis and research with unrivaled QA/QC procedures to confirm the accuracy and relevance of our data.

Our specialty Pipeline Condition Assessment and Asset Management group brings industry leading expertise to clients throughout the United States. Our approach to Condition Assessment is tested and proven, furthering your return on investment and the reliability of your system. HDR **led the development of the 2019 AWWA M77 – Condition Assessment of Water Mains** and is a key contributor in the ongoing efforts to update the manual.

We offer a combination of industry leadership in condition assessment and intimate knowledge of LVMWD's facilities from recent projects. Our team comprises of local industry-recognized leaders and a bench of national resources to provide you the services required to execute a successful and seamless project.



Below is a matrix of similar projects that our team has completed. These projects below represent successful partnerships with our clients, providing cost-saving solutions, reaching performance goals, and creating programs that are program-specific and right-sized.

Client	Key Staff				Base Scope of Services										Optional Scope								
	Spencer	Ellison	Clark	McCormack	Task 1	Task 2	Task 3	Task 4	Task 5	Task 6	Task 7	Task 8	Task 9	Task 10	Task 11								
					Program Assessment	Process Recommendations	Leak Detection & Machine Learning Workshop	Budgeting	LoS Forecasting	LoF	CoF	Risk	Project Packaging	Unit Cost Assessment	Political Stakeholder Engagement	Training	Project Management	Leak Detection or Machine Learning Pilot	Hydraulic CoF	Opportunistic Condition Assessment Implementation CIP & Report	Condition Assessment Plan	Information System Implementation	
City of Ventura, CA*	✓	✓						👉	👉	👉	👉	👉	👉	👉			👉						
City of Phoenix, AZ*	✓	✓	✓		👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉		👉	👉	👉	👉
Mesa Water District, CA*	✓	✓	✓	✓	👉	👉		👉		👉	👉	👉	👉	👉	👉	👉	👉			👉	👉		
Padre Dam Municipal Water District, CA*	✓	✓	✓	✓	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉		👉		👉	👉	👉
Irvine Ranch Water District, CA*	✓	✓	✓	✓	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉
WRF 4480 Effective Management of AC Pipe*	✓	✓								👉							👉			👉			
Suburban Water Systems, CA*	✓	✓	✓	✓	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉		👉	👉	👉	👉	👉
Long Beach Water District, CA	✓	✓	✓	✓				👉		👉	👉	👉	👉	👉	👉	👉	👉		👉	👉	👉		
Vista Irrigation District, CA	✓	✓			👉	👉		👉	👉	👉	👉	👉	👉	👉	👉	👉	👉			👉			
Olivenhain Municipal Water District	✓	✓			👉	👉		👉	👉				👉	👉	👉	👉	👉			👉			
Rainbow Municipal Water District, CA	✓	✓	✓	✓	👉	👉		👉	👉	👉	👉	👉	👉	👉	👉	👉	👉			👉	👉		
Rancho California Water District, CA	✓	✓	✓	✓	👉	👉	👉	👉		👉	👉	👉	👉	👉	👉	👉	👉		👉	👉	👉		
San Bernardino County, CA	✓	✓		✓	👉	👉		👉		👉	👉	👉	👉	👉	👉	👉	👉			👉	👉		
City of Santa Cruz, CA	✓	✓		✓	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉		👉			
City of Bellevue, WA	✓	✓		✓	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉		👉	👉	👉	👉
City of Tucson, AZ	✓						👉			👉							👉	👉					👉
City of Honolulu, HI	✓	✓								👉			👉	👉			👉						
Department of Water Resources, CA	✓		✓		👉	👉		👉		👉	👉	👉	👉	👉	👉	👉	👉				👉		
City of Carlsbad, CA	✓	✓	✓	✓	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉		👉	👉	👉	👉	👉
Contra Costa Water District, CA	✓	✓			👉	👉		👉	👉	👉	👉	👉	👉	👉	👉	👉	👉		👉	👉	👉	👉	👉
City of Des Moines, IA	✓	✓			👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉		👉	👉	👉	👉	👉
City of St. Petersburg, FL	✓		✓	✓	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉
Johnson County, KS	✓	✓		✓	👉	👉		👉	👉	👉	👉	👉	👉	👉	👉	👉	👉				👉	👉	👉
Lee's Summit, KS	✓	✓	✓	✓	👉	👉				👉	👉	👉	👉	👉	👉	👉	👉				👉	👉	👉
City of Omaha, NE	✓	✓		✓	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉		👉	👉	👉	👉	👉
Sweetwater, CA	✓	✓		✓	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉		👉	👉	👉	👉	👉
OWASA, NC	✓	✓			👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉		👉	👉	👉	👉	👉
San Dieguito Water District, CA	✓			✓	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉	👉			👉	👉	👉	👉
San Francisco Public Utilities Commission, CA	✓	✓			👉	👉		👉		👉	👉	👉	👉	👉	👉	👉	👉				👉	👉	👉

** Full project descriptions and client references are included on the following pages



Water Master Plan Update

City of Ventura, CA, *Ventura, CA*

PROJECT DETAILS

REFERENCE

Ron Herbst, Principal Engineer
Ventura Water
501 Poli Street, Ventura, CA 93001
805.406.0181
rherbst@cityofventura.ca.gov

DATES

2020 - 2023

KEY STAFF

Dave Spencer; Dan Ellison; Jon Paz; Brien Clark;
Adam McGinnis; Lucy Jaramillo

VALUE ADDED

HDR developed a **cost-effective pipeline condition assessment strategy** including opportunistic condition assessment whenever a pipe is exposed and a proactive condition assessment program for pipes that are so critical, the City can't wait for them to fail before performing condition assessment.



HDR led the development of the aging pipeline infrastructure management component of the 2022 Water Master Plan Update Project. The City of Ventura (City) owns 393 miles of water main infrastructure. As the system continues to age and deteriorate, one of the City's primary goals is to cost effectively sustain desired service levels. As part of a master plan update project, the City requested this study to improve the way distribution infrastructure is managed. The primary objectives of this study were to:

- Quantify system performance and investment levels relative to similar benchmarked utilities.
- Establish prudent, transparent, and defensible investment levels that will enable the City to sustain desired levels of service as the system continues to age and deteriorate.
- Update unit costs based on City experience and similar projects outside the City.
- Develop a cost-effective condition assessment strategy.
- Identify the Top 10 Projects for condition assessment and renewal which encompassed the first 5-years of the program including the extents, planning level cost, and the justification for the project.

Control of Costs: HDR completed project on budget.

Quality of Work: Peer reviewed and adopted.

Ability to Meet Schedule: HDR delivered the project on schedule.



Pipeline Condition Assessment and Asset Management Program

City of Phoenix, Arizona, *Phoenix, AZ*

PROJECT DETAILS

REFERENCE

Matthew Woodland, PE
City of Phoenix, AZ, Water Services Department
200 West Washington St., 8th Floor, Phoenix, Arizona 85003
602.495.3753
matthew.woodland@phoenix.gov

DATES

2016 - Ongoing

KEY STAFF

Dave Spencer; Dan Ellison; Brien Clark

VALUE ADDED

Optimized Phoenix's \$50 million dollar per year program to **replace the RIGHT pipe, at the RIGHT time, using the RIGHT technology.**



HDR has been working with the City to develop a pipeline condition assessment and asset management program. This has included: 1) forecasting service levels and establishing prudent budgets for pipeline condition assessment and replacement, 2) condition assessment, 3) risk assessment, 4) evaluation of machine learning, 5) implementation of staff owned data management and information system to identify and prioritize CIP projects, and 6) inspection and assessment of the City's Reinforced Concrete Pipe (RCP) water transmission mains. The City has over 7,000 miles of water mains and consist of a variety of pipeline materials including, PVC, AC, RCP, CCP (AWWA C303), CRCP, DIP, and CIP. Using the as-builts, pipe age, break history, location, critical facility served, etc. HDR completed a desktop analysis analyzing and classifying each of the pipelines. For each pipeline a consequence and likelihood of failure was calculated, and pipeline criticality rating was determined. HDR then worked with the City of Phoenix to classify each of the pipelines into one of four categories depending on their priority for assessment.

In addition to the desktop analysis, HDR completed a detailed technology assessment evaluating the type, data received, cost, inspection requirements, etc. to determine a set of recommended technologies that could be used to assess each of the pipelines. In order to further evaluate the pipelines and to assist in recommending the required technology, HDR also coordinated a pilot test with various in pipe inspection vendors to evaluate the requirements for completing the inspection, cost, and quality of data received.

Control of Costs: HDR completed project within budget.

Quality of Work: HDR completed the initial AM plan in 2016 and continues to support elements of the program including a recent task to evaluate and implement machine learning.

Ability to Meet Schedule: HDR met all project deadlines.



PROJECT DETAILS

REFERENCE

Karyn Igar, PE
Mesa Water District
1965 Placentia Ave, Costa Mesa, CA 92627
949.207.5452
Karynl@mesawater.org

DATES

2017 - 2021

KEY STAFF

Dave Spencer; Dan Ellison; Brien Clark; Luzmilla Jaramillo;
Adam McGinnis; Steven Friedman

VALUE ADDED

Based on the results of this analysis, it was determined that most of the system has significant **remaining useful life saving approximately \$230 million** in capital investments. A condition based-decision making process was developed to identify pipeline that warranted near term renewal or more detailed condition assessment. This project also had the following awards: CMUA for California Utilities for Outstanding Programs Benefiting Customers and Local Communities (2020), Finalist for ACWA "Clair A. Hill Agency Award for Excellence" for their Pipeline Integrity Testing Program (2018), Journal of AWWA Feature Article (2019).

Pipeline Integrity Testing Program

Mesa Water District (Mesa Water®), Costa Mesa, CA

Mesa Water® hired HDR to estimate the remaining useful life of Mesa Water®'s pipelines based on measured pipeline properties, rather than using an age-based approach. HDR developed a Board adopted pipeline decision making process which leverages readily available data to identify remaining useful life, identify specific pipes that required condition assessment of replacement, continuously refined the testing program to provide the most value to the ratepayers, refined business processes to collect high quality break and condition assessment data, and updated GIS / Asset Data to reflect work in this project.

HDR performed assessments of Mesa Water®'s existing system:

CATHODIC PROTECTION SYSTEMS SURVEY: Performed corrosion control testing and evaluation of 19 pipelines, including approximately 141,000 linear feet of cement mortar and coated welded steel pipe, concrete cylinder pipe, cement mortar lined and coal tar coated welded steel pipe, and ductile iron pipe. Through this evaluation, HDR provided Mesa Water® with an updated assessment of the existing cathodic protection system and recommended the need to rehabilitate the system that is depleted or approaching the end of their intended life.

CELL-TO-CELL SURVEY OF 12-IN CIP: Performed cell-to-cell potential survey of a critical 12-inch cast iron pipeline approximately 3,800 linear feet along W 19th Street between Placentia and Harbor Boulevard, which is a high traffic area (vehicular and pedestrians). The survey identified several locations with the highest potential for active corrosion and perform additional testing through external corrosion direct assessment to inform decision making for pipe replacement.

Control of Costs: HDR completed project within budget.

Quality of Work: HDR was initially hired in 2017 and continues to perform as-needed condition assessment services.

Ability to Meet Schedule: HDR met all project deadlines due to coordination with Client throughout the project duration.



PROJECT DETAILS

REFERENCE

Michael Hindle, PE
Padre Dam Municipal Water District
9300 Fanita Pkwy, Santee, CA 92071
619.258.4632
mhindle@padre.org

DATES

2017 - 2023

KEY STAFF

Dave Spencer; Dan Ellison; Brien Clark; Tom McCormack;
Eric Packer; Lucy Jaramillo; Adam McGinnis

VALUE ADDED

This award winning project resulted in **over \$1M in savings in condition assessment, \$16M per year in pipeline replacement deferral, and a set of dashboards that enabled Staff to communicate the benefits of the program** to their staff, managers, and board members. Project received the ASCE San Diego Award for Sustainability in addressing aging infrastructure.



Pipeline Risk Prioritization & Condition Assessment of Potable Water Pipelines

Padre Dam Municipal Water District, Santee, CA

HDR provided engineering planning services to Padre Dam Municipal Water District related to the development of a potable water pipeline risk prioritization model. This risk based prioritization approach would allow the District to move systematically forward with a more comprehensive condition assessment program for its potable water pipelines. This prioritization led to pipeline condition assessment including approximately 25,000 linear feet of indirect assessment followed by direct assessment. The condition assessments was utilized to make repair, rehabilitation, replacement or future monitoring recommendations on pipelines and inform the development of the District's future potable water pipelines Condition Assessment Program and Capital Improvement Program budgeting. The scope of services included two phases and multiple step processes that used selected specialized methods to assess the condition of high priority pipelines.

Phase 1 of the Project included a detailed data review, an indirect condition assessment of pipelines, a direct assessment design, a direct assessment proposal evaluation, negotiation of scopes and budgets with vendors and contractors, and preparation for the work plan for direct assessment.

Phase 2 of the Project included direct condition assessment, analysis of results, risk model updates, identification of specific monitoring or capital improvement recommendations for assessed pipelines and program recommendations for future condition assessments and capital improvements.

Control of Costs: Project was completed \$25,000 under budget.

Quality of Work: No changes orders for construction work or condition assessment work.

Ability to Meet Schedule: HDR met all project deadlines due to coordination with Client throughout the project duration.



Capital Improvement Plan and Asset Management for Potable and Non-potable Pipelines

Irvine Ranch Water District (IRWD)

Irvine Ranch Water District (IRWD) owns 2,600 miles of potable and recycled water pipeline. This project includes analysis to determine the appropriate level of funding and specific project within the Capital Improvement Plan (CIP) to cost-effectively manage aging infrastructure. CIP investments include condition assessment, cathodic protection, rehabilitation, and replacement. The project incorporates concepts such as desktop condition assessment, risk analysis, replacement costs, condition assessment program development, remaining useful life, level of service. A specific emphasis is on refining and implementing IRWD's information management systems to enable the utility to leverage new data (e.g. breaks, CP test station reads, leak detection, condition assessment) to continuously investment decisions.

PROJECT DETAILS

Reference: Mitch Robinson, PE, Project Manager
 Irvine Ranch Water District
 15600 Sand Canyon Avenue,
 Irvine, CA 92618
 949.453.5863 | robinson@irwd.com

Dates: 2023 - Ongoing

Key Staff: Dave Spencer; Dan Ellison; Brien Clark; Tom McCormack



Water Main Study

Suburban Water Systems

Suburban Water Systems (SWS) owns 860 miles of water main infrastructure. As the system continues to age and deteriorate, one of SWS's primary goals is to cost effectively sustain desired service levels. To accomplish this, HDR helped SWS initiate this effort to continuously improve the way distribution infrastructure is managed. The three primary accomplishments of this project are to:

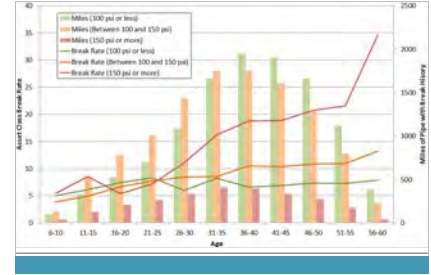
- Establish prudent, transparent, and defensible investment levels that will enable SWS to sustain desired levels of service as the system continues to age and deteriorate.
- Focus those investments by developing an advanced risk model to make sure ratepayers realize the greatest return on their investment.
- Develop a cost effective condition assessment program for asbestos cement pipe which makes up roughly 80% of the system.
- Develop a staffing plan to continuously execute the program.
- Gain state approval for the program.

PROJECT DETAILS

Reference: Zhaohui (Josie) Sun, PE, Suburban Water Systems
 1325 N. Grand Avenue, Ste, 100,
 Covina, CA 91724
 626.543.256 | zsun@swwc.com

Dates: 2018 - 2023

Key Staff: Dave Spencer; Tom McCormack



WRF 4480, Development of Effective Asbestos Cement Distribution Pipe Management Strategy for Utilities

Water Research Foundation (WRF)

HDR led this research project that involved developing an effective strategy for management of utility Asbestos Cement (AC) pipe assets, which included condition assessment and remaining life prediction, water quality optimization, rehabilitation and replacement, renewal prioritization modeling, and cost analysis. The project involved analysis of more than 100 samples of pipe and 20 years of break data for 1,100 miles of East Bay Municipal Utility District (EBMUD) AC pipes.

A variety of testing methodologies were applied to the same pipe in order to quantify the value and cost-effectiveness of each technology. Testing evaluated included EDS, hardness, crush tests, flexural tests, burst test, acoustic testing, stain testing, measured diameter to thickness ratio, water quality, stress information, and system performance as measured through break history.

PROJECT DETAILS

Reference: Jian Zhang, Research Manager
 Water Research Foundation (WRF)
 6666 W. Quincy Ave., Denver, CO 80235
 303.347.6114 | jzhang@waterRF.org

Dates: 2012 - 2014

Key Staff: Dave Spencer; Dan Ellison; Brien Clark

G

Cost





Cost

Las Virgenes Municipal Water District Potable Water Pipeline Rehab and Replacement Study Estimated Level of Effort and Fee

TASKS		LEVEL OF EFFORT								FEE				
		Principal	Quality Manager	Project Manager	Sr Technical Expert	Senior Engineer	Project Engineer	Accountant	Project Coordinator	Total Labor	Labor	Subs	Direct Costs	TOTAL
No.	Description	<i>Client Billing Rates</i>												
		\$350	\$350	\$320	\$295	\$250	\$180	\$150	\$150	\$241		Calc	Calc	-1
1	Program Assessment & Recommendations													
1.1	Request, Review, and Compile Data			8	2	18	12			40	\$9,810	\$0	\$196	
1.2	Staff Interviews & Assessment of Practices			16	2	4	16			38	\$9,590	\$0	\$192	
1.3	Machine Learning and Software Workshop			8			6			14	\$3,640	\$0	\$73	
1.4	Draft Report Chapter & Workshop		4	16	1	16	16			53	\$13,695	\$0	\$274	
1.5	Final Report Chapter		2	6		8	8			24	\$6,060	\$0	\$121	
	Subtotal 1 Program Assessment & Recommendations	0	6	54	5	46	58	0	0	169	\$42,795	\$0	\$856	\$43,650
2	Budgeting and LoS Forecasting													
2.1	Develop LoS Forecasting & Workshop		2	32		4	20			58	\$15,540	\$0	\$311	
2.2	Refine Investment Scenarios			12			16			28	\$6,720	\$0	\$134	
2.3	Draft Report Chapter & Workshop		4	20		2	24			50	\$12,620	\$0	\$252	
2.4	Final Report Chapter		2	6			10			18	\$4,420	\$0	\$88	
	Subtotal 2 Budgeting and LoS Forecasting	0	8	70	0	6	70	0	0	154	\$39,300	\$0	\$785	\$40,090
3	Risk Assessment													
3.1	Quantify LoF & Workshop			24	12	8	40			84	\$20,420	\$0	\$408	
3.2	Quantify CoF & Workshop			10		24	24			58	\$13,520	\$0	\$270	
3.3	Quantify Risk & Workshop			16		12	24			52	\$12,440	\$0	\$249	
3.4	Draft Report Chapter & Workshop		4	20	4	20	24			72	\$18,300	\$0	\$366	
3.5	Final Report Chapter		2	6		6	12			26	\$6,280	\$0	\$126	
	Subtotal 3 Risk Assessment	0	6	76	16	70	124	0	0	292	\$70,960	\$0	\$1,419	\$72,380
4	Rehab & Replacement Project Development													
4.1	Unit Cost Development			4		8	6			18	\$4,360	\$0	\$87	
4.2	Develop Project Packaging Criteria			12	5	20	24			61	\$14,635	\$0	\$293	
4.3	Enhanced Assessment & Mapping of 10-Yr CIP			6		24	42			72	\$15,480	\$0	\$310	
4.4	Draft Report Chapter & Workshop		4	16		24	32			76	\$18,280	\$0	\$366	
4.5	Final Report Chapter		2	6		6	14			28	\$6,640	\$0	\$133	
	Subtotal 4 Rehab & Replacement Project Development	0	6	44	5	82	118	0	0	255	\$59,395	\$0	\$1,189	\$60,580
5	Communication & Training													
5.1	Develop & Provide Training & Support			12		8	16			36	\$8,720	\$0	\$174	
5.2	Present to Board of Directors		8	14		1	11			34	\$9,510	\$0	\$190	
	Subtotal 5 Communication & Training	0	8	26	0	9	27	0	0	70	\$18,230	\$0	\$364	\$18,590
6	Project Management													
6.1	Kickoff Meeting		6	7			6			19	\$5,420	\$0	\$108	
6.2	Monthly Check-in Meeting			10			12			22	\$5,360	\$0	\$107	
6.3	Project Management & Invoicing	3		12			24	27	27	93	\$17,310	\$0	\$346	
	Subtotal 6 Project Management	3	6	29	0	0	42	27	27	134	\$28,090	\$0	\$561	\$28,650
TOTAL, hours		3	40	299	26	213	439	27	27	1,074				
TOTAL, dollars											\$258,770	\$0	\$5,174	\$263,940

H

Contract & Insurance



Contract & Insurance

Contract

HDR and the District have executed several agreements in the past. We recommend these agreements be used as the basis for this project, which will facilitate a quick start of work. HDR has reviewed and understands the District’s standard professional services agreement. Upon selection, **HDR would appreciate the opportunity to discuss some of the contract terms with LVMWD.** HDR respectfully proposes the following modifications to LVMWD’s standard professional services agreement. We propose deleting the strikethrough language highlighted in yellow and adding/revising the language **bolded in red.** We are available to discuss any of the requested changes with you.



No.	Section Title	Recommendations to Agreement
2.3.5	Responsibilities of Consultant	2.3.5 <u>Conformance to Applicable Requirements.</u> All work prepared by Consultant shall be subject to the approval of Agency, such approval will not be unreasonably withheld or delayed.
2.5	Indemnification.	<p>To the fullest extent permitted by law, Consultant shall immediately indemnify and hold the Agency, its directors, officials, officers, employees, volunteers, and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage, or injury of any kind, in law or equity, to property or persons, including wrongful death, in any manner arising out of, pertaining to, or incident to any alleged negligent or wrongful acts, errors, or omissions of Consultant, its officials, officers, employees, subcontractors, consultants, or agents in connection with the performance of the Consultant’s Services, the Project, or this Agreement, including without limitation the payment of all consequential damages, attorneys’ fees and costs, including expert witness fees. Notwithstanding the foregoing, to the extent Consultant’s Services are subject to Civil Code Section 2782.8, the above indemnity shall be limited, to the extent required by Civil Code Section 2782.8, to claims that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the Consultant.</p> <p>Consultant shall immediately defend, with Counsel of Agency’s choosing reasonably approved by Agency and at Consultant’s own cost, expense and risk, any and all claims, suits, actions, or other proceedings of every kind that are subject to Consultant’s indemnification obligation and may be brought or instituted against Agency or its directors, officials, officers, employees, volunteers, and agents. Consultant shall pay and satisfy any judgment, award, or decree that may be rendered against Agency or its directors, officials, officers, employees, volunteers, and agents as part of any such claim, suit, action, or other proceeding. Consultant shall also reimburse Agency for the cost of any settlement paid by Agency or its directors, officials, officers, employees, agents, or volunteers as part of any such claim, suit, action, or other proceeding. Such reimbursement shall include payment for Agency’s attorneys’ fees and costs, including expert witness fees. Consultant’s obligation to defend and indemnify shall survive expiration or termination of this Agreement, and shall not be restricted to insurance proceeds, if any, received by the Agency, its directors, officials, officers, employees, agents, or volunteers. However, Consultant’s defense and indemnification obligations shall be limited to the percentage of fault assigned to Consultant by a court of law, arbitrator, or by mutual agreement of the parties to this Agreement.</p>



No.	Section Title	Recommendations to Agreement
2.6	Insurance	(a) <u>Commercial General Liability</u> . Coverage for commercial general liability insurance shall be at least as broad as Insurance Services Office (ISO) Commercial General Liability Coverage (Occurrence Form CG 0001). Consultant shall maintain limits no less than \$2,000,000 per occurrence, and in the aggregate, or the full per occurrence limits of the policies available, whichever is greater , for bodily injury, personal injury, and property damage. If Commercial General Liability Insurance or other form.....
2.6	Insurance	2.6.3 <u>All Coverages</u> . (ii) Policies may provide coverage which contains deductible or self-insured retentions. Such deductible and/or self-insured retentions shall not be applicable with respect to the coverage provided to Agency under such policies. Consultant shall be solely responsible for deductible and/or self-insured retention and Agency, at its option, may require Consultant to secure the payment of such deductible or self-insured retentions by a surety bond or an irrevocable and unconditional letter of credit. The insurance policies that contain deductibles or self-insured retentions in excess of \$25,000 per occurrence shall not be acceptable without the prior approval of Agency.
2.6	Insurance	2.6.3 <u>All Coverages</u> . (iv) Each policy required in this section shall contain a policy cancellation clause that provides the policy shall not be cancelled or otherwise terminated by the insurer or the Consultant or reduced in coverage or in limits materially changed except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the Agency, Attention: Director of Finance & Administration.
2.7	Termination of Agreement	2.7.1 <u>Grounds for Termination</u> . Agency may, by written notice to Consultant, terminate the whole or any part of this Agreement without liability to the Agency if Consultant fails to perform or commits a substantial breach of the terms hereof, but only after providing Consultant written notice of the failure and a period of ten (10) days to cure . Either Party may terminate this agreement on.....
2.8	Ownership of Materials and Confidentiality	2.8.1 <u>Documents & Data; Licensing of Intellectual Property</u>If the Agency uses any of the data, reports, and documents furnished or prepared by the Consultant for projects other than the project shown on Exhibit A, the Consultant shall be released from responsibility to Agency and third parties concerning the use of the data, reports, and documents. The Consultant may....

Appendix

Staff Resumes





David Spencer, PE

Project Manager | Program Assessment & Recommendations |
Budgeting and LoS Forecasting | Communication & Training

EDUCATION

Bachelor of Science, Civil
Engineering, California
Polytechnic State
University, San
Luis Obispo

REGISTRATIONS

Professional Engineer -
Civil, CA, No. 66885

INDUSTRY TENURE

22 years

Dave Spencer developed and implemented asset management programs encompassing over 100,000 miles of pipelines in the U.S.. Dave specializes in developing and implementing practical results-oriented programs for aging water, recycled water, and wastewater infrastructure. He is adept in interacting with all levels of a utility organization from field staff to management. He is currently engaged in the evaluation of several emerging condition assessment technologies including acoustic testing, non-destructive examinations, an ASCE Manual of Practice, and other Water Research Foundation projects. Proficient in ESRI and Microsoft analytical tools, Dave has supported many high performing utilities in building and refining asset management practices including the Cities of San Diego, Poway, Vista, Phoenix and Honolulu, Vista Irrigation District, Los Angeles Bureau of Sanitation, and Seattle Public Utilities.

RELEVANT EXPERIENCE

City of Ventura, CA, Water Master Plan Update | Ventura, CA
Technical Lead. HDR led the development of the aging pipeline infrastructure management component of the 2022 Water Master Plan Update Project. The primary objectives of this study were to quantify system performance and investment levels relative to similar benchmarked utilities, establish prudent, transparent, and defensible investment levels, update unit costs based on City experience and similar projects outside the City, develop a cost-effective condition assessment strategy, and identify the top 10 projects for condition assessment and renewal. Dave was the technical lead for the section on managing aging pipelines.

Water Research Foundation (WRF), WRF 4480 Development of an Effective Asbestos Cement (AC) Distribution Pipe Management Strategy for Utilities | Oakland, CA

Co-author. Dave participated on this research project that involved developing an effective strategy for management of utility AC pipe assets, which included condition assessment and remaining life prediction, water quality optimization, rehabilitation and replacement, renewal prioritization modeling, and cost analysis. Project involved analysis of more than 100 samples of pipe and 20 years of break data for 1,100 miles of East Bay Municipal Utility District (EBMUD) AC pipes.

Irvine Ranch Water District, Capital Improvement Plan and Asset Management for Potable and Non-potable Pipelines | Irvine, CA
Project Manager. Irvine Ranch Water District (IRWD) owns 2,600 miles of potable and recycled water pipeline. This project includes analysis to determine the appropriate level of funding and specific project within the Capital Improvement Plan (CIP) to cost-effectively manage aging infrastructure. CIP investments include condition assessment, cathodic protection, rehabilitation, and replacement. The project incorporates

concepts such as desktop condition assessment, risk analysis, replacement costs, condition assessment program development, remaining useful life, level of service. A specific emphasis is on refining and implementing IRWD's information management systems to enable the utility to leverage new data to continuously investment decisions.

Mesa Consolidated Water District, Pipeline Integrity Program (Pipeline Integrity Testing Program) | Costa Mesa, CA

Task Manager. Mesa Water District performed an age-based assessment for over 300 miles of water distribution piping, which resulted in an estimated replacement cost of \$300 million within the next 30 years. Because their break rates were not consistent with this forecast, HDR was selected to assist Mesa Water in the determining the remaining useful life of their water main pipeline by evaluating historical data, identifying the appropriate test methodology, and continuously refining the testing program to focus Mesa Water's rehabilitation and replacement efforts and provide the most value to customers. The scope expanded to include performing a survey of the cathodic protection system and a close-interval survey.

Padre Dam Municipal Water District, Pipeline Risk Prioritization | San Diego, CA

As **Asset Management Task Lead**, Dave provided data assessment and cleansing, risk model development, condition assessment decision making logic, implementation plan for change management, training, and support for presentations. HDR provided engineering planning services to Padre Dam Municipal Water District related to the development of a potable water pipeline risk prioritization model. This risk-based prioritization approach would allow the District to move systematically forward with a more comprehensive condition assessment program for its potable water pipelines.

Suburban Water Systems, Water Main Study | Covina, CA

Project Manager. The purpose of this project was to support Suburban in addressing the issues identified in Chapter 6 of the ORA Report including identifying and justifying appropriate long-term renewal needs of Suburban to the Public Utilities Commission. HDR conducted a detailed assessment of Suburban's valve and water main renewal program through the practical application of research and lessons learned from implementing similar techniques at roughly 70,000 miles of pipeline around the country.

City of Phoenix, RCP Main Inspection and Condition Assessment Program | Phoenix, AZ

HDR provided inspections and condition assessments of the City's Reinforced Concrete Pipe (RCP) water transmission mains. This program includes inventory of RCP mains, collection and review of construction, repair, and operation information, review and recommendation of technologies for RCP mains, prioritization of RCP mains, and development of a pilot program of assessment technology. There are approximately 228 miles of RCP transmission mains ranging from 16- to 90-inch diameter. While the majority of this pipe is bar-wrapped cylinder pipe, the City's RCP also includes other types of steel-reinforced concrete pipe.



Dan Ellison, PE, SE

Technical Advisor/Quality Review

EDUCATION

Master of Business Administration, Finance, University of Southern California

Bachelor of Arts, English, University of Utah

Bachelor of Science, Civil Engineering, University of Utah

REGISTRATIONS

Professional Engineer - Structural, CA, No. 3020

Professional Engineer - Civil, CA, No. 38094

INDUSTRY TENURE

42 years

Dan has gained national and international recognition as an expert on pipe assessment, rehabilitation, and trenchless construction, having authored several books on the subject. He is the former Chair of the Water Main Rehabilitation Committee of AWWA. Dan has managed groups with more than 40 employees and programs with annual budgets up to \$40 million. Projects have ranged from record-setting trenchless river crossings, to published research, to power plant retrofits, even a fish ladder. This diversity of projects along with superior management skills of people and programs make Dan tremendously flexible and creative. With more than 35 years of civil and structural engineering experience, Dan has design and construction experience in both the energy and water supply fields on projects ranging to the multi-billion dollar range.

RELEVANT EXPERIENCE

City of Ventura, CA, Water Master Plan Update | Ventura, CA

Project Manager. HDR led the development of the aging pipeline infrastructure management component of the 2022 Water Master Plan Update Project. The primary objectives of this study were to quantify system performance and investment levels relative to similar benchmarked utilities, establish prudent, transparent, and defensible investment levels, update unit costs based on City experience and similar projects outside the City, develop a cost-effective condition assessment strategy, and identify the top 10 projects for condition assessment and renewal.

Water Research Foundation, WRF 4480, Development of an Effective Asbestos Cement (AC) Distribution Pipe Management Strategy for Utilities | Oakland, CA

Project Manager. Participated on this research project that involved developing an effective strategy for management of utility AC pipe assets, which included condition assessment and remaining life prediction, water quality optimization, rehabilitation and replacement, renewal prioritization modeling, and cost analysis. Project involved analysis of more than 100 samples of pipe and 20 years of break data for 1,100 miles of East Bay Municipal Utility District (EBMUD) AC pipes.

Las Virgenes Municipal Water District, Recycled Water / Potable Water / Integrated Master Plan Update | Calabasas, CA

Project Manager. Preparation of master plans for a complex water distribution system comprising over 22 service zones and two water systems. Included hydraulic computer model of all pipes 4 inches and larger. Studied alternatives for major transmission pipeline upgrades and interconnections with neighboring facilities. Project included 3 large reports: Recycled Water Potable Water and Integrated. Completed project in 14 months which

included 15 workshop-style meetings with client. Provided comprehensive list of recommendations including opinions of probable cost totaling approximately \$90 million. (*Prior to HDR*)

Padre Dam Municipal Water District, Pipeline Risk Prioritization | San Diego, CA

Condition Assessment. HDR provided engineering planning services to Padre Dam Municipal Water District related to the development of a potable water pipeline risk prioritization model. This risk-based prioritization approach would allow the district to move systematically forward with a more comprehensive condition assessment program for its potable water pipelines.

Mesa Consolidated Water District, Pipeline Integrity Program (Pipeline Integrity Testing Program) | Costa Mesa, CA

Condition Assessment. Mesa Water hired HDR to estimate the remaining useful life of Mesa Water's pipelines based on measured pipeline properties, rather than using an age-based approach. Identify specific pipes that require replacement, and continuously refine the testing program to provide the most value to the ratepayers.

Irvine Ranch Water District, Capital Improvement Plan and Asset Management for Potable and Non-potable Pipelines | Irvine, CA

Technical Advisor. Irvine Ranch Water District (IRWD) owns 2,600 miles of potable and recycled water pipeline. This project includes analysis to determine the appropriate level of funding and specific project within the Capital Improvement Plan (CIP) to cost-effectively manage aging infrastructure. CIP investments include condition assessment, cathodic protection, rehabilitation, and replacement. The project incorporates concepts such as desktop condition assessment, risk analysis, replacement costs, condition assessment program development, remaining useful life, level of service. A specific emphasis is on refining and implementing IRWD's information management systems to enable the utility to leverage new data (e.g. breaks, CP test station reads, leak detection, condition assessment) to continuously investment decisions.

Western Municipal Water District, Nondestructive Condition Assessment Alternatives for the Mills Gravity Pipeline | Claremont, CA

Project Manager. Condition assessment of 14 miles of 48- to 60-inch-diameter water transmission pipe, using corrosion survey and in-line leak detection methods. This American Water Works Association (AWWA) C303, bar-wrapped concrete cylinder pipe is the primary water source for several utilities, with pressures ranging to over 250 psi. This 2015-2016 determined that the pipeline was in relatively good condition, although areas of concern were identified for further evaluation, including two small leaks at blow-offs.



Brien Clark, PE, NACE CP-4

Corrosion Advisor

EDUCATION

Bachelor of Science,
Chemical Engineering,
California State
Polytechnic University,
Pomona

REGISTRATIONS

AMPP – Cathodic
Protection Specialist, No.
17978

National Council of
Examiners for Engineering
and Surveying,
No. 18-469-62

Professional Engineer -
Chemical, CA
No. CH 6291

INDUSTRY TENURE

22 years

Brien is a senior corrosion engineer and has conducted more than 500 condition assessments, external direct assessments, failure analyses, soil corrosivity studies, water aggressivity studies, cathodic protection surveys, cathodic protection/corrosion control designs, and construction checkouts for water and wastewater facilities. He has performed field surveys on varying terrain and conditions, specified or performed field tests, analyzed data and made recommendations for corrosion control measures to protect underground structures, performed continuity testing to determine spans of electrical discontinuity in buried pipelines, performed over-the-line close interval surveys (CIS) while circulating current to identify electrically discontinuous pipe joints, performed lateral/side drain surface surveys to determine corroding areas of buried pipelines, performed current requirement testing on existing structures to determine adequate cathodic protection, designed cathodic protection systems and other corrosion control facilities.

RELEVANT EXPERIENCE

Irvine Ranch Water District, Capital Improvement Plan and Asset Management for Potable and Non-potable Pipelines | Irvine, CA
Corrosion Advisor. Irvine Ranch Water District (IRWD) owns 2,600 miles of potable and recycled water pipeline. This project includes analysis to determine the appropriate level of funding and specific project within the Capital Improvement Plan (CIP) to cost-effectively manage aging infrastructure. CIP investments include condition assessment, cathodic protection, rehabilitation, and replacement. The project incorporates concepts such as desktop condition assessment, risk analysis, replacement costs, condition assessment program development, remaining useful life, level of service. A specific emphasis is on refining and implementing IRWD's information management systems to enable the utility to leverage new data (e.g. breaks, CP test station reads, leak detection, condition assessment) to continuously investment decisions.

Water Research Foundation, Water Research Foundation - WRF 4480, Development of an Effective Asbestos Cement (AC) Distribution Pipe Management Strategy for Utilities | Oakland, CA

Corrosion Advisor. Participated on this research project that involved developing an effective strategy for management of utility AC pipe assets, which included condition assessment and remaining life prediction, water quality optimization, rehabilitation and replacement, renewal prioritization modeling, and cost analysis. Project involved analysis of more than 100 samples of pipe and 20 years of break data for 1,100 miles of East Bay Municipal Utility District (EBMUD) AC pipes.

City of Ventura, CA, Water Master Plan Update | Ventura, CA

Technical Advisor. HDR led the development of the aging pipeline infrastructure management component of the 2022 Water Master Plan Update Project. The primary objectives of this study were to quantify system performance and investment levels relative to similar benchmarked utilities, establish prudent, transparent, and defensible investment levels, update unit costs based on City experience and similar projects outside the City, develop a cost-effective condition assessment strategy, and identify the top 10 projects for condition assessment and renewal.

Water Research Foundation (WRF), WRF 4480 Development of an Effective Asbestos Cement (AC) Distribution Pipe Management Strategy for Utilities | Oakland, CA

Co-author. Brien participated on this research project that involved developing an effective strategy for management of utility AC pipe assets, which included condition assessment and remaining life prediction, water quality optimization, rehabilitation and replacement, renewal prioritization modeling, and cost analysis. Project involved analysis of more than 100 samples of pipe and 20 years of break data for 1,100 miles of East Bay Municipal Utility District (EBMUD) AC pipes.

Padre Dam Municipal Water District, Pipeline Risk Prioritization San Diego, California

Condition Assessment. HDR provided engineering planning services to Padre Dam Municipal Water District related to the development of a potable water pipeline risk prioritization model. This risk-based prioritization approach would allow the district to move systematically forward with a more comprehensive condition assessment program for its potable water pipelines.

City of Phoenix, RCP Main Inspection and Condition Assessment Program | Phoenix, AZ

HDR provided inspections and condition assessments of the City's Reinforced Concrete Pipe (RCP) water transmission mains. This program includes inventory of RCP mains, collection and review of construction, repair, and operation information, review and recommendation of technologies for RCP mains, prioritization of RCP mains, and development of a pilot program of assessment technology. There are approximately 228 miles of RCP transmission mains ranging from 16- to 90-inch diameter.

Mesa Consolidated Water District, Pipeline Integrity Program (Pipeline Integrity Testing Program) | Costa Mesa, CA

Mesa Water District performed an age-based assessment for over 300 miles of water distribution piping, which resulted in an estimated replacement cost of \$300 million within the next 30 years. Because their break rates were not consistent with this forecast, HDR was selected to assist Mesa Water in the determining the remaining useful life of their water main pipeline by evaluating historical data, identifying the appropriate test methodology, and continuously refining the testing program to focus Mesa Water's rehabilitation and replacement efforts and provide the most value to customers.



Jon Paz, EIT, ENV ESP

Deputy Project Manager

Jon is a Water/Wastewater Deputy Project Manager and has been with HDR since July 2018. Jon engineers solutions to address water infrastructure and water management challenges to meet the needs of the present while planning for the future. Jon is enthusiastic and effective in communication, problem solving, and learning and cultivating skills and technology. Jon works to anticipate the needs of team members and Clients and is well-prepared and well-organized. Jon is driven, dedicated, and proactive with a proven record in engineering effective solutions that positively contribute to the Client's long-term goals. Jon's responsibilities include the development of detailed designs and specifications of water and wastewater transmission and treatment systems; review and preparation of engineering reports, construction cost estimates, requests for information, and letter proposals; project management, resource allocation, budgeting and reporting, subconsultant coordination, and documentation control for multidisciplinary teams; and collaboration with project managers, accounting, and operational leadership for risk management, project reviews, and client development.

EDUCATION

Master of Science,
Engineering and
Technology Management,
Colorado School of Mines

Bachelor of Science,
Environmental
Engineering, Colorado
School of Mines

REGISTRATIONS

Engineer in Training,
Colorado, No. 73511

Envision Sustainability
Professional, California,
No. 32631

INDUSTRY TENURE

5 years

RELEVANT EXPERIENCE

City of Ventura, CA, Water Master Plan Update | Ventura, CA

Project Engineer. HDR led the development of the aging pipeline infrastructure management component of the 2022 Water Master Plan Update Project. The primary objectives of this study were to quantify system performance and investment levels relative to similar benchmarked utilities, establish prudent, transparent, and defensible investment levels, update unit costs based on City experience and similar projects outside the City, develop a cost-effective condition assessment strategy, and identify the top 10 projects for condition assessment and renewal.

Padre Dam Municipal Water District, Potable Water Pipeline Condition Assessment, Santee, California

Project Engineer. HDR provided engineering services to Padre Dam Municipal Water District related to the Condition Assessment Project for Potable Water Pipelines Project. This scope of services included a two phases and multiple step processes that used selected specialized methods to assess the condition of high priority pipelines. The condition assessments will be utilized to make repair, rehabilitation, replacement, or future monitoring recommendations on pipelines and inform the development of the District's future potable water pipelines Condition Assessment Program and Capital Improvement Program budgeting. Phase 1 of the Project included a detailed data review, an indirect condition assessment of pipelines, a direct assessment design, a direct assessment proposal evaluation, negotiation of scopes and budgets with vendors and contractors, and preparation for the work plan for direct assessment. Phase 2 of the Project included direct condition assessment, analysis of results, risk model updates, identification

of specific monitoring or capital improvement recommendations for assessed pipelines and program recommendations for future condition assessments and capital improvements.

City of Thousand Oaks, Hill Canyon Treatment Plant Coating & Rehabilitation Second Clarifier No. 3, Thousand Oaks, California

Project Engineer. HDR provided condition assessment and design of rehabilitation project for refurbishing concrete and steel components of this “pipe organ” type secondary clarifier. Work included the replacement of the flocculating well, influent well, scum beach, and PVC piping, cleaning, and coating of all other metal, miscellaneous repairs, and other work. Service provided to the City included: condition assessment and preliminary design report development and delivery, plans and specifications development for public advertisement and construction, bid-phase support, engineering services during construction, and coating and welding inspection.

City of Thousand Oaks, Hill Canyon Treatment Plant Digester Rehab, Thousand Oaks, California

Deputy Project Manager. HDR provided condition Assessment, Preliminary Design, Final Design and Operational Assistance. Digester No. 3 was the first of three digesters rehabilitated by the City of Thousand Oaks. HDR was selected after a competitive process and was awarded the other two projects based on performance. Work assigned to the HDR team included external and internal assessments of structural and mechanical systems and involved sampling of concrete for degradation tests. The digester rehabilitation included replacement of piping and corroded steel components and lining of the interior surfaces above the water line. HDR services also included assisting the client with developing a procedure for safely removing the digester from service and for successfully returning it to service. Cracking of the concrete occurred due to severe alkali-silica reactivity, causing gas leakage. HDR developed innovative assessment methods, which avoided the need to clean the digesters and erect scaffolding.

City of Thousand Oaks, Wastewater Interceptor Capital Improvement Project Unit Y2, Thousand Oaks, California

Deputy Project Manager. HDR performed condition assessment, preliminary design, final design, bidding, and construction phase services for rehabilitation improvements to the lower portion of the Unit Y interceptor pipeline. The project included: (1) site investigations to determine the best locations for new access structures along the interceptor that will facilitate future cleaning and inspection; (2) hydraulic analysis of recent Hill Canyon Treatment Plant influent flow meter data and the 2002 City of Thousand Oaks Wastewater Master Plan, which was used confirm the applicability of different rehabilitation methods; and (3) analysis and comparison of multiple rehabilitation methods, which included cured-in-place pipe (CIPP), loose-fit and close-fit sliplining, pipe bursting, open-trench construction, and horizontal directional drilling (HDD). The feasibility, costs, and logistics of each method were investigated and compared.



Tom McCormack, PACP

Risk Assessment Lead

EDUCATION

Bachelor of Science,
Landscape Architecture,
University of California,
Davis

REGISTRATIONS

NASSCO Pipeline
Assessment and
Certification Program,
No. U-0121-70400836

INDUSTRY TENURE

12 years

Tom is a utility performance and information technology consultant with 12 years of experience. His background includes work in Asset Management/CMMS development and updates to new systems as well as design, development, and implementation of new databases primarily in Microsoft Access. In addition, Tom has performed a wide range of work in ESRI ArcGIS using ArcSDE geodatabases and tools to manage geospatial data. His GIS software expertise includes ArcGIS Online, Collector for ArcGIS, Survey123 for ArcGIS, ArcGIS Desktop, ArcSDE, ArcGIS Online and Portal for ArcGIS. He has also assisted in a wide range of data management functions and system analysis.

RELEVANT EXPERIENCE

Padre Dam Municipal Water District, Potable Water Pipeline Condition Assessment Program | San Diego, California

Project Engineer. HDR provided engineering services to Padre Dam Municipal Water District related to the Condition Assessment Project for Potable Water Pipelines Project. This scope of services included a two phases and multiple step processes that used selected specialized methods to assess the condition of high priority pipelines. The condition assessments will be utilized to make repair, rehabilitation, replacement, or future monitoring recommendations on pipelines and inform the development of future potable water pipelines Condition Assessment Program and Capital Improvement Program.

Irvine Ranch Water District, Capital Improvement Plan and Asset Management for Potable and Non-potable Pipelines | Irvine, CA

Project Engineer. Irvine Ranch Water District (IRWD) owns 2,600 miles of potable and recycled water pipeline. This project includes analysis to determine the appropriate level of funding and specific project within the Capital Improvement Plan (CIP) to cost-effectively manage aging infrastructure. CIP investments include condition assessment, cathodic protection, rehabilitation, and replacement. The project incorporates concepts such as desktop condition assessment, risk analysis, replacement costs, condition assessment program development, remaining useful life, level of service. A specific emphasis is on refining and implementing IRWD's information management systems to enable the utility to leverage new data to continuously investment decisions.

Suburban Water Systems, Water Main Study | Covina, California

Project Engineer. HDR proposes to conduct a detailed assessment of Suburban's water main renewal program through the practical application of research and lessons learned from implementing similar techniques at roughly 70,000 miles of pipeline around the country. The purpose of this project is to support Suburban in addressing the issues identified in Chapter 6 of the ORA Report including identifying and justifying appropriate long-term renewal needs of Suburban to the PUC.

Irvine Ranch Water District, IRWD Condition Assessment of Pump Stations | Irvine, California

Project Engineer. HDR performed condition assessment services for the booster pump stations replacement and rehabilitation. The condition assessments included evaluations for physical condition, operating performance, and reliability. Based on the results of the comprehensive condition assessment, project packages and scopes of work will be developed for facilities in need of repair and rehabilitation. The condition assessment for pump stations evaluated assets for mechanical, structural, instrumentation and control, electrical, site, and emergency power.

Orange County Sanitation District, Asset Management Plan (PS18-01) | Orange County, California

Utility Consultant supported Orange County Sanitation District with developing an updated and tactically focused Asset Management Plan providing the Sanitation District with a robust understanding of the condition and performance of all critical and major assets and linked with their ability to meet established levels of service. This updated Asset Management Plan serves as a tactical document summarizing plans for addressing asset condition and performance issues and associated maintenance or capital projects for the Sanitation District's collection system and treatment plants.

City of San Diego MWWD, Recycled Water System Condition Assessment and Optimization Plan | North San Diego, California

Technical Support. The project provided useful life cycle analysis of all the current Recycled Water System assets, including PLC\DCS Hardware, communications, and network systems and Operator Visualization, as well as a gap analysis of the current system versus the client's idealized system. HDR also developed a prioritized list of projects to bring the Control System Infrastructure from its current state to the idealized state.

City of San Diego Public Utilities Dept, Task: Point Loma Wastewater Treatment Plant Master Plan Update | San Diego, California

Project Engineer. The objective of this Task Order was to reduce maintenance efforts and run PLWTP more efficiently by assessing condition of structural, mechanical, and electrical components of assets within each process area. The approach is to conduct visual inspections and non-destructive tests to assess physical condition and functional characteristics of equipment and structures related to each process. Prepare a master plan update to the Point Loma Wastewater Treatment Plant and perform condition assessment of facilities. The outcome of the field inspection efforts will be to analyze the collected data and provide recommendations on projects for repair, rehabilitation, and replacement. The projects will be categorized as activities that can be performed with CITY crews and as capital projects that require budgeting and scheduling. Costs will be developed using a Class 5 cost estimate format. The final product will be a condition assessment report summarizing the findings and recommendations.



James Kelly, PE

Rehab & Replacement Project Development Lead

EDUCATION

Bachelor of Science,
Civil Engineering,
California Polytechnic
State University,
San Luis Obispo

REGISTRATIONS

Professional Engineer,
Civil, California,
No. 88317

INDUSTRY TENURE

10 years

James is a Professional Engineer with just under 10 years' experience in Civil Land Development and pipeline design within Los Angeles and Ventura Counties. He has a very strong Client communication skill set, developed over years of managing projects for both Private and Public Sector Clients. He also has a strong background in design and construction of water, wastewater, and storm drain systems, earning him a keen eye to see the overall underground picture, understand the infrastructure, and identify the solutions to maintain critical paths. James has a deep understanding of water systems. He has designed conveyance pipelines, tanks, wells, and pump stations all throughout Ventura County. He has a working understanding with all water distribution pipe types from CMLC Steel to HDPE and their inherent advantages and disadvantages. James' ability to understand the big picture of a system, yet also pinpoint the details that matter, will be an invaluable asset to the Las Virgenes Pipeline Rehabilitation effort.

RELEVANT EXPERIENCE

Central Coast Water Authority, Carport Kit Engineering Services for Santa Ynez Pumping Plant | Buellton, CA

Project Manager. CCWA has several portable equipment that are stored at either the WTP or at the Santa Ynez Pumping Plant (SYPP). This equipment includes the asphalt crack sealing unit, the vacuum trailer unit, the fiber optic cable repair trailer, the two de-chlorination dosing system trailers and the chloramination dosing trailer. To prevent UV degradation and weathering of this portable equipment, carport shelters are needed at both the WTP and SYPP. Through sheltering the equipment from the effects of UV radiation and weathering, the service life of the equipment will be extended. This project will include engineering support to (1) select the most cost effective four-bay carport package and (2) provide sufficient engineering design guidance to instruct a contractor to safely install the carport, including footing foundation design.

Central Coast Water Authority, Tank 7 Access Road Overlay Design | Buellton, CA

Project Manager. CCWA owns an access easement and roadway leading from Highway 246 to Tank 7. Based on staff's annual pavement assessments, this access road needs an asphalt overlay and associated curbing. This road is used by the property owner to access their property and farming operation. The road is also used to gain access to a communication tower by the tower operator. This project will develop a design for the asphalt overlay and associated curbing. CCWA staff will utilize the engineering cost estimate of the design to seek a cost sharing with the property owner and other users of the roadway. Cost estimate includes engineering and legal assistance. Needs specs, design for access road.

City of Ventura, Ocean Outfall Pump Station | Ventura, CA

Project Engineer. The ocean outfall and corresponding pump station will deliver a combination of reverse osmosis concentrate and tertiary treated disinfected effluent safely to the ocean. This project will include engineering services related to the pump station that will discharge to the ocean outfall. The pump station will have the capacity to discharge a maximum of 14 million gallons per day (MGD) of tertiary treated effluent from the Ventura Water Reclamation Facility (VWRF) during peak wet weather events which assumes the AWP is offline resulting in no additional RO concentrate. Under normal conditions, the proposed pump station and subsequent outfall pipelines will convey 0.6 to 1.2 MGD of RO concentrate safely to the ocean.

Harvest at Limoneira, Water Design Study | Santa Paula, CA

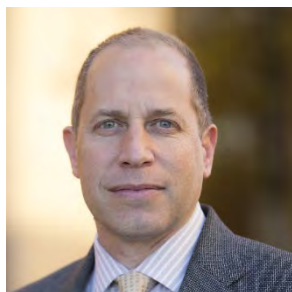
Project Engineer. Assisted with the Harvest at Limoneira Water Design Study. Managed the Water CAD design for the development's connection with the city system, two service phases, tank installations, proposed wells, and construction changes. Many modeling scenarios were needed to confirm the design could meet interim conditions as proposed product types and quantities changed over time. Part of a 4-person team to fully design Civil infrastructure for a 250-acre residential, commercial, and recreational development in Santa Paula, CA. Assisted in the design and drafting of all main roadways, utilities, community center, detention basins, flood and outflow structures, and first 250-home neighborhood. *(Prior to HDR)*

City of Oxnard, Groundwater Recovery Enhancement and Treatment Line Phase 2 | Oxnard, CA

Project Engineer. James was part of a team to design the City of Oxnard Groundwater Recovery Enhancement and Treatment (GREAT) HDPE pipeline. The pipeline's purpose was to deliver water from the City of Oxnard's new Advanced Water Purification Facility to farmers in the Oxnard Plains. Worked closely with the City and Calleguas to repurpose and design a temporary delivery system through the Calleguas Salinity Management Pipeline while the GREAT line was being designed and constructed. *(Prior to HDR)*

Santa Clarita Valley Water Agency, Mission Village Development | Santa Clarita, CA

Project Engineer. Designed over 40,000 LF of water pipeline in multiple phases for the Mission Village Development Project in Santa Clarita. Worked through solutions with Client and Contractor during construction for efficient and effective project delivery. *(Prior to HDR)*



Steve Friedman, PE, BCEE, PMP

Principal in Charge | Rehab & Replacement Project Packaging

Steve Friedman has 30 years of experience in engineering planning and design of water, recycled water, industrial waste, and wastewater facilities. He has both management and design experience in projects concerning transmission and distribution system piping wastewater treatment plant upgrades, pumping stations, pressure-control stations, and water treatment. Steve has also been instrumental in conducting several hydraulic network modeling assignments including integrating results with ongoing planning and/or design efforts. He has provided a wide range of services during construction including office engineering, construction observation, and construction management.

EDUCATION

Master of Science, Civil Engineering, University of California, Berkeley

Bachelor of Science, Civil Engineering, University of California, Berkeley

REGISTRATIONS

Professional Engineer - Civil, CA No. 055566

Project Management Professional, CA No. 293170

Risk Assessment Methodology for Water, California

American Academy of Environmental Engineers, CA No. BCEE / 7337470

INDUSTRY TENURE

30 years

RELEVANT EXPERIENCE

City of Ventura, CA, Water Master Plan Update | Ventura, CA

HDR PIC. HDR led the development of the aging pipeline infrastructure management component of the 2022 Water Master Plan Update Project. The primary objectives of this study were to quantify system performance and investment levels relative to similar benchmarked utilities, establish prudent, transparent, and defensible investment levels, update unit costs based on City experience and similar projects outside the City, develop a cost-effective condition assessment strategy, and identify the top 10 projects for condition assessment and renewal.

Metropolitan Water District California, MWD Foothill Pump Station Intertie Ph. 1 | California

Principal in Charge. HDR provided the initial study to evaluate the hydraulic feasibility of utilizing the existing FPS to pump the water to the Rialto Pipeline. As part of the initial study, HDR also developed the conceptual design for the Inland Feeder FPS Intertie facilities. Metropolitan, then contracted HDR as the Engineer of Record (EOR) to prepare the final contract plans and specifications. HDR completed the preliminary design report (PDR) in less than 2 months which included geotechnical and utility site investigations, survey, and surge analysis coordination.

City of Newport Beach, Industrial Way Water Transmission Main Replacement | Newport Beach, California

Project Manager for routing study, design, bidding, and construction engineering services for the replacement of a 2,000 linear feet (LF) of 14-inch-diameter water main located in Industrial Way between Superior Avenue and Newport Boulevard, and a 30-inch-diameter water main that traverses the city's general services department. The two existing water mains were replaced with a single 36-inch-diameter water main within the Caltrans and City of Costa Mesa public street right-of-way. The project also consisted of designing a new 8-inch-diameter water main to connect from the replaced water main to an existing water main.

Orange County Sanitation District, Sludge Dewatering and Odor Control at Plant No. 1 Job No. P1-101 | Fountain Valley, California

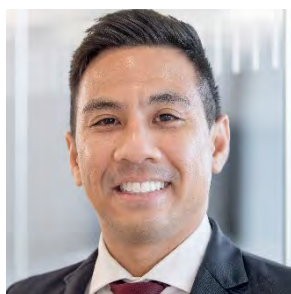
Technical Advisor. OCSO implemented a \$2.4 billion program to provide full secondary treatment at Plants No. 1 and No. 2, supply water to the Groundwater Replenishment facility, and improve the condition and reliability of its treatment plants. A key component of the program is the construction of new thickening and dewatering facilities at Plant No. 1. The project includes the design and construction support services for replacement of the existing sludge dewatering systems with a new system.

Poseidon Resources, Task No. 17: Poseidon Ultimate New Intake Evaluation | Carlsbad, California

Project Manager. Poseidon had a need to evaluate backup intake design concepts for the ultimate intake system in the event that pilot testing of Alternative 21B wedgewire screens (WWS) proves unsuccessful. HDR's primary goal was to identify the preferred alternative such that later project phases could adequately conduct Computational Fluid Dynamic modeling (CFD) and alternative refinements to develop a viable opinion of probable construction cost.

Metropolitan Water District California, Sepulveda Prestressed Concrete Cylinder Pipe Rehabilitation | Los Angeles, California

Principal-in-Charge. HDR is providing engineering design services to perform preliminary design for the Prestressed Concrete Cylinder Pipe (PCCP) Rehabilitation of the Sepulveda Feeder, a 40-mile pipeline in urban Los Angeles. Pipeline size ranges from 84-inches to 150-inches. Services consist of preliminary design and the preparation of design reports.



Joseph Marcos, PE

Project Packaging & 10-Year CIP

Joseph is a registered civil engineer and serves as project manager and design engineer on various water/wastewater infrastructure projects. Joseph has managed multi-discipline teams to make sure projects are delivered according to scope, schedule, and budget. He has extensive experience at facilitating project direction and guidance to make sure all stakeholders including clients, jurisdictional agencies, design team, and subconsultants are aware of project status. Joseph has a strong ability to anticipate issues and implement corrective action solutions to get projects back on track, should issues occur. He has been involved in all aspects of a typical project lifecycle including identifying scopes and preparing proposals, performing design, providing bid support services, and providing construction support.

EDUCATION

Master of Science, Civil and Environmental Engineering, Stanford University

Bachelor of Science, Environmental Engineering, University of California, Irvine

REGISTRATIONS

Professional Engineer - Civil, CA, No. C90898

INDUSTRY TENURE

13 years

RELEVANT EXPERIENCE

Metropolitan Water District California, MWD Pure Water Southern California Conveyance Reach 2 - Final Design | Los Angeles, CA
Project Engineer. Engineering design services for the Pure Water Southern California Conveyance Reach No. 1 through the City of Carson and Reach No. 2 through the cities of Long Beach and Lakewood. The Reach 1 alignment is approximately 6 miles long, generally from the site of the new AWP facility in the City of Carson to the intersection of Del Amo Boulevard and Santa Fe Ave, prior to crossing the Los Angeles River. The Reach 1 pipeline corridor generally traverses Main Street.

Non-HDR Experience

Los Angeles Bureau of Engineering (LABOE), Task Order No. 4 - Construction Management Support Services | Los Angeles, California,
Task Manager. Managed an \$8M contract to provide construction management staff augmentation services to supplement LABOE staff on active construction projects within their wastewater treatment plants. Worked closely with LABOE Contract Manager to place qualified schedulers, estimators, inspectors, resident engineers, and construction managers.

Los Angeles County Sanitation District (LASAN), TAF No. 3: Westside Trunk Sewer Rehabilitation | Los Angeles, California
Deputy Task Lead. Assisted with the preparation of 90% plans and specifications of the rehabilitation of approximately 16,000 linear feet of 15-inch diameter non-reinforced concrete sewer pipe in the City of Lancaster. Scope also included sewer condition assessment analysis, hydraulic analysis, cured-in-place pipe liner thickness calculations, pumped bypass feasibility analysis, easement review, and stakeholder outreach/coordination.

Los Angeles County Sanitation District (LASAN), TAF No. 4: Main Trunk, Duarte Trunk, and Monterey Diversion Trunk Sewer Rehabilitation | Los Angeles, California

Deputy Task Lead. Assisted with the preparation of 90% plans and specifications of the rehabilitation of approximately 7,500 linear feet of 15-inch diameter non-reinforced concrete sewer pipe in the Cities of Monterey Park and Duarte. Scope also included sewer condition assessment analysis, hydraulic analysis, cured-in-place pipe liner thickness calculations, pumped bypass feasibility analysis, easement review, and stakeholder coordination.

Metropolitan Water District, Etiwanda Test Facility | Riverside County, California

Deputy Project Manager. Assisted with managing a technical team that provided preliminary design of a hydraulic equipment testing facility at the Etiwanda Facility. The purpose of the new test facility will be to evaluate various types of hydraulic equipment for use in the system as Metropolitan looks to upgrade and replace the existing infrastructure. Parameters included flow meter accuracy/calibration and testing of pressurized conduit valves, atmospheric energy dissipation valves, open flow control devices.

Metropolitan Water District, Lake Mathews and Lake Skinner Dam Monitoring System Upgrades and Spillway Condition Assessment | Riverside County, California

Deputy Project Manager. Assisted with managing a technical team that identified and characterized erosion areas occurring at the dams, evaluated existing monitoring and instrumentation devices, and characterized the current design and condition of the spillway structures according to best practice dam design. Coordinated with internal team, clients, and subcontractors. Ensured quality management system (QMS) policies and procedures were implemented, followed, and documented. This project entailed the evaluation of erosion and instrumentation and condition assessments at MWD's Lake Mathews Dam and Lake Skinner Dam.

Orange County Sanitation District (OC SAN), Project 3-64 Rehabilitation of Western Regional Sewers | Orange County, California

Deputy Project Manager. Provided deputy project management and engineering design services throughout four phases: Pre-Design Evaluation Studies: Reviewed existing as-builts, maintenance logs, and existing CCTV data to develop a supplemental sewer pipeline and manhole condition assessment and inspection program. Preliminary Design/Engineering: Analyzed sewer flow and condition assessment results to identify pipe segments and manholes that do not conform to OC Sanitation District standards including peak wet weather, d/D, surcharge, velocity, etc. Final Design/Engineering: Prepared plans and specifications. Bid Support: Addressed Contractor questions and prepared conformed plans and specifications. Construction Support: Provided engineering support during construction including the review of submittals and RFIs.



Allison Ribachonek, PE

Condition Assessment

Allison is a NASSCO-certified inspector whose professional experiences are driven by her passion for water resources, disaster recovery, and building more resilient communities. She brings over 10 years of experience in project management, capital improvement project planning and design, asset management, conditions assessment, GIS, hydrologic and hydraulic (H&H) modeling, funding support, document controls, and construction site management on capital improvement projects for agencies throughout San Diego County. Allison has acted as a project manager, deputy project manager, or resident engineer on a number of projects including reservoir rehabilitation projects, pipeline condition assessment projects, pump station condition assessment projects, potable water pipeline design and construction projects, pump station construction projects, and stormwater infrastructure projects.

EDUCATION

MS, Environmental & Hydrosystems Engineering, University at Buffalo, The State University of New York, 2012

BS, Civil Engineering, University at Buffalo, The State University of New York, 2010

REGISTRATIONS

Professional Engineer - Civil, AZ, No. 78589

INDUSTRY TENURE

10+ years

RELEVANT EXPERIENCE

Vallecitos Water District, Land Outfall West Pipeline Condition Assessment | CA

Deputy Project Manager. Allison assisted in the inspection planning, inspection oversight, and condition assessment of the 3.2-mile western portion of the Vallecitos Water District's Land Outfall sewer pipeline and its associated manholes (Land Outfall West) which have not been evaluated for nearly 35 years. This section of the system ranges in diameter size from 24" to 54" transporting wastewater from the District's lift station to the Encina Water Pollution Control Facility. This part of the system is mostly gravity sewer but also includes three inverted siphons totaling nearly 2,700 linear feet. Allison's responsibilities included project management, stakeholder engagement and coordination, development of an inspection work plan (including the definition of in-field activities, traffic control, and environmental constraints, access limitations, required permitting, and public outreach needs), contractor oversight in the field during the inspections, analysis of the inspection data collected per NASSCO PACP and MACP standards, and lastly provide recommendations on the prioritization of renewal/replacement projects and routine maintenance needs to support the District's asset management programs. *(Prior to HDR)*

Rainbow Municipal Water District (RMWD), North River Road Land Outfall Sewer Rehabilitation Project | CA

Deputy Project Manager. RMWD conveys wastewater from unincorporated communities in the District to the San Luis Rey Water Reclamation Facility (SLRWRF) in Oceanside for treatment via the North River Road Land Outfall. After heavy rains caused failure in portions of the pipeline, the District declared an emergency to repair failed portions of the pipe and evaluate and prioritize critical repairs along the force main. Allison provided engineering support during construction and field inspection on the rehabilitation of approximately 9,200 linear feet of CIPP. Her responsibilities include

developing bid documents and specifications, reviewed contractor submittals and prepared responses, reviewed of pre- and post-installation CCTV inspections, inspected the contractor's processes for wet out of the liner, installation, and curing (time and temperature) for conformance with the contractor's approved submittals, examination of lateral reinstatements, and reviewed of potential features or defects in the CIPP installations which require corrective measures by the contractor. *(Prior to HDR)*

City of Victorville, CA, Force Main Condition Assessment Program | Victorville, CA

Deputy Project Manager. An audit of the City of Victorville's Sanitary Sewer Maintenance Program (SSMP) performed by the State Water Resources Control Board Lahontan Region determined that a condition assessment of the sewer force main was required. The subject sewer force main is an 8-inch diameter, 5,922-foot-long ductile iron pipe with some buried PVC transitions that conveys wastewater from the Stoddard Wells sewer pump station located south of Abbey Lane, near the Mojave River, to its outfall located near National Trails Highway and the CEMEX Cement Plant. A portion of the sewer force main is exposed ductile iron pipe and is braced underneath a railroad bridge owned by CEMEX crossing the Mojave River. The Hoch Consulting Team provided technical recommendations and oversight over the deployment of inspection technologies for internal pre-screening to detect potential leaks and/or gas pockets and external pipe scanning to assess pipe wall thickness at the exposed portion of the pipe. Allison provided inspection supervision and prepared a report with engineering review and recommendations for monitoring, maintenance, rehabilitation, or improvements. *(Prior to HDR)*

Vista Irrigation District, Flume Replacement Alignment Study | CA

Deputy Project Manager. The Vista Flume was originally constructed in 1926 featuring nearly 12-miles of both gravity flume and pressurized siphon facilities to deliver water from the Escondido-Vista Water Treatment Plant (EVWTP) to the District's service area. The gravity facilities of the flume account for approximately 5.75 miles of the overall length and include 11 above ground gunite bench sections and one 0.25-mile-long hard rock tunnel section. The pressurized siphons account for the remaining 5.5 miles and include five riveted steel, three reinforced concrete, and one high-density polyethylene (HDPE) sections. The District performed a conditions assessment study in 2012 which led to a comprehensive Water Supply Planning Study (WSPS) in 2019. The studies concluded that the flume is in poor condition, has limited service life remaining, and should be replaced. The WSPS included a series of workshops through which conveyance options and alternative alignments were processed for further consideration. Allison's responsibilities include reviewing existing studies and documents, performing site reconnaissance of the existing alignment and those developed in the WSPS for additional constraints, developing and conducting GIS analyses to produce alternative alignments informed by public and stakeholder agency-provided data, and assisting in the review and determination of funding opportunities. *(Prior to HDR)*



Lucy Jaramillo, EIT, NACE/AMPP CP-2, CIP-1

Corrosion

EDUCATION

Bachelor of Science,
Chemical Engineering,
California State Polytechnic
University, Pomona

REGISTRATIONS

Permit Required Confined
Spaces, CA

Engineer in Training, CA
No. 166938

AMPP – Coating Inspector
Level 1, No. 71477

AMPP – Cathodic
Protection Technician, No.
66998

INDUSTRY TENURE

10 years

Lucy is a Corrosion Technician with a decade of experience providing corrosion engineering support. She consistently analyzes field and laboratory data to generate soil corrosivity and pipeline reports with corrosion control recommendations. As a Corrosion Technician, Lucy has performed various field testing procedures such as pipeline electrical continuity, structure-to-electrolyte potential surveys of cathodically protected and unprotected pipelines, close interval-potential surveys, pipeline current span calibrations, electromagnetic potential survey testing, fall of potential impedance testing, electrical resistivity testing of soil using Wenner 4-pin and Schlumberger methods, and soil sample collection. She has participated in several confined entries as well as served as entry attendant for confined entry permit required spaces.

RELEVANT EXPERIENCE

Padre Dam Municipal Water District, PDMWD Potable Water Pipeline Condition Assessment Program | San Diego, CA

Corrosion Technician. HDR provided engineering services to Padre Dam Municipal Water District related to the Condition Assessment Project for Potable Water Pipelines Project. This scope of services included a two phases and multiple step processes that used selected specialized methods to assess the condition of high priority pipelines. The condition assessments will be utilized to make repair, rehabilitation, replacement or future monitoring recommendations on pipelines and inform the development of the district's future potable water pipelines Condition Assessment Program and Capital Improvement Program budgeting. Phase 1 of the Project included a detailed data review, an indirect condition assessment of pipelines, a direct assessment design, a direct assessment proposal evaluation, negotiation of scopes and budgets with vendors and contractors, and preparation for the work plan for direct assessment. Phase 2 of the Project included direct condition assessment, analysis of results, risk model updates, identification of specific monitoring or capital improvement recommendations for assessed pipelines and program recommendations for future condition assessments and capital improvements.

Eastern Municipal Water District, Winchester Recycled Water Transmission Pipeline Corrosion Assessment | Winchester, CA

Corrosion Technician. The Winchester Recycled Water Transmission Pipeline consists of 18- and 24-inch-diameter pipelines that extend approximately 15.6 miles from Diaz Road in Temecula to Winchester Ponds Reservoir. The pipeline is made up of ductile iron, polyvinyl chloride (PVC), and cement mortar lined and coated (CML&C) welded steel pipe. HDR performed a corrosion indirect condition assessment at a number of locations along the pipe to determine an approach for the development of recommendation for repair.

Irvine Ranch Water District, 3-Year Cathodic Protection Monitoring Program for Metallic Pipelines and Reservoir Tanks | Fountain Valley, CA

Corrosion Technician. Surveyed cathodic protection systems for 59 metallic pipelines and 16 reservoir tanks. Reported the status of the cathodic protection systems, made adjustments to ensure protection, and provided troubleshooting were directed to improve the functionality of the cathodic protection systems.

Irvine Ranch Water District, Michelson Water Recycling Plant Tertiary Filters Improvements | Irvine, CA

Corrosion Technician. IRWD contracted HDR to perform the preliminary and final design for the rehabilitation of the tertiary filtration system (originally constructed in 1978) and consists of the tertiary filters, backwash supply, spent backwash, air scour blower, and air compressor. An investigation into the poor performance of Filter No. 7 and a condition assessment of the concrete backwash supply and spent backwash tanks were also performed to better inform the extent of the rehab design and make modifications to potentially improve filter performance.

Mesa Consolidated Water District, Cathodic Protection Systems Survey Costa Mesa, CA

Corrosion Technician. Provided cathodic protection system testing services, comprising of corrosion control testing and evaluation on 19 pipelines. The 19 pipeline alignments consisted of approximately 141,000 linear feet (LF) of piping that included cement mortar lined and coated (CML&C) welded steel pipe, concrete cylinder pipe (CCP), cement mortar lined and coal tar coated welded steel pipe, and ductile iron pipe (DIP). The objective of the cathodic protection system testing was to determine the operating effectiveness of the cathodic protection systems, identify limitations in the existing cathodic protection systems that resulted in the pipelines not meeting industry criteria for corrosion protection, and provide recommendations to improve the effectiveness of the cathodic protection systems. Assembled and reviewed existing documentation, studies and data. Provided field verification of existing conditions of pipe cathodic protection systems. Performed minor repairs to existing corrosion test stations. Gathered the necessary data required for the future design of new cathodic protection systems and the rehabilitation of existing cathodic protection systems.



Adam McGinnis, NACE/AMPP CP-2, CIP-2 Corrosion

As a Corrosion/GIS Technician, Adam has performed the following: assisted with GIS database applications, analyzed spatial features and relationships for GIS projects, provided technical assistance and troubleshooting advice to employees and management, performed on-site software and hardware installation and customer service to a range of clients, assembled computer systems for clients, implemented GPS data with the GIS database, and maintained servers and insured their data integrity.

REGISTRATIONS

Confined Space Entry
Supervisor (ENT & ATTN),
California

OSHA 30 Hour
Construction Safety,
California

INDUSTRY TENURE

22 years

RELEVANT EXPERIENCE

City of Phoenix, Transmission Main Inspection and Assessment Program | Phoenix, AZ

Corrosion Technician. HDR is providing condition assessment emergency rehabilitation construction administration and inspection and program planning services for the City's large diameter prestressed concrete cylinder pipe (PCCP). More than 100+ miles of PCCP, 42-inch to 108-inch in diameter, have been included in this program. This program includes training City staff in the implementation of the program assisting the City with the inspection and assessment of high priority PCCP pipelines and to provide specialty inspection services as needed.

Padre Dam Municipal Water District, Potable Water Pipeline Condition Assessment Program | San Diego, CA

Corrosion Technician. HDR provided engineering services to Padre Dam Municipal Water District related to the Condition Assessment Project for Potable Water Pipelines Project. This scope of services included a two phases and multiple step processes that used selected specialized methods to assess the condition of high priority pipelines. The condition assessments will be utilized to make repair, rehabilitation, replacement, or future monitoring recommendations on pipelines and inform the development of the district's future potable water pipelines Condition Assessment Program and Capital Improvement Program budgeting. Phase 1 of the Project included a detailed data review, an indirect condition assessment of pipelines, a direct assessment design, a direct assessment proposal evaluation, negotiation of scopes and budgets with vendors and contractors, and preparation for the work plan for direct assessment. Phase 2 of the Project included direct condition assessment, analysis of results, risk model updates, identification of specific monitoring or capital improvement recommendations for assessed pipelines and program recommendations for future condition assessments and capital improvements.

Eastern Municipal Water District, Winchester Recycled Water Transmission Pipeline Corrosion Assessment | Winchester, CA

Corrosion Technician. The Winchester Recycled Water Transmission Pipeline consists of 18- and 24-inch-diameter pipelines that extend approximately 15.6 miles from Diaz Road in Temecula to Winchester Ponds Reservoir. The pipeline is made up of ductile iron, polyvinyl chloride (PVC), and cement mortar lined and coated (CML&C) welded steel pipe. Performed a corrosion indirect condition assessment at a number of locations along the pipe to determine an approach for the development of recommendation for repair.

Irvine Ranch Water District, 3-Year Cathodic Protection Monitoring Program for Metallic Pipelines and Reservoir Tanks | Irvine, CA

Corrosion Technician. The first three-year program was successfully completed, and the second three-year program is underway. Currently, one third of IRWD pipelines are protected with galvanic anode or impressed current CP systems. Pipe-to-soil potential measurements were collected on all piping with CP at all available CPTS. During the first initial survey a total of 532 CPTS and 41 rectifiers were located.

Irvine Ranch Water District, Michelson Water Recycling Plant Tertiary Filters Improvements | Irvine, CA

Corrosion Technician. IRWD contracted HDR to perform the preliminary and final design for the rehabilitation of the tertiary filtration system (originally constructed in 1978) and consists of the tertiary filters, backwash supply, spent backwash, air scour blower, and air compressor. An investigation into the poor performance of Filter No. 7 and a condition assessment of the concrete backwash supply and spent backwash tanks were also performed to better inform the extent of the rehab design and make modifications to potentially improve filter performance.

Irvine Ranch Water District, Michelson WRP Filter Pump Station 2 Header Replacement Design | Fountain Valley, CA

Corrosion Technician. IRWD contracted with HDR to develop the construction documents on an expedited schedule to replace the corroded FPS-2 header, install new isolation valves and flow meter, and provide cathodic protection. HDR engaged with IRWD stakeholders to develop a detailed construction sequence, temporary bypass pumping implementation and testing plan, and startup plan for the FPS-2 pumps during the design phase. Following the completion of this design effort, IRWD contracted with HDR to provide Engineering Services During Construction.



Joel Engleson

Hydraulic Capacity

Joel has more than 20 years of experience in numerical and computational, including more than 12 years of experience in utility management consulting services. His primary focus is hydraulic analysis and master planning of water, recycled water, and sewer systems. He specializes in using the latest modeling software technology to developed innovative solutions related to the operation, planning, and design of water distribution systems. He has served in the capacity of project engineer modeler and project manager on a variety of projects.

EDUCATION

Bachelor of Science,
Civil Engineering,
University of South Florida

Master of Science,
Civil Engineering,
Texas A&M University,
College Station

Bachelor of Engineering,
Civil Engineering,
Texas A&M University,
College Station

INDUSTRY TENURE

20 years

RELEVANT EXPERIENCE

Padre Dam Municipal Water District, Potable Water Pipeline Condition Assessment | Santee, CA

Project Engineer. HDR provided engineering services to Padre Dam Municipal Water District related to the Condition Assessment Project for Potable Water Pipelines Project. This scope of services included a two phases and multiple step processes that used selected specialized methods to assess the condition of high priority pipelines. The condition assessments will be utilized to make repair, rehabilitation, replacement, or future monitoring recommendations on pipelines and inform the development of the District's future potable water pipelines Condition Assessment Program and Capital Improvement Program budgeting. Phase 1 of the Project included a detailed data review, an indirect condition assessment of pipelines, a direct assessment design, a direct assessment proposal evaluation, negotiation of scopes and budgets with vendors and contractors, and preparation for the work plan for direct assessment. Phase 2 of the Project included direct condition assessment, analysis of results, risk model updates, identification of specific monitoring or capital improvement recommendations for assessed pipelines and program recommendations for future condition assessments and capital improvements.

Vista Irrigation District, Potable Water Master Plan Update | Vista, CA

Lead Hydraulic Modeler during preparation of a potable water master plan update. The master plan includes InfoWater model update, capital improvement plan development, and asset management of the district's potable water distribution system. The InfoWater model was used to develop supply and distribution alternatives for conveying water from higher pressure, large diameter transmission mains (including the San Diego County Water Authority's First and Second Aqueducts and the North County Distribution Pipeline) to the district's potable distribution system. Alternatives were developed to address the relatively high head in the transmission mains, head required for adequate distribution of turnout flow, high local system pressures related to pump station operation, and head loss across large pressure zones.

City of Carlsbad, Wastewater and Recycled Water Master Plan | Carlsbad, CA

Deputy Project Manager. Prepared water, sewer, and recycled water master plan update. The project included hydraulic modeling to assess development impacts on existing system infrastructure, fire flow analysis, water demand and sewer flow projection calculations, analysis to assess capacity of existing infrastructure to convey flows, and development of an asset management plan. Developed cost-effective opportunity condition assessment for water systems.

City of Reedley, Sanitary Sewer and Storm Drainage Master Plans and Urban Water Management Plan | Reedley, CA

Lead Hydraulic Modeler. Assisted with preparation of master plans for the city's sanitary sewer, potable water, and storm drainage systems, which was integrated with the water master plan to ensure consistency with the city's new general plan, as well as consistent planning criteria, approaches, and financial planning and policies among the master plans. Responsible for both sanitary sewer and potable water hydraulic modeling using InfoSWMM software from Innovyze. Sanitary sewer hydraulic modeling analysis included developing alternatives for conveying flows over the Kings River, including evaluating projected existing siphon capacity and potentially diverting flows to an existing lift station.

City of Sacramento Utilities Department, Comprehensive Sewer Master Plan for Basin 45 | Sacramento, CA

Hydraulic Modeler. Assisted with preparation of a comprehensive sewer master plan for Basin 45. Basin 45 includes 6.7 miles of sewer pipelines, 155 manholes, and a 3.2 mgd pumping station. Responsible for hydraulic investigations of the existing collection systems based on existing and ultimate build-out landuse conditions; Used InfoSewer, Innovyze software. Provided a capacity assessment of the Basin 45 sewer collection system, including pipelines, manholes, and lift station, to identify deficiencies and any upgrades needed to avoid sanitary sewer overflows. Existing and projected future conditions were considered as part of the analysis.

San Benito County Water District, Master Plan Implementation Program Management Services | Hollister, CA

Lead Modeler. Provided consulting engineering services to support the implementation of the Hollister Urban Area Water and Wastewater Master Plan completed in November 2008 and the Coordinated Water Supply and Treatment Plan completed in January 2010. Responsible for water distribution system modeling using H2OMap Water.



Eric Packer, PE

GIS and Software Development

Eric's professional focus is in water and wastewater system design and analysis. His recent work includes chemical feed design, analysis of water system design alternatives, and utility asset management. Eric's passion for aligning the small technical details of a project with the client's overall vision makes him a valuable member of the project team.

EDUCATION

Bachelor of Science,
Human-Centered Design,
Dartmouth College

Bachelor of Science,
Mechanical Engineering,
Dartmouth College

Certificate, Business
Management, Tuck School
of Business at Dartmouth

REGISTRATIONS

Professional Engineer, AK
No. CE- 200694

INDUSTRY TENURE

15 years

RELEVANT EXPERIENCE

Irvine Ranch Water District, IRWD Condition Assessment of Pump Stations | Irvine, California

Asset Management Business Intelligence Tools Lead. HDR performed condition assessment services for the booster pump stations replacement and rehabilitation. The condition assessments included evaluations for physical condition, operating performance, and reliability. Based on the results of the comprehensive condition assessment, project packages and scopes of work will be developed for facilities in need of repair and rehabilitation. The condition assessment for tanks evaluated assets for mechanical, electrical, and instrumentation and control. Eric developed Asset Management Business Intelligence Tools for IRWD's Pump Stations and Tanks Condition Assessment Replacement and Rehabilitation Study, creating a single hub to bring together all data from the program and communicate that data to IRWD stakeholders.

Padre Dam Municipal Water District, Potable Water Pipeline Condition Assessment Program | San Diego, California

Project Engineer. HDR provided engineering services to Padre Dam Municipal Water District related to the Condition Assessment Project for Potable Water Pipelines Project. This scope of services included a two phases and multiple step processes that used selected specialized methods to assess the condition of high priority pipelines. The condition assessments will be utilized to make repair, rehabilitation, replacement, or future monitoring recommendations on pipelines and inform the development of the district's future potable water pipelines Condition Assessment Program and Capital Improvement Program budgeting. Phase 1 of the Project included a detailed data review, an indirect condition assessment of pipelines, a direct assessment design, a direct assessment proposal evaluation, negotiation of scopes and budgets with vendors and contractors, and preparation for the work plan for direct assessment. Phase 2 of the Project included direct condition assessment, analysis of results, risk model updates, identification of specific monitoring or capital improvement recommendations for assessed pipelines and program recommendations for future condition assessments and capital improvements.

Anchorage Water & Wastewater Utility, CRW Pump Station 2 BCE | Anchorage, Alaska

Project Manager. Eric performed hydraulic modeling of the pump station and developed an energy efficiency model to aid in pump selection. The hydraulic analysis additionally involved analysis of pump impeller design and the resultant impact on pumping efficiency for a range of static and dynamic pressure conditions.

City of Ashland, Phase 2 Water Treatment Plant | Ashland, Oregon

Project Engineer. Provided preliminary design and final design of a new 7.5 mgd water treatment plant that replace the existing water treatment plant due to its capacity limitations, aging components, and current location in the floodplain of Reeder Reservoir. Treatment alternatives that were evaluated included: (1) ozonation with direct media filtration and chlorination treatment; (2) ozonation with 2-stage filtration and chlorination; (3) sedimentation, powdered activated carbon (PAC) addition, media filtration, ultraviolet (UV) disinfection, and chlorination treatment alternative; (4) ozonation, high-rate clarifiers, media filtration treatment; and (5) membrane filtration, granular activated carbon (GAC), UV disinfection. Advantages and disadvantages for each treatment process were evaluated, including the Ashland Creek crossing location for the pipelines and vehicles, clearwell volume and configuration, and sustainable energy generation.

Great Lakes Water Authority (GLWA), Linear System Integrity Program | Detroit, Michigan

Business Intelligence Engineer. Eric supported development of an inspection cost estimation tool to rapidly evaluate the suitability of various pipe inspection methodologies and provide cost estimates based on pipe length, pipe geometry, and pipe attributes.

Municipality of Anchorage, Alaska Project Management & Engineering, Chester Creek at Muldoon Channel Realignment | Anchorage, Alaska

Deputy Program Manager. HDR designed improvements for Chester Creek at Muldoon Road. Tasks included assembling and researching available data; reviewing and confirming the findings and proposed design elements of the Chester Creek Restoration Muldoon Greenhouse Property Planning Report; polling resource agencies concerning proposed plans for the middle branch of the south fork of Chester Creek; polling DOT&PF concerning impacts to storm drain and street conveyances on Muldoon Road; addressing physical legal access and development issues to residential tracks; flood mapping revisions; and parcel re-platting and rezoning.



Yuying Li, GISP

GIS and Software Development

Yuying is a GIS Analyst in HDR's San Diego office. She has over 20 years of GIS consulting and software development and customization experience. Yuying has extensive knowledge of GIS data modeling, geodatabase design/development, spatial analysis, and mapping. Yuying is also well versed in programming and database management, which she has applied to several customized desktop and web-based GIS applications using ASP.net, ASP, HTML, VBscript, VB.net, ArcObject, ArcGIS Server Flex API, ArcGIS Server Silverlight Apl, etc.

EDUCATION

Masters, Geography, San Diego State University, United States, 2003

Bachelors, Environmental Sciences/Studies, East China Normal University (ECNU), China, 1997

REGISTRATIONS

Certified GIS Professional, CA, No. 00057433

PROFESSIONAL MEMBERSHIPS

Urban and Regional Information Systems Association (URISA)

INDUSTRY TENURE

25 years

RELEVANT EXPERIENCE

Irvine Ranch Water District, Embedded Energy Update | Irvine, CA

GIS Analyst. HDR evaluated the embedded energy of IRWD's potable water supply and treatment wastewater collection wastewater treatment and disposal and recycled water/non-potable water production and distribution. The HDR team has collected all the information available that relates water volumes provided collected and treated to the energy required. HDR is developing a GIS-based tool that will allow IRWD staff to graphically select regions of its service area to compare the embedded energy required to provide energy to each of its users.

U.S. Army Corps of Engineers, Lake Tahoe Basin Wastewater Infrastructure Program, Sacramento, CA (Part 2) | United States

GIS Analyst/Database Designer. Ms. Li designed a geodatabase for sewage. HDR to provide technical assistance to the Lake Tahoe Wastewater Infrastructure Partnership (the eight Water/Wastewater districts around the lake) to develop and implement programmatic tools and processes that assist the Partnership to design and develop a geographic information system (GIS) infrastructure. Following completion of a GIS Assessment for South Tahoe Public Utility District (STPUD) and Incline Village General Improvement District (IVGID) that summarized development of sanitary sewer GIS recommendations it was determined to establish a standard GIS infrastructures that could be collectively used by the eight sewer utility districts serving the Lake Tahoe Basin (Districts) and the Partnership to monitor their wastewater infrastructure in the shorezone and beyond.

USACE - Sacramento District, Lake Tahoe Wastewater Infrastructure Partnership Geographic Information System (GIS) Infrastructure | South Lake Tahoe

GIS Programmer providing technical assistance to the Lake Tahoe WW Infrastructure Partnership (the eight Water/Wastewater districts around the lake) to develop and implement programmatic tools and processes that assist the Partnership to design and develop a geographic information system (GIS) infrastructure.

Orange County Public Works, PL 84-99 Channel Inspections | Santa Ana, CA

GIS Task Lead. HDR is hired by Orange County Public Works to inspect thirteen flood control facilities to confirm previously identified issues as well as new deficiencies. Each facility will receive a "U" or "M" rating and issues must be addressed to obtain an "A" rating from USACE in order to remain eligible under the USACE Public Law 84-99 Rehabilitation and Inspection Program. Yuying worked with project team and leveraged the Esri Collector app to collection inspection information

with detailed the photo log. The app allows the field crew to easily locate the facilities, record required inspection data via pick list or description. The inspection information then is stored in a central database for review and QC. Photo logs and summary reports are generated using python script to streamline the process.

California Department of Water Resources, Task Order 6 - GIS Support | Sacramento, CA

Lead GIS Analyst. Yuying is one of the lead GIS analysts to support Bay Delta Conservation Plan EIR/EIS. She developed a Access based Survey scheduling tool that facilitates field survey planning, scheduling and tracking that implement many rules, such as parcel access, neighbor parcels, surveyor availability, etc. Yuying also developed and customized ArcGIS server WebADF web application for project engineers and subconsultants to visualize the engineer design and compare among different alternatives.

County of San Diego Dept of General Services, Flood Control Facilities Master Plan Update

GIS Analyst/Programmer. Ms. Li develops tools to facilitate the data processing for model input using Visual Studio. HDR is assisting the County of San Diego to update their existing Special Drainage Areas 5 (Bostonia) and 6 (Lakeside) Drainage Facilities Master Plan (DFMP) to make it consistent with the updated San Diego County Hydrology Manual updated planned land use data and other updated information. HDR is revising the existing hydrologic model using a GIS platform and 'S/SIMS software. Based on the revised model HDR will recommend drainage facility sizing prepare cost estimates facility priority rankings and update the drainage fee rate. The DFMP report will also be updated.

Moulton Niguel Water District, Utility Management System Improvements Management System Standard Operating Procedures (MSSOP)

GIS Analyst/Developer. HDR provide innovative utility management system improvements implemented for the Moulton Niguel Water District (MNWD) in Southern California. The system includes facility descriptions operating procedures databases construction drawings and system models. The databases which include maintenance management Supervisory Control and Data Acquisition (SCADA) and customer data are being integrated and presented via convenient schematic and geographical user interfaces.

City of Los Angeles, Safe Sidewalk Repair Program (SRP) Civil Design and Construction Management | Los Angeles, CA

GIS Mobile App Lead. As part of our on-call contract with the City, HDR has been working on a task order to provide program management and engineering services for the Safe Sidewalks LA Program. The program identifies and corrects existing non-ADA accessible sidewalks and curb ramps as well as provides new ADA accessible sidewalks, curb ramps and cross walks. Yuying developed the mobile app that will track the sidewalk ADA construction details for contraction bid preparation. Mobile app is also proposed for tree removal tracking.



Anders Burvall

GIS and Software Development

Anders is a Senior GIS analyst in the San Diego office. Throughout his 11-year tenure with HDR's Southern California GIS team, Anders has been an integral component on a wide array of projects throughout the Western United States. His experience includes many large-scale projects encompassing a wide array of disciplines, including Transportation, Energy, Federal, Environmental, Biological Resources, Solid Waste, Wastewater, Water Resources and Cultural Resources. Ander's geospatial expertise encompasses most aspects of the GIS workflow, including data management, database design, advanced spatial analysis, cartography, web mapping, and mobile data collection. Anders is proficient in a number of software applications, primarily the ESRI GIS (ArcInfo, ArcEditor, ArcView) program suite, Adobe Illustrator, ERDAS Imagine and ENVI image processing software, and the Rainfall Runoff Modeling Toolkit (Hydrological modeling software).

EDUCATION

Masters, Geography, San Diego State University, United States, 2007

Bachelors, Environmental Science, San Diego State University, United States, 2004

INDUSTRY TENURE

19 years

RELEVANT EXPERIENCE

Irvine Ranch Water District, Recycled Water Salt Management Plan | Irvine, Orange, California

GIS Analyst. IRWD selected HDR to prepare a Salt Management Plan that contains a comprehensive historic present day and future salt balance analysis quantifies salt concentration limits for recycled water customers and identifies costs and benefits of mitigation strategies to control salts in the recycled water product. Solutions from both the potable water and wastewater perspective were evaluated to determine the most cost-effective approach to reducing salinity.

Irvine Ranch Water District, Sewage Treatment Plant Master Plan | Irvine, California

GIS Analyst. HDR prepared the Sewage Treatment Master Plan, which characterized historical sewage flows and loading to IRWD's two water recycling plants, projected future flows and loading through build-out, evaluated existing treatment capabilities and identified deficiencies, identified current and future end uses, and developed treatment process upgrades and expansion requirements for the 28 mgd Michelson Water Recycling Plant (WRP) and the 7.8 mgd Los Alisos WRP. The master planning effort aimed to maximize the beneficial reuse of sewage, minimize diversion of sewage to Orange County Sanitation District, and identifies ways of managing the sewage collection and treatment systems in the most cost-effective manner while balancing the projected sewage flows with projected recycled water demands.

City of Los Angeles, Safe Sidewalks LA Program | Los Angeles, California

GIS Analyst. Responsibilities include working with GIS staff to create GIS database and program-specific application for identification of locations that need repair and logging of data. HDR is performing site visits at each location, assessing existing conditions, preparing engineer's estimates and providing construction management services during construction. This is an accelerated program and in 2 months, HDR has assessed and prepared engineer's estimates for 252 sites.

Port of Long Beach, POLB Pier B Port-Wide Stormwater Infrastructure Master Plan | Long Beach, Los Angeles, California

Sr. GIS Analyst. Anders led the extensive GIS program for Storm Water Master Plan Project which included field data collection, flooding analysis, data management, and figure production. HDR conducted a port-wide stormwater infrastructure master plan of the POLB, which includes comprehensive hydraulic modeling, condition and capacity analysis of existing drainage system and pump stations and development of a 20-year capital improvement plan. Work included; data collection, screening, and processing; catchment area delineation and characterization; hydraulic model development; hydrology and hydraulic simulation of the storm drain system and pump stations for design storm scenarios based on the LA County approved methods; inspection and condition assessment of existing facilities, analysis of improvement alternatives and identification of preferred alternatives; development of cost estimates and the capital improvement plan.

San Bernardino County Transportation Authority (SBCTA), Downtown San Bernardino Passenger Rail Project | San Bernardino, California

Sr. GIS Analyst. Anders performed Spatial Analysis, data management, and cartography. HDR is providing engineering and environmental services. This project extends Metrolink commuter rail service 1-mile from the San Bernardino Santa Fe Depot on the west side of I-215 to a new multi-modal Transit Center on the east side of I-215 at Rialto Avenue and E Street in downtown San Bernardino.

California Department of Water Resources, Task Order 6 - GIS Support | Sacramento, California

GIS Analyst. Mr. Burvall performed GIS Analysis and cartography. HDR developed a GIS database and standardize map templates and map products for the development of a high quality and legally defensible EIR/EIS document. Used ESRI ArcGIS Version 9.2 to conduct GIS analyses providing quantitative metrics for the comparison of alternatives and resource impacts and automating some resource assessment processes to reduce the amount of time needed to produce the EIR/EIS. Also provided technical support for other BDCP task orders.

LACMTA, Link Union Station (Link US) Project (formerly known as Southern California Regional Interconnector Project - SCRIP) | Los Angeles, California

Sr. GIS Analyst. Anders performed Spatial Analysis, data management, and cartography. HDR is performing preliminary engineering, environmental document, final design, and construction support for Metro's Link US (formerly known as SCRIP). The purpose of Link US is to increase the overall capacity of Los Angeles Union Station and prepare Southern California for the expected future growth of both Regional Rail (commuter rail and intercity rail) and the California High-Speed Rail Blended System. Link US has been identified as the No. 1 needed regional rail project in Southern California. The project includes raising the rail yard, inclusion of a new elevated concourse, new run-through tracks over US-101, and active transportation connections. The \$2.5B project is being designed to keep the existing light rail, heavy rail and subway fully operational during construction.



Sharon Jacob

GIS and Software Development

Sharon is a GIS Analyst based out of our San Diego office.

RELEVANT EXPERIENCE

EDUCATION

Bachelor of Arts,
Environmental Studies,
UC Santa Barbara, 2018

Geographic Information
Systems Certificate,
Geographic Information
Science and Cartography,
San Diego Mesa College,
2022

INDUSTRY TENURE

6 years

Rancho California Water District, Pipe Asset Management

GIS Analyst. The District owns approximately 950 miles of potable water pipelines, which provide water to over 150,000 customers within the city of Temecula, portions of the city of Murrieta, and unincorporated areas of the County. Over 60 percent of its pipelines are less than 40 years old - an industry low system age and a correspondingly low break rate. The district implemented a phased approach to managing its pipeline infrastructure. In this next phase of the project, there will be three main elements. The first element is to assess the in situ condition of selected Rancho Water pipelines (locations to be determined by the Consultant) by utilizing methodologies that are applicable for the location, accessibility, and material type of the selected pipelines. The second element is to make recommendations to assist Rancho Water in refining and improving the District's Pipeline CP Program. The third element is to develop (but not implement) a unidirectional flushing program for the District's potable water system. Scope of work includes owner's representative/project management services in the condition assessment of its potable pipelines.

Padre Dam Municipal Water District, Potable Water Pipeline Condition Assessment

GIS Analyst. HDR provided engineering services to Padre Dam Municipal Water District related to the Condition Assessment Project for Potable Water Pipelines Project. This scope of services included a two phases and multiple step processes that used selected specialized methods to assess the condition of high priority pipelines. The condition assessments will be utilized to make repair, rehabilitation, replacement or future monitoring recommendations on pipelines and inform the development of the District's future potable water pipelines Condition Assessment Program and Capital Improvement Program budgeting. Phase 1 of the Project included a detailed data review, an indirect condition assessment of pipelines, a direct assessment design, a direct assessment proposal evaluation, negotiation of scopes and budgets with vendors and contractors, and preparation for the work plan for direct assessment. Phase 2 of the Project included direct condition assessment, analysis of results, risk model updates, identification of specific monitoring or capital improvement recommendations for assessed pipelines and program recommendations for future condition assessments and capital improvements.

City of Lake Elsinore, I-15/SR-74 (Central Avenue) Interchange Improvement Project Project Approval and Environmental Documentation (PA&ED) | Lake Elsinore, California

GIS Analyst. HDR is leading the effort to finish the PA&ED Phase of this project in the business district of the City of Lake Elsinore (City) on the I-15 corridor. HDR worked with the City and Caltrans District 8 to screen multiple alternatives and focus on key alternatives that delivered a viable project while minimizing right-of-way (ROW) impacts.

City of Phoenix, Phoenix Bus Rapid Transit Program Management (BRT PMC Pkg A) | Apache Junction, Maricopa, Arizona

GIS Analyst for the City of Phoenix Bus Rapid Transit Program. This includes program management, planning and capital development, community education and engagement, funding and financing, and development of conceptual alternatives. The BRT program includes five BRT corridors from the Transportation 2050 plan, including the highest bus ridership route (Thomas Road) in the region. This is the first BRT project in Phoenix.

LACMTA, Link Union Station (Link US) Project (formerly known as Southern California Regional Interconnector Project - SCRIP) | Los Angeles, California

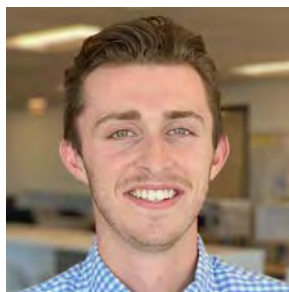
GIS Analyst. HDR is performing preliminary engineering, environmental document, final design, and construction support for Metro's Link US (formerly known as SCRIP). The purpose of Link US is to increase the overall capacity of Los Angeles Union Station and prepare Southern California for the expected future growth of both Regional Rail (commuter rail and intercity rail) and the California High-Speed Rail Blended System. Link US has been identified as the No. 1 needed regional rail project in Southern California. The project includes raising the rail yard, inclusion of a new elevated concourse, new run-through tracks over US-101, and active transportation connections. The \$2.5B project is being designed to keep the existing light rail, heavy rail and subway fully operational during construction.

Orange County Transportation Authority, Program Management Consultant (PMC) Services for Regional Rail Programs (aka Rail PMC 2019) | Orange, California

GIS Analyst. HDR, as a subconsultant to Mott MacDonald, provided PMC services for the Regional Rail Program from 2014 to 2020. However, HDR was selected as a prime consultant in 2019 to continue this work. We have delivered a wide range of work scopes, ranging from planning, environmental compliance, ROW and engineering through construction support.

Riverside County Transportation Comm, I-15 Express Lanes Project Southern Extension (ELPSE) Project Approval and Environmental Document (PA&ED) | San Bernardino, California

GIS Analyst. HDR is leading the collective effort to construct new lanes along I-15 in Riverside County. The primary component of the I-15 ELPSE is the addition of two tolled express lanes in both the northbound and southbound directions within the median of I-15 from SR-74 (Central Avenue) in the City, through the unincorporated Riverside County community of Temescal Valley, to El Cerrito Road in the City of Corona for a distance of approximately 16 miles. The project would also add a southbound auxiliary lanes between both the Main Street Off-Ramp and SR-74 (Central Avenue) On-Ramp, between SR-74 (Central Avenue) Off-Ramp and Nichols Road On-Ramp, and a segment of auxiliary lane prior to the Nichols Road Off-Ramp.



Matthew Wilson, GISP

Information Systems Management

As a geographic information system (GIS) developer, Matt works with clients and coworkers to design and implement both desktop and web applications that assist with the creation, aggregation, and visualization of spatial data for a variety of projects. He has extensive experience working with multiple GIS platforms, synthesizing data from multiple data sources, communicating analytical results visually, in writing, and through oral presentations to a wide variety of audiences.

EDUCATION

Master of Science,
Geography, Appalachian
State University

Bachelor of Science,
Geographic Information
Science, Appalachian
State University

REGISTRATIONS

Certified GIS
Professional,
No. 161364

INDUSTRY TENURE

4 years

RELEVANT EXPERIENCE

City of Ann Arbor, Barton Raw Water Main Condition Assessment, Ann Arbor, MI

Geodatabase Design. HDR performed condition assessment for raw water mains - concrete cylinder and metallic pipe. The pipe alignment runs from the Barton Pump Station to the water treatment plant and is approximately 6,000 linear feet.

Charlotte Water, Capacity Assurance, Charlotte, NC

Geodatabase Design. As part of the CAP support on-call, HDR is working to develop a GIS-based application to manage wastewater capacity allocations across the rapidly growing service area. This project includes GIS application development, technology and business workflow services, and database quality control work to develop a utility-owned tool to manage growth within their service area.

City of High Point, CMMS Needs Assessment & Procurement Support, High Point, NC

CMMS. HDR developed a roadmap of the steps required for the city to select and implement the most suitable CMMS, including documentation of functional requirements, criteria for software package selection, and suggesting an implementation plan and estimated costs. The needs assessment resulted in a software requirements document that outlined the relevant features and capabilities of a best-fit CMMS solution. Procurement documentation and the facilitation of proposal evaluation were provided, which included a review of formal submittals and in-person product demonstrations. Assisting with development of an implementation plan and troubleshooting integration challenges.

City of Littleton, On-Call Sanitary Staff Augmentation Services, Littleton, CO

CMMS. The City of Littleton completed a condition assessment of its stormwater and wastewater collection systems in 2018 and 2019, contracting with a pipe inspection and cleaning company to inspect pipes, manholes, inlets, outfalls, and other structures in both collection systems. Due to quality-associated issues, the City asked HDR to assist them in cleaning the contractor-provided CCTV footage and inspection reports. HDR is assisting

the City with QC of the CCTV video and NASSCO-based condition scores, linking inspection records, photos, and videos to the City's GIS, and converting the data to the most recent version of NASSCO, version 7.0, so that the data can be imported into the City's computerized maintenance management system.

City of Raleigh, Integrated Master Plan, Raleigh, NC

Geodatabase Design. Assisted with preparation of an integrated master plan that incorporated the city's utility system, including both linear and vertical facility components, into one master plan framework. The integrated master plan will provide a common basis of planning for system planning, address interdependencies between the utility systems, integrate asset management with traditional capacity-based master planning, and develop a planning framework for capital projects and priorities. During Phase 1, developed water and wastewater system profiles, performed unit consumption analysis for the potable water/reclaimed water/wastewater systems, performed a regulatory review of current and future considerations, reviewed climate change scenarios, established the basis of planning, developed service area wide water demand and wastewater flow forecast, performed facility capacity evaluation, reviewed existing hydraulic models to identify gaps/model improvements/opportunities for integration with other projects/opportunities to build consistency among the models, and developed a roadmap to define specific technical modeling and analytical task activities to fully develop the master plan to meet the identified goals and objectives.

Johnston County, Cityworks Computerized Maintenance Management System (CMMS) Needs Assessment and Vendor Management, Raleigh, NC

Geodatabase Design. HDR assisted the county in assessing water resource business needs, evaluating enterprise information system architecture, and identifying a GIS-based CMMS solution for the utility. This included providing asset management and data architecture guidance. HDR was also selected for the following implementation of the CMMS for the utility.

Winston-Salem/Forsyth County Utilities, Water Facilities Master Plan and AWIA Compliance, Winston Salem, NC

Technical Lead. The City of Winston-Salem/Forsyth County Utilities (WSFC Utilities) department operates and maintains the Swann, R.A. Thomas, and R.W. Neilson water treatment plants and several water pump stations. HDR is updating WSFC Utilities' Water Facilities Master Plan to provide long-term guidance, planning, and estimated costs for projects within a five-year planning window and for future capital improvement projects at all three water treatment facilities and associated pump stations over a 20-year planning period.

Proof of Professional Licenses for Key Staff



SPENCER, DAVID

LICENSE NUMBER: [66885](#) **LICENSE TYPE:** CIVIL ENGINEER
LICENSE STATUS: CLEAR **EXPIRATION DATE:** SEPTEMBER 30, 2024
SECONDARY STATUS: N/A
CITY: OCEANSIDE **STATE:** CALIFORNIA **COUNTY:** SAN DIEGO **ZIP:** 92057



ELLISON, ROBERT DANIEL

LICENSE NUMBER: [3020](#) **LICENSE TYPE:** STRUCTURAL ENGINEER
LICENSE STATUS: CLEAR **EXPIRATION DATE:** MARCH 31, 2025
SECONDARY STATUS: N/A
CITY: VENTURA **STATE:** CALIFORNIA **COUNTY:** VENTURA **ZIP:** 93003



ELLISON, ROBERT DANIEL

LICENSE NUMBER: [38094](#) **LICENSE TYPE:** CIVIL ENGINEER
LICENSE STATUS: CLEAR **EXPIRATION DATE:** MARCH 31, 2025
SECONDARY STATUS: N/A
CITY: VENTURA **STATE:** CALIFORNIA **COUNTY:** VENTURA **ZIP:** 93003



CLARK, BRIEN LEE

LICENSE NUMBER: [6291](#) **LICENSE TYPE:** CHEMICAL ENGINEER
LICENSE STATUS: CLEAR **EXPIRATION DATE:** DECEMBER 31, 2025
SECONDARY STATUS: N/A
CITY: EASTVALE **STATE:** CALIFORNIA **COUNTY:** RIVERSIDE **ZIP:** 92880



KELLY, STACEY JAMES

LICENSE NUMBER: [88317](#) **LICENSE TYPE:** CIVIL ENGINEER
LICENSE STATUS: CLEAR **EXPIRATION DATE:** MARCH 31, 2024
SECONDARY STATUS: N/A
CITY: VENTURA **STATE:** CALIFORNIA **COUNTY:** VENTURA **ZIP:** 93003



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DATE: April 16, 2024
TO: Board of Directors
FROM: Engineering and External Affairs

SUBJECT: Cornell Pump Station Improvement Project: Construction Award

SUMMARY:

The Cornell Pump Station is a critical component of the District's potable water distribution system during Metropolitan Water District of Southern California (MWD) outages and/or emergencies due to the role it plays in delivering water between the eastern and western portions of the District's service area. Cornell acts like the "heart" of the potable water system and is necessary to convey water from west-to-east or east-to-west directions. It is a critical facility for transferring water to service connections on either side of the District's service area.

The Cornell Pump Station Improvement Project consists of replacement of the two pumps, electric motor, natural gas-powered motor, all electro-mechanical controls, and associated equipment and modifications to the pump station to improve the reliability and efficiency of the pump station. Both pumps are at the end of their useful service life and are no longer efficient and reliable for normal pumping operations, potential emergencies, and future extended MWD shutdowns.

On January 16, 2024, the Board authorized a call for bids for the Cornell Pump Station Improvement Project. The final design was completed in January 2024 and publicly advertised from February 1 to March 22, 2024. Three bids for the project were received and publicly opened on March 22, 2024. Staff evaluated the bids and determined that the lowest responsive bid was submitted by Pacific Hydrotech Corporation, in the amount of \$5,464,100, which is 20 percent above the Engineer's Estimate of \$4,551,000.

RECOMMENDATION(S):

Award a construction contract to Pacific Hydrotech Corporation, in the amount of \$5,464,100, and reject all remaining bids upon receipt of duly executed documents for the Cornell Pump Station Improvement Project; re-appropriate funding from CIP Job No. 10556 – Interconnection with Calleguas Municipal Water District in the amount of \$1,500,000, CIP Job No. 10672 – Stationary Emergency Generators in the amount of \$500,000, and CIP Job No. 10430 – Twin Lakes Pump Station Pipeline in the amount of \$976,918, to CIP Job No. 10655 – Cornell Pump Station Improvement Project; authorize the General Manager to execute Contract Amendment No. 2 with Cannon Corporation, in the amount of \$66,106, for additional

design services associated with the pump station building upgrades; and authorize the General Manager to execute a Memorandum of Agreement with the City of Agoura Hills, in an amount not to exceed \$220,000, for reimbursement of the water main relocation, hardscaping and exterior building upgrade costs associated with the City's Ladyface Greenway Project.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

The total project cost is estimated to be \$6,624,462. Sufficient funding for the work is available in the adopted Fiscal Year 2023-24 Budget. There is currently \$3,647,544.05 remaining in CIP Job No. 10655 – Cornell Pump Station Improvements. The additional funding for the project is to be re-appropriated as follows: \$1,500,000 from CIP Job No. 10556 – Interconnection with Calleguas Municipal Water District, \$500,000 from CIP Job No. 10672 – Stationary Emergency Generators, and \$976,918 from CIP Job No. 10430 – Twin Lakes Pump Station Pipeline, to CIP Job No. 10655 – Cornell Pump Station Improvement Project. The total amount includes the additional design fees, reimbursement to the City of Agoura Hills with a 10 percent contingency, construction costs and administrative costs for the project.

DISCUSSION:

Originally built in 1972 and expanded in 1985, the Cornell Pump Station consists of two pumps. One pump is driven by an original natural gas-powered engine, which has reached the end of its service life. The natural gas-powered engine is no longer serviceable by the manufacturer and has become increasingly difficult to obtain suitable parts for its maintenance. The second pump is driven by an electric motor, installed in 1990, which is also reaching the end of its useful life. As a result, improvements to the facility are warranted to maximize its operational reliability in preparation of potential emergencies and extended MWD shutdowns, and to address deteriorating equipment.

Cornell Pump Station is a critical component of the District's system during MWD outages and/or emergencies due to the role it plays in delivering water between the eastern and western portions of the District's service area. The pump station is necessary to get water from west-to-east or east-to-west and is a critical facility in conveying water to service connections on either side of the District's service area.

MWD is the primary source of water supplied to the District. The Calabasas Feeder, owned and operated by MWD, delivers water to the District through the LV-2 Interconnection. As part of MWD's Pre-stressed Concrete Cylinder Pipe (PCCP) Rehabilitation Program, MWD must inspect, evaluate, and repair portions of the Calabasas Feeder. In early 2017, MWD notified the District of the scheduled extended maintenance and rehabilitation, which is scheduled to begin in 2024. MWD's extended shutdowns of the Calabasas Feeder are expected to occur in intervals and will interrupt the primary source of supply for the District's potable water system for up to six months at a time.

Cannon Corporation (Cannon) prepared a technical memorandum of the current condition of Cornell Pump Station in February 2020. The document provides recommendations to improve reliability, redundancy, and capacity, and serves as a basis for design for the Cornell Pump Station Improvements Project. On November 2, 2021, the Board authorized a professional service agreement with Cannon to complete the design for the Cornell Pump Station Improvement Project.

On January 20, 2023 the General Manager administratively approved the first contract amendment with Cannon for additional effort to complete the design for the natural gas engine, building ventilation, and roof. The design was near completion; however, additional design elements such as the antenna relocation, roof equipment screening, and building fascia, were modified to provide cohesion with the City’s Ladyface Greenway Project. The final design was coordinated with the City of Agoura Hill’s Ladyface Greenway Project and completed in January 2024.

The Las Virgenes Municipal Water District Code establishes that if changes are equal or greater than ten percent of the original professional service agreement amount, the change must be approved by the Board. Below is a summary of the previous amendments and fee adjustments to date for the Cannon agreement including the recommended second contract amendment:

Description	Cost	Cumulative Cost	Cumulative percent change
Original Agreement	\$326,582.40	-	-
First Amendment	\$31,878.75	\$358,461.15	10%
Second Amendment (proposed)	\$66,106.00	\$424,567.15	30%

Staff recommends that the Board authorize the General Manager to execute a second contract amendment with Cannon, in the amount of \$66,106, for additional engineering design for the relocation of the antenna, roof screening and building fascia. The cost for these elements is included in the total project cost estimate.

The District was originally planning to make other site improvements to the Cornell Pump Station to meet the District’s maintenance and operational needs. The City of Agoura Hill’s planned Ladyface Greenway Project is adjacent to Cornell and is planned to be constructed at the same time as the Cornell Pump Station Project. Due to the vicinity of both projects, the City requested that the District work collaboratively with them to integrate both projects aesthetically to provide continuity of appearances with the planned projects. The City has included within their project the hardscape, landscape, and other site features on District property to allow for a cohesive aesthetic transition at this location.

As part of the City’s project, a water main will also be required to be relocated that spans the flood control channel to provide future access for maintenance of the pipeline by District staff. The City has requested that the District participate in reimbursement of certain site features within the District property that would have been completed by the District independent of the City project. District and City staff have collaborated and negotiated deal points for a Memorandum of Agreement (MOA) for right-of-entry, long term maintenance, and a not-to-exceed amount of \$200,000 to cover the exterior upgrades, drainage, hardscape, pipeline

relocation, and an additional \$20,000 (10 percent) to cover potential change orders related directly to District property, for a total of \$220,000. Any additional changes related to aesthetics would be at the expense of the City. The negotiated amount and contribution are directly tied to the itemized engineering estimate for the work with costs being distributed between the District and City based on core functionalities versus aesthetic requests of the City. A final version of the MOA will be produced after all parties, including the District’s legal counsel, have had the opportunity to review it. If there are material changes, the MOA will be brought back to the Board for re-approval prior to execution by the General Manager.

District staff held a mandatory pre-bid meeting on February 15, 2024, which was attended by a total of six contractors. Three responsive bids were received with Pacific Hydrotech Corporation (PacHydro) submitting the lowest responsive bid total. PacHydro’s bid is 20 percent above the Engineer’s Estimate of \$4,551,000. While the bids were competitive, the increased costs for electrical equipment and pumps were not anticipated, but consistent with changing market conditions. The two lowest bids were provided by equally capable construction companies and separated by a margin of \$1,304,638. PacHydro has successfully completed projects for the District in the past, with the most recent in February 2024 for the Tapia Summer Season TMDL Compliance and Meter Project. After a thorough review of the submitted bids, District staff recommend awarding the construction contract for the Cornell Pump Station Improvement Project to Pacific Hydrotech Corporation.

The following table summarize the bid results:

Bidder	Bid Total	Percentage Below/Above Engineer’s Estimate of \$4,551,000.00
Pacific Hydrotech Corporation	\$5,464,100.00	20% above
Blois Construction, LLC	\$6,768,738.00	49% above
GSE Construction Company Inc.	\$7,025,500.00	54% above

The following table summarize the anticipated costs and requested appropriation:

Description	Cost
Professional Services:	
Engineering Services (Cannon)	\$66,106.00
Construction:	
Construction Award	\$5,464,100.00
Construction Contingency (10%)	\$546,410.00
Administrative:	
District Labor (2%)	\$109,282.00
G&A (4%)	\$218,564.00
Other:	
City of Agoura Hills Reimbursement	\$220,000.00

Total Construction Cost	\$6,338,356.00
Total Project Cost	\$6,624,462.00
Existing Appropriation	\$3,647,544.05
Total Project Cost less existing appropriation	\$2,976,918.00

Schedule:

Construction is anticipated to start in May 2024 and will be completed by August 2025.

Environmental Documentation:

On January 16, 2024, the Board determined the Cornell Pump Station Improvement Project to be categorically exempt from the provisions of the California Environmental Quality Act (CEQA), pursuant to Section 15303 – New Construction or Conversion of Small Structures of the CEQA Guidelines, because it implements necessary water utility improvements within an existing structure. A Notice of Exemption has been completed, filed and received with the Los Angeles County Clerk.

GOALS:

Provide Safe and Quality Water with Reliable Services

Prepared by: Alex Leu, Senior Engineer



DATE: April 16, 2024
TO: Board of Directors
FROM: Engineering and External Affairs

SUBJECT: Taxpayer Protection and Government Accountability Act: Oppose

SUMMARY:

During a legislative update at the March 19, 2024 Board meeting, staff discussed the Taxpayer Protection and Government Accountability Act, which will appear on the November 2024 ballot as a statewide initiative. Staff discussed the matter to gauge the Board's interest in officially opposing the initiative. Because more information was requested on the initiative, staff is bringing the item back to the Board for further discussion. This report serves to provide an overview of the initiative and its potential implications for the District. Given the potential impacts, staff recommends opposing the Taxpayer Protection and Government Accountability Act.

RECOMMENDATION(S):

Oppose the Taxpayer Protection and Government Accountability Act.

FINANCIAL IMPACT:

There is no fiscal impact associated with taking an oppose position on the initiative.

DISCUSSION:

The Act has been placed on the November 2024 ballot by the California Business Roundtable and California Business Properties Association. The statewide ballot initiative would expand the definition of what constitutes a tax and raise the voter approval threshold for local taxes from the current simple majority to a two-thirds requirement. The initiative would also limit certain fees to the least amount necessary to provide the service. The ballot measure would apply to any tax and certain fees adopted after January 1, 2022. Local governments would have one year to ask voters to re-approve applicable taxes.

According to the California Attorney General, the initiative would limit the ability of local voters and state and local governments to raise the revenue required for government services. It

could also make it harder to raise revenues for a range of services — from emergency services to road maintenance.

According to the authors, the Taxpayer Protection and Government Accountability Act will “empower voters with the right to approve or reject all new state and local taxes, increase accountability and stop politicians from using hidden taxes to drive up the cost of government services.”

Counties, cities, special districts, labor groups and community organizations representing millions of Californians across the state have come out in opposition of the measure.

Potential Impacts to Las Virgenes Municipal Water District:

The initiative would amend the State constitution and key provisions of Proposition 218. Currently, the District sets its rates on a five-year basis pursuant to Article XIII D of the California Constitution that states that the rates the District sets must cover the “reasonable” costs of the service. The initiative specifies that the District would be required to set its rates to recover the “actual cost” of the service, and further defines that cost to be the “minimum amount necessary” to provide the services.

The major opposition to the initiative is a coalition that includes the League of California Cities, Association of California Water Agencies (ACWA), California Association of Sanitation Agencies (CASA), California Special Districts Associations (CSDA) and California State Association of Counties (CSAC). Over 200 California cities formally oppose the measure. The initiative would have significant fiscal impacts to the District as outlined in this report.

If authorized by the Board, the District would join and sign on to coalition letters to oppose the initiative. Staff does not anticipate or propose any individual actions by the District on the effort.

Attached for reference is a copy of the language for the ballot initiative, together with a summary and analysis by the Legislative Analyst's Office.

Prepared by: Jeremy Wolf, Legislative Program Manager

ATTACHMENTS:

[Taxpayer Protection and Government Accountability Act](#)
[Legislative Analyst's Office Summary and Analysis](#)

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November 5, 2021

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NOV 05 2021

INITIATIVE COORDINATOR
ATTORNEY GENERAL'S OFFICE

Anabel Renteria
Initiative Coordinator
Office of the Attorney General
State of California
PO Box 994255
Sacramento, CA 94244-25550

Re: Initiative 21-0026 - Amendment Number One

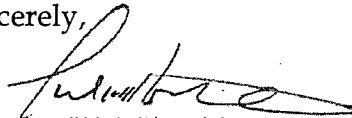
Dear Initiative Coordinator:

Pursuant to subdivision (b) of Section 9002 of the Elections Code, enclosed please find Amendment #1 to Initiative No. 21-0026 "The Taxpayer Protection and Government Accountability Act." The amendments are reasonably germane to the theme, purpose or subject of the initiative measure as originally proposed.

I am the proponent of the measure and request that the Attorney General prepare a circulating title and summary of the measure as provided by law, using the amended language.

Thank you for your time and attention processing my request.

Sincerely,



Thomas W. Hiltachk

The Taxpayer Protection and Government Accountability Act

[Deleted codified text is denoted in ~~strikeout~~. Added codified text is denoted by *italics and underline*.]

Section 1. Title

This Act shall be known, and may be cited as, the Taxpayer Protection and Government Accountability Act.

Section 2. Findings and Declarations

(a) California's cost-of-living crisis is driving up the State's poverty rate, contributing to our ongoing homelessness crisis and driving lower- and middle-class families out of the state. State and local governments' appetite for new revenue adds to the rapidly rising costs of living that Californians face for housing, childcare, gasoline, food, energy, healthcare, and education. In the past 10 years alone, Personal Income Tax revenue into the State's General Fund has grown 129%. In fact, total tax revenue coming into the General Fund has more than doubled in the past 10 years, increasing by \$121 billion during that time and now topping \$240 billion. Tax revenue to local governments has also grown rapidly, again nearly doubling in the last 10 years. At the same time, unelected bureaucrats, empowered by politicians and the courts, have nearly unchecked ability to raise additional costs on consumers by imposing so-called "fees" and other costs without a vote of a single elected body. This growing cost burden is hurting California families who find themselves struggling to live paycheck to paycheck, and are being forced to make tough choices between paying for housing, food, or healthcare.

(b) Californians are already among the highest taxed people in the country and already pay the highest tax rates in the nation for the state personal income tax, sales taxes, and gasoline tax. From the most recent US Census Bureau data, California state and local government general revenues collected in 2019 from taxes, fees, charges, and other non-utility local sources were the highest in the nation at \$533 billion, making them the 6th highest on a per capita basis at \$13,503 per person. With 12 percent of the national population, US Census Bureau data shows that Californians in 2019 paid 16 percent of all taxes collected by the states including 13 percent of all general sales taxes, 16 percent of all vehicle license fees, 16 percent of all property taxes, 22 percent of all corporation taxes, and 22 percent of all personal income taxes. This growing tax burden, and the impact on the State's cost-of-living crisis, have not stopped politicians from demanding more. In 2021 alone, they introduced legislation to raise more than \$234 billion in new and higher taxes and fees.

(c) But the tax burden is only part of the story of California's cost crisis. Californians pay billions more in costs imposed by unelected bureaucrats through "fees" and other revenue-raising mechanisms. In fact, there are now more than 5,100 fees and other charges driving up the cost of living beyond the significant tax burden already placed on working families. What's worse, these fees and other charges don't go to pay for the services being provided; they go to cover overhead, labor and growing pension costs. Since 2010, state revenue from these "fees" has more than doubled. In 2022-23, the state expects to bring in more than \$21.5 billion in fee revenue alone. Working families cannot keep up with the rapid growth in taxes, fees and other costs. California now has the highest cost-adjusted poverty rate in the country.

(d) Californians have tried repeatedly to increase their voice in when and how taxes, fees and other costs are raised by enacting a series of measures to make taxes more predictable and guarantee transparency and accountability. Voter-approved ballot measures such as Proposition 13 (1978), Proposition 62 (1986),

Proposition 218 (1996), and Proposition 26 (2010) required state and local governments to make their case to the voters on the need for increased government revenues.

(e) Contrary to the voters' intent, voter approval of government revenue increases and spending accountability measures have been weakened by the Legislature, the courts, and special interests, making it easier to raise government revenues in a variety of ways by only a simple majority of the Legislature and with no vote by the public who is expected to pay the costs.

(f) Now, thanks to consistent efforts to undermine the repeated will of the voters, politicians, state and local governments, and special interests promise that taxpayer money will be spent for a specific purpose, only to divert its use once the money is collected. Revenues that are supposed to improve education instead have been diverted to general salary and benefit increases. Revenues that were promised to improve and expand government services were instead diverted to pay down debts created by past government decisions. Recent major transportation improvements have seen cost overruns more than double their original estimate. Polling by the nonpartisan Public Policy Institute of California showed 88 percent of Californians believe state government wastes a lot or some of the money we pay in taxes and charges.

(g) Worse, court-created loopholes have enabled governments and their surrogates to become less transparent about how the funds taken from taxpayers are raised and spent. Loopholes have been created which are used by the Legislature, local governments and even special interest groups to: (1) pass vaguely-worded statutes allowing unelected bureaucrats to impose new fees and other charges on their own that increase the costs of goods and services in the state; (2) impose new taxes and other charges by hiding them and simply calling them by another name or even using the term "something else;" (3) shelter the revenues from voter approval by running the revenues through a nonprofit organization or another third party; and (4) encourage "divide and tax" by making it easier to raise taxes or charges on only a part of the population through simple majority votes in low turnout elections.

(h) Desperate for new revenue from working families, politicians now illegally campaign for new and higher taxes they put on the ballot by using taxpayer dollars. Poorly disguised as voter outreach or education, these politicians spend millions of taxpayer dollars to urge voters to support new tax measures. In one instance, a local government agreed to pay more than \$1 million to settle a claim that it illegally used taxpayer dollars to support a local tax increase.

Section 3. Statement of Purpose

(a) In enacting this measure, the voters reassert their right to a voice and a vote on new and higher taxes by requiring any new or higher tax to be put before voters for approval. Voters intend to ensure that all taxes and other charges are passed or rejected by either the voters themselves or a governing body elected by voters and not by unelected and unaccountable bureaucrats.

(b) Furthermore, the purpose and intent of the voters in enacting this measure is to increase transparency and accountability over higher taxes and charges by requiring any tax measure placed on the ballot—either at the state or local level—to clearly state if the tax is for general purposes or a specific and clearly defined service or program, how long it will be in effect, and the estimated cost of the tax. The voters also intend to increase their ability to challenge the legality of a new tax or charge in court prior to the tax or charge being collected.

(c) Furthermore, the purpose and intent of the voters in enacting this measure is to clarify that any new or increased form of government revenue, by any name or manner of extraction paid directly or indirectly by Californians, shall be authorized only by a two-thirds vote of the Legislature and signature by the Governor to ensure that the purposes for such charges are broadly supported and transparently debated.

(d) Furthermore, the purpose and intent of the voters in enacting this measure is also to ensure that taxpayers have the right and ability to effectively balance new or increased taxes and other charges with the rapidly increasing costs Californians are already paying for housing, food, childcare, gasoline, energy, healthcare, education, and other basic costs of living, and to further protect the existing constitutional limit on property taxes and ensure that the revenue from such taxes remain local.

(e) Furthermore, the purpose and intent of the voters in enacting this measure is to force transparency and accountability on how state and local revenues are utilized, so that revenues are used for their promised purposes, and not diverted to other uses.

(f) Furthermore, the purpose and intent of the voters in enacting this measure is to close loopholes currently exploited by local politicians by explicitly prohibiting taxpayer dollars from being used to campaign for any measure on the state or local ballot and holding politicians personally liable for any violation of the new law.

(g) In enacting this measure, the voters also additionally intend to reverse loopholes in the legislative two-thirds vote and voter approval requirements for government revenue increases created by the courts including, but not limited to, *Cannabis Coalition v. City of Upland*, *Chamber of Commerce v. Air Resources Board*, *Schmeer v. Los Angeles County* and *Wilde v. City of Dunsmuir*.

Section 4. Sections 3 and 14 of Article XIII A of the California Constitution are amended to read:

Sec. 3(a) Every levy, charge, or exaction of any kind imposed by state law is either a tax or an exempt charge.

(b) ~~(a)~~ Any change in state statute law which results in any taxpayer paying a higher tax must be imposed by an act passed by not less than two-thirds of all members elected to each of the two houses of the Legislature, and submitted to the electorate and approved by a majority vote, except that no new ad valorem taxes on real property, or sales or transaction taxes on the sales of real property, may be imposed. Each Act shall include:

(1) A specific duration of time that the tax will be imposed and an estimate of the annual amount expected to be derived from the tax.

(2) A specific and legally binding and enforceable limitation on how the revenue from the tax can be spent. If the revenue from the tax can be spent for unrestricted general revenue purposes, then a statement that the tax revenue can be spent for "unrestricted general revenue purposes" shall be included in the separate, stand-alone section required by paragraph (3). Any proposed change to the use of the revenue from the tax shall be adopted by a separate act that is passed by not less than two-thirds of all members elected to each of the two houses of the Legislature and submitted to the electorate and approved by a majority vote.

(3) A true and impartial statement of facts explicitly and affirmatively identifying each tax and the specific limitation on how the revenue therefrom can be spent is set forth in the state law as a separate, stand-alone section containing no other information.

(c) Any change in state law which results in any taxpayer paying an exempt charge must be imposed by an act passed by not less than two-thirds of all members elected to each of the two houses of the Legislature. Each act shall specify the type of exempt charge as provided in subdivision (e), and the amount or rate of the exempt charge to be imposed.

(d) ~~(b)~~ As used in this section and in Section 9 of Article II, "tax" means every ~~any~~ levy, charge, or exaction of any kind imposed by the State state law that is not an exempt charge. ~~except the following:~~

(e) As used in this section, "exempt charge" means only the following:

~~(1) a charge imposed for a specific benefit conferred or privilege granted directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the State of conferring the benefit or granting the privilege to the payor.~~

~~(1) (2) A reasonable charge imposed for a specific government service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable actual costs to the State of providing the service or product to the payor.~~

~~(2) (3) A charge imposed for the reasonable regulatory costs to the State incident to issuing licenses and permits, performing investigations, inspections, and audits, enforcing agricultural marketing orders, and the administrative enforcement and adjudication thereof.~~

(3) A levy, charge, or exaction collected from local units of government, health care providers or health care service plans that is primarily used by the State of California for the purposes of increasing reimbursement rates or payments under the Medi-Cal program, and the revenues of which are primarily used to finance the non-federal portion of Medi-Cal medical assistance expenditures.

~~(4) A reasonable charge imposed for entrance to or use of state property, or the purchase, rental, or lease of state property, except charges governed by Section 15 of Article XI.~~

~~(5) A fine, or penalty, or other monetary charge including any applicable interest for nonpayment thereof, imposed by the judicial branch of government or the State, as a result of a state administrative enforcement agency pursuant to adjudicatory due process, to punish a violation of law.~~

(6) A levy, charge, or exaction collected for the promotion of tourism in California pursuant to Chapter 1 (commencing with Section 13995) of part 4.7 Division 3 of Title 2 of the Government Code.

~~(f) (e) Any tax or exempt charge adopted after October January 1, 2021 2010, but prior to the effective date of this act, that was not adopted in compliance with the requirements of this section is void 12 months after the effective date of this act unless the tax or exempt charge is reenacted by the Legislature and signed into law by the Governor in compliance with the requirements of this section.~~

(g) (1) (d) The State bears the burden of proving by a preponderance of the clear and convincing evidence that a levy, charge, or other exaction is an exempt charge and not a tax. The State bears the burden of proving by clear and convincing evidence that the amount of the exempt charge is reasonable and that the amount charged does not exceed the actual cost of providing the service or product to the payor. ~~that the amount is no more than necessary to cover the reasonable costs of the governmental activity and that the manner in which those costs are allocated to a payor bear a fair or reasonable relationship to the payor's burdens on, or benefits received from, the governmental activity~~

(2) The retention of revenue by, or the payment to, a non-governmental entity of a levy, charge, or exaction of any kind imposed by state law, shall not be a factor in determining whether the levy, charge, or exaction is a tax or exempt charge.

(3) The characterization of a levy, charge, or exaction of any kind imposed by state law as being voluntary, or paid in exchange for a benefit, privilege, allowance, authorization, or asset, shall not be a factor in determining whether the levy, charge, or exaction is a tax or an exempt charge.

(4) The use of revenue derived from the levy, charge or exaction shall be a factor in determining whether the levy, charge, or exaction is a tax or exempt charge.

(h) As used in this section:

(1) "Actual cost" of providing a service or product means: (i) the minimum amount necessary to reimburse the government for the cost of providing the service or product to the payor, and (ii) where the amount charged is not used by the government for any purpose other than reimbursing that cost. In computing "actual cost" the maximum amount that may be imposed is the actual cost less all other sources of revenue including, but not limited to taxes, other exempt charges, grants, and state or federal funds received to provide such service or product.

(2) "Extend" includes, but is not limited to, doing any of the following with respect to a tax or exempt charge, lengthening its duration, delaying or eliminating its expiration, expanding its application to a new territory or class of payor, or expanding the base to which its rate is applied.

(3) "Impose" means adopt, enact, reenact, create, establish, collect, increase or extend.

(4) "State law" includes, but is not limited to, any state statute, state regulation, state executive order, state resolution, state ruling, state opinion letter, or other legal authority or interpretation adopted, enacted, enforced, issued, or implemented by the legislative or executive branches of state government. "State law" does not include actions taken by the Regents of the University of California, or Trustees of the California State University, and the Board of Governors of the California Community Colleges.

Sec. 14. All property taxed by state or local government shall be assessed in the county, city, and district in which it is situated. Notwithstanding any other provision of law, such state or local property taxes shall be collected by the counties and apportioned according to law to the districts within the counties.

Section 5. Section 1 of Article XIII C of the California Constitution is amended, to read:

Sec. 1. Definitions. As used in this article:

(a) "Actual cost" of providing a service or product means: (i) the minimum amount necessary to reimburse the government for the cost of providing the service or product to the payor, and (ii) where the amount charged is not used by the government for any purpose other than reimbursing that cost. In computing "actual cost" the maximum amount that may be imposed is the actual cost less all other sources of revenue including, but not limited to taxes, other exempt charges, grants, and state or federal funds received to provide such service or product.

(b) "Extend" includes, but is not limited to, doing any of the following with respect to a tax, exempt charge, or Article XIII D assessment, fee, or charge: lengthening its duration, delaying or eliminating its expiration,

expanding its application to a new territory or class of payor, or expanding the base to which its rate is applied.

~~(c) (a)~~ “General tax” means any tax imposed for general governmental purposes.

~~(d)~~ “Impose” means adopt, enact, reenact, create, establish, collect, increase or extend.

~~(e) (b)~~ “Local government” means any county, city, city and county, including a charter city or county, any special district, or any other local or regional governmental entity, or an elector pursuant to Article II or the initiative power provided by a charter, or statute.

~~(f)~~ “Local law” includes, but is not limited to, any ordinance, resolution, regulation, ruling, opinion letter, or other legal authority or interpretation adopted, enacted, enforced, issued, or implemented by a local government.

~~(g) (c)~~ “Special district” means an agency of the State, formed pursuant to general law or a special act, for the local performance of governmental or proprietary functions with limited geographic boundaries including, but not limited to, school districts and redevelopment agencies.

~~(h) (d)~~ “Special tax” means any tax imposed for specific purposes, including a tax imposed for specific purposes, which is placed into a general fund.

~~(i) (e)~~ As used in this article, and in Section 9 of Article II, “tax” means every ~~any~~ levy, charge, or exaction of any kind, imposed by a local government law that is not an exempt charge. ~~except the following:~~

~~(j)~~ As used in this section, “Exempt charge” means only the following:

~~(1)~~ A charge imposed for a specific benefit conferred or privilege granted directly to the payor that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of conferring the benefit or granting the privilege.

~~(1) (2)~~ A reasonable charge imposed for a specific local government service or product provided directly to the payor that is not provided to those not charged, and which does not exceed the reasonable actual costs to the local government of providing the service or product.

~~(2) (3)~~ A charge imposed for the reasonable regulatory costs to a local government for issuing licenses and permits, performing investigations, inspections, and audits, enforcing agricultural marketing orders, and the administrative enforcement and adjudication thereof.

~~(3) (4)~~ A reasonable charge imposed for entrance to or use of local government property, or the purchase, rental, or lease of local government property.

~~(4) (5)~~ A fine, or penalty, or other monetary charge including any applicable interest for nonpayment thereof, imposed by the judicial branch of government or a local government administrative enforcement agency pursuant to adjudicatory due process, as a result of to punish a violation of law.

~~(5) (6)~~ A charge imposed as a condition of property development, excluding any levy, charge, or exaction regulating or related to vehicle miles traveled and imposed as a condition of property development. No condition of property development relating to vehicle miles traveled can be imposed until and unless the voters of the county in which the development is located have approved a vehicle miles traveled countywide levy, charge, or exaction equally applicable to all drivers in the county. The condition imposed

on property development relating to vehicle miles traveled may not be greater than, and must be collected in the same way as, the countywide levy, charge or exaction applicable to each driver in the development. If the voters do not approve the levy, charge, or exaction, no condition relating to vehicle miles traveled may be imposed on property development. The voter approval required by this paragraph may not be used to delay or deny the approval of property development.

~~(6) (7) An~~ Assessments and property related fees assessment, fee, or charge imposed in accordance with the provisions of subject to Article XIII D, or an assessment imposed upon a business by a tourism marketing, or property and business improvement district.

(7) A charge imposed for a specific health care service provided directly to the payor and that is not provided to those not charged, and which does not exceed the reasonable costs to the local government of providing the health care service. As used in this paragraph, a "health care service" means a service licensed or exempt from licensure by the state pursuant to Chapters 1, 1.3, or 2 of Division 2 of the Health and Safety Code.

The local government bears the burden of proving by a preponderance of the evidence that a levy, charge, or other exaction is not a tax, that the amount is no more than necessary to cover the reasonable costs of the governmental activity and that the manner in which those costs are allocated to a payor bear a fair or reasonable relationship to the payor's burdens on, or benefits received from, the governmental activity.

Section 6. Section 2 of Article XIII C of the California Constitution is amended to read:

Sec. 2. Local Government Tax Limitation. Notwithstanding any other provision of this Constitution:

(a) Every levy, charge, or exaction of any kind imposed by local law is either a tax or an exempt charge. All taxes imposed by any local government shall be deemed to be either general taxes or special taxes. Special purpose districts or agencies, including school districts, shall have no power to levy general taxes.

(b) No local government, whether proposed by the governing body or by an elector, may impose, ~~extend,~~ or increase any general tax unless and until that tax is submitted to the electorate and approved by a majority vote. A general tax shall not be deemed to have been increased if it is imposed at a rate not higher than the maximum rate so approved. The election required by this subdivision shall be consolidated with a regularly scheduled general election for members of the governing body of the local government, except in cases of emergency declared by a unanimous vote of the governing body.

~~(c) Any general tax imposed, extended, or increased, without voter approval, by any local government on or after January 1, 1995, and prior to the effective date of this article, shall continue to be imposed only if approved by a majority vote of the voters voting in an election on the issue of the imposition, which election shall be held within two years of the effective date of this article and in compliance with subdivision (b).~~ (d) No local government, whether proposed by the governing body or by an elector, may impose, ~~extend,~~ or increase any special tax unless and until that tax is submitted to the electorate and approved by a two-thirds vote. A special tax shall not be deemed to have been increased if it is imposed at a rate not higher than the maximum rate so approved.

(d) The governing body of a local government shall only submit a tax ordinance proposed by the local government to the electorate by a resolution passed by not less than two-thirds of all members elected to the governing body. The governing body of a local government shall submit a tax ordinance proposed by

an elector, to the electorate by a resolution of the governing body. Any proposed tax to be submitted to the electorate shall be consolidated with a regularly scheduled general election for members of the governing body of the local government, except in cases of an emergency declared by a unanimous vote of the governing body.

(e) Only the governing body of a local government shall have the authority to impose any exempt charge. The governing body shall impose an exempt charge by an ordinance specifying the type of exempt charge as provided in Section 1(j) and the amount or rate of the exempt charge to be imposed, and passed by not less than two-thirds of all members elected to the governing body. An exempt charge imposed by a governing body shall be subject to referendum pursuant to the same signature requirement applicable to statewide referendum measures. This subdivision shall not apply to charges specified in paragraph (7) of subdivision (j) of Section 1.

(f) No amendment to a Charter which provides for the imposition, extension, or increase of a tax or exempt charge shall be submitted to or approved by the electors, nor shall any such amendment to a Charter hereafter submitted to or approved by the electors become effective for any purpose.

(g) Each measure providing for the imposition of a tax, including a measure proposed by an elector pursuant to Article II, by Charter, or by statute providing for the initiative power, shall be submitted to the electors in the form of an ordinance. The ordinance shall include:

(1) A specific duration of time that the tax will be imposed and an estimate of the annual amount expected to be derived from the tax.

(2) A specific and legally binding and enforceable limitation on how the revenue from the tax can be spent. If the revenue from a tax can be spent for unrestricted general revenue purposes, then a statement saying only that the tax revenue can be spent for "unrestricted general revenue purposes" shall be included in the separate, stand-alone section required by paragraph (3). If the ordinance proposes a general tax, no advisory measure may appear on the same ballot that would indicate that the revenue from the general tax will be used for any specific purpose. Any proposed change to the use of the revenue from the tax by a local governing body shall be adopted by a separate ordinance that is passed by not less than two-thirds of all members elected to the governing body and submitted to the electorate and approved by a two-thirds vote.

(3) A true and impartial statement of facts explicitly and affirmatively identifying each tax and the specific limitation on how the revenue therefrom can be spent is set forth in the act as a separate, stand-alone section containing no other information.

(h) Any tax or exempt charge adopted after October 1, 2021, but prior to the effective date of this act, that was not adopted in compliance with the requirements of this section is void 12 months after the effective date of this act unless the tax or exempt charge is reenacted in compliance with the requirements of this section.

(i)(1) The local government bears the burden of proving by clear and convincing evidence that a levy, charge or exaction is an exempt charge and not a tax. The local government bears the burden of proving by clear and convincing evidence that the amount of the exempt charge is reasonable and that the amount charged does not exceed the actual cost of providing the service or product to the payor.

(2) The retention of revenue by, or the payment to, a non-governmental entity of a levy, charge, or exaction of any kind imposed by a local law, shall not be a factor in determining whether the levy, charge, or exaction is a tax or exempt charge.

(3) The characterization of a levy, charge, or exaction of any kind imposed by a local law as being voluntary, or paid in exchange for a benefit, privilege, allowance, authorization, or asset, shall not be factors in determining whether the levy, charge, or exaction is a tax or an exempt charge.

(4) The use of revenue derived from the levy, charge or exaction shall be a factor in determining whether the levy, charge, or exaction is a tax or exempt charge.

Section 7. Section 3 of Article XIII D of the California Constitution is amended, to read:

Sec. 3. Property Taxes, Assessments, Fees and Charges Limited

(a) No tax, assessment, fee, ~~or charge~~, or surcharge, including a surcharge based on the value of property, shall be assessed ~~by any agency~~ upon any parcel of property or upon any person as an incident of property ownership except:

(1) The ad valorem property tax imposed pursuant to described in section 1(a) of Article XIII and sections 1(a) and 1(b) of Article XIII A.

(2) Any special non-ad valorem tax that is imposed on all parcels in the jurisdiction at a uniform rate or in a uniform amount and without regard to the use or ownership of the parcel, except for an exemption or lower rate based on the age, veteran status, or disability of the owner, and parcels wholly or partially exempt from property tax pursuant to Article XIII, and after receiving a two-thirds vote pursuant to Section 4 of Article XIII A.

(3) Assessments as provided by this article.

(4) Fees or charges for property related services as provided by this article.

(b) For purposes of this article, fees for the provision of electrical or gas service shall not be deemed charges or fees imposed as an incident of property ownership.

Section 8. Article XIII E of the California Constitution is added to read:

(a)(1) Notwithstanding Article IV, a statute or resolution calling an election to approve a tax imposition, extension or increase pursuant to Section 3 of Article XIII A, shall be passed by not less than two-thirds of all members elected to each of the two houses of the Legislature.

(2) The title and summary and ballot label, required for a measure pursuant to the Elections Code, shall specify:

(i) The type and amount or rate of the tax;

(ii) The annual amount of revenue expected to be derived from the tax;

(iii) The duration of the tax; and

(iv) The use of the revenue from the tax as required in Section 3(b)(2) of Article XIII A;

(b)(1) A resolution calling an election to approve a tax pursuant to Section 2 of Article XIII C, shall be approved pursuant to Section 2(d) of Article XIII C.

(2) The title and summary and ballot label or question required for a measure pursuant to the Elections Code, shall specify:

(i) The type and amount or rate of the tax;

(ii) The annual amount of revenue expected to be derived from the tax;

(iii) The duration of the tax; and

(iv) The use of the revenue from the tax as required in Section 2(g)(2) of Article XIII C.

(c)(1) Notwithstanding any other provision of this Constitution, after a measure subject to the requirements of this section has qualified for the ballot by action of a legislative body pursuant to Section 3 of Article XIII A; Section 2 of Article XIII C; by an elector pursuant to Article II or by a Charter providing for the initiative power; or Section 6(c) of Article XIII D, no expenditure of public funds on any public communication that references the measure by name, or by reference to its subject matter, shall be permitted with respect to that measure until the certification of the election result for that such measure. This section shall not prohibit public expenditures for the provision of ballots or other ballot materials including sample ballots and the State Voter Information Guide provided for in the Elections Code; or to encourage voters to register to vote or to vote, so long as those expenditures are for communications directed at the general public and not segments of the population.

(2) Any public official who approves an expenditure of funds in violation of subdivision (c)(1) shall be personally liable for the amount unlawfully expended in an action brought by the Attorney General, District Attorney, or a taxpayer.

Section 9. Section 1 of Article XIII is amended to read:

Sec. 1 Unless otherwise provided by this Constitution or the laws of the United States:

(a) All property is taxable and shall be assessed at the same percentage of fair market value. When a value standard other than fair market value is prescribed by this Constitution or by statute authorized by this Constitution, the same percentage shall be applied to determine the assessed value. The value to which the percentage is applied, whether it be the fair market value or not, shall be known for property tax purposes as the full value.

(b) All property so assessed shall be taxed in proportion to its full value.

(c) All proceeds from the taxation of property shall be collected by the counties and apportioned according to law to the districts within the counties.

Section 10. Section 32 of Article XIII is amended to read:

Sec. 32(a) Any person may bring an action seeking an injunction to prohibit the collection of a tax or exempt charge alleging that the tax or exempt charge was not lawfully imposed under Section 3 of Article XIII A, or Sections 2 and 3 of Article XIII C, within ninety (90) days after enactment of the tax or exempt charge.

No person shall be required to post a bond to obtain an injunction to prohibit the collection of a tax or exempt charge pursuant to this section.

(b) Except as provided in paragraph (a), No legal or equitable process shall issue in any proceeding in any court against this State, any local government, or any officer thereof to prevent or enjoin the collection of any tax. After payment of a tax claimed to be illegal, an action may be maintained to recover the tax paid, with interest, in such manner as may be provided by the Legislature.

(c) No judgment in a validation action shall prohibit issuance of an injunction under subdivision (a) or an action to recover tax paid under subdivision (b) unless the tax or exempt charge was pledged as security to repay bonds that have already been issued and both the tax or exempt charge and the bonds were the subject of a validation action brought by the State or local agency.

Section 11. General Provisions

A. This Act shall be liberally construed in order to effectuate its purposes.

B. (1) In the event that this initiative measure and another initiative measure or measures relating to state or local requirements for the imposition, adoption, creation, or establishment of taxes, charges, and other revenue measures shall appear on the same statewide election ballot, the other initiative measure or measures shall be deemed to be in conflict with this measure. In the event that this initiative measure receives a greater number of affirmative votes, the provisions of this measure shall prevail in their entirety, and the provisions of the other initiative measure or measures shall be null and void.

(2) Notwithstanding paragraph (1), this initiative measure shall not be deemed to be in conflict with any other initiative measure that requires statewide voter approval of the creation, increase, extension, or continued imposition of any tax.

(3) If this initiative measure is approved by the voters but superseded in whole or in part by any other conflicting initiative measure approved by the voters at the same election, and such conflicting initiative is later held invalid, this measure shall be self-executing and given full force and effect.

C. The provisions of this Act are severable. If any portion, section, subdivision, paragraph, clause, sentence, phrase, word, or application of this Act is for any reason held to be invalid by a decision of any court of competent jurisdiction, that decision shall not affect the validity of the remaining portions of this Act. The People of the State of California hereby declare that they would have adopted this Act and each and every portion, section, subdivision, paragraph, clause, sentence, phrase, word, and application not declared invalid or unconstitutional without regard to whether any portion of this Act or application thereof would be subsequently declared invalid.

D. If this Act is approved by the voters of the State of California and thereafter subjected to a legal challenge alleging a violation of state or federal law, and both the Governor and Attorney General refuse to defend this Act, then the following actions shall be taken:

(1) Notwithstanding anything to the contrary contained in Chapter 6 of Part 2 of Division 3 of Title 2 of the Government Code or any other law, the Attorney General shall appoint independent counsel to faithfully and vigorously defend this Act on behalf of the State of California.

(2) Before appointing or thereafter substituting independent counsel, the Attorney General shall exercise due diligence in determining the qualifications of independent counsel and shall obtain written affirmation from independent counsel that independent counsel will faithfully and vigorously defend this Act. The written affirmation shall be made publicly available upon request.

(3) A continuous appropriation is hereby made from the General Fund to the Controller, without regard to fiscal years, in an amount necessary to cover the costs of retaining independent counsel to faithfully and vigorously defend this Act on behalf of the State of California.

(4) Nothing in this section shall prohibit the proponents of this Act, or a bona fide taxpayers association from intervening to defend this Act.



January 19, 2022

Hon. Rob Bonta
Attorney General
1300 I Street, 17th Floor
Sacramento, California 95814

Attention: Ms. Anabel Renteria
Initiative Coordinator

Dear Attorney General Bonta:

Pursuant to Elections Code Section 9005, we have reviewed the proposed constitutional Taxpayer Protection and Government Accountability Act initiative (A.G. File No. 21-0042, Amendment #1).

Background

State Government

Taxes and Fees. This year's state budget spends over \$255 billion in state funds. Over 90 percent of the state budget is funded with revenues from taxes. These include, for example, sales taxes paid on goods and income taxes paid on wages and other sources of income. Much of the rest of the state budget is funded by fees and other charges. Examples include: (1) charges relating to regulatory activities; (2) charges for specific government services or products, like fees charged to drivers to improve roads; (3) charges for entering state property, such as a state park; and (4) judicial fines, penalties, and other charges. The State Constitution requires the state to set fees at a reasonable level, generally reflecting the costs of the services or benefits provided. The state uses revenue from taxes and fees to fund a variety of programs and services, including education, health care, transportation, and housing and homelessness services.

Current Requirements to Approve Taxes and Fees. Under the State Constitution, state tax increases require approval by two-thirds of each house of the Legislature or a majority vote of the statewide electorate. The Legislature can reduce taxes with a majority vote of each house, provided the change does not result in an increase in taxes paid by any single taxpayer. In many cases, the Legislature has enacted statutes that delegate its authority to adjust fees and other


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charges to administrative entities, like state departments. In these cases, these charges can be increased or changed by the department within certain limits.

Local Government

Taxes and Fees. The largest local government tax is the property tax, which raises roughly \$75 billion annually. Other local taxes include sales taxes, utility taxes, and hotel taxes. In addition to these taxes, local governments levy a variety of fees and other charges. Examples include parking meter fees, building permit fees, regulatory fees, and judicial fines and penalties. In order to be considered a fee, the charge cannot exceed the reasonable costs to the local government of providing the associated product or service. Local governments use revenues from taxes and fees to fund a variety of services, like fire and police, public works, and parks.

Current Requirements to Approve Taxes and Fees. State law requires increases in local taxes to receive approval of the local governing body—for example, a city council or county board of supervisors—as well as approval of voters in that local jurisdiction. Most proposed taxes require a two-thirds vote of the local governing board before being presented to the voters. Special taxes (those used for a specific purpose) require a two-thirds vote of the electorate while other types of taxes require a majority vote of the electorate. The majority-vote general taxes can be used for any purpose. Recent case law suggests that citizen initiative special taxes may be approved by majority vote, rather than a two-thirds vote. Currently, local governing bodies have the ability to delegate their authority to adjust fees and other charges to administrative entities, like city departments. In these cases, these charges can be increased or changed by the department within certain limits.

Proposal

This measure amends the State Constitution to change the rules for how the state and local governments can impose taxes, fees, and other charges.

State and Local Government Taxes

Expands Definition of Tax. The measure amends the State Constitution to expand the definition of taxes to include some charges that state and local governments currently treat as fees and other charges. For example, certain charges imposed for a benefit or privilege granted to a payer but not granted to those not charged would no longer be considered fees. As a result, the measure could increase the number of revenue proposals subject to the higher state and local vote requirements for taxes discussed below.

Requires Voter Approval for State Taxes. The measure increases the vote requirements for increasing state taxes. Specifically, the measure requires that legislatively proposed tax increases receive approval by two-thirds of each house *and* a majority vote of the statewide electorate. Voters would still be able to increase taxes by majority vote of the electorate without legislative action, however. Any state tax approved between January 1, 2022 and the effective date of this measure would be nullified unless it fulfills the requirements of the measure.

Requirements for Approving Local Taxes. Whether sought by the local governing body or the electorate, the measure establishes the same approval requirements for increasing local

special taxes. Any local tax approved between January 1, 2022 and the effective date of this measure would be nullified unless it fulfills the requirements of the measure.

Allowable Uses and Duration of State and Local Tax Revenues Must Be Specified. The measure requires state and local tax measures to identify the type and amount (or rate) of the tax and the duration of the tax. State and local government general tax measures must state that the revenue can be used for general purposes.

State and Local Government Fees

Requires the Legislature and Local Government Bodies to Impose State and Local Fees. Fees would have to be imposed by a majority vote of both houses of the Legislature or local governing bodies. The measure would restrict the ability of state and local governments to delegate fee changes to administrative entities. The extent of these restrictions would depend on future court decisions. Any fee approved between January 1, 2022 and the effective date of this measure would be nullified unless it fulfills the requirements of the measure.

Some New State and Local Fees Could Not Exceed Actual Costs. For some categories of fees, if the Legislature or a local governing body wished to impose a new fee or make changes to an existing fee, the measure generally would require that the charge be both reasonable and reflect the actual costs to the state or local government of providing the service. The measure also specifies that actual cost should not exceed “the minimum amount necessary.” In many cases, existing fees already reflect the government’s actual costs. In other cases, some fees would have to more closely approximate the payer’s actual costs in order to remain fees. If a fee payer challenged the charge, the state or local government would need to provide clear and convincing evidence that the fee meets this threshold. State and local governments also would bear the burden of providing clear and convincing evidence that the levy is a fee—which is not subject to a vote by the electorate—and not a tax under the new definition.

Fiscal Effects

Lower State Tax and Fee Revenue. By expanding the definition of a tax, increasing the vote requirements for approving taxes, and restricting administrative changes to fees, the measure makes it harder for the Legislature to increase nearly all types of state revenues. The extent to which revenues would be lower under the measure would depend on various factors, most notably future decisions made by the Legislature and voters. For example, requirements for legislative approval of fee increases currently set administratively could result in lower fee revenues, depending on future votes of the Legislature. That lower revenue could be particularly notable for some state programs largely funded by fees. Due to the uncertainty of these factors, we cannot estimate the amount of reduced state revenue, but it could be substantial.

Lower Local Government Tax and Fee Revenue. Compared to the state, local governments generally face greater restrictions to raising revenue. By expanding the definition of taxes and restricting administrative changes to fees, the measure would make it somewhat harder for local governments to raise revenue. Consequently, future local tax and fee revenue could be lower than they would be otherwise. The extent to which revenues would be lower is unknown, but

fees could be more impacted. The actual impact on local government revenue would depend on various factors, including future decisions by the courts, local governing bodies, and voters.

Possible Increased State and Local Administrative Costs to Change Some Fee Levels. In some cases, state and local departments would need to develop methods for setting fees to reflect actual costs if the Legislature or local governing bodies wanted to change those fees in the future. Estimating actual costs by program and fee source could involve some added workload for those state and local departments, which likely would be supported by fee revenue. The extent of these administrative costs would depend on (1) whether the state and local governments determine a fee increase is needed in order to maintain their current level of programs and services funded through fee revenue and (2) future court decisions.

Summary of Fiscal Effects. We estimate that this measure would have the following major fiscal effects:

- Lower annual state and local revenues, potentially substantially lower, depending on future actions of the Legislature, local governing bodies, voters, and the courts.

Sincerely,

for Gabriel Petek
Legislative Analyst

for Keely Martin Bosler
Director of Finance