



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

AGENDA
LVMWD BOARD OF DIRECTORS - REGULAR MEETING
TUESDAY, OCTOBER 3, 2023 – 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: <https://us06web.zoom.us/j/81386775847>

To join by telephone, please dial (669) 900-6833 or (346) 248-7799 and enter Webinar ID:
813 8677 5847

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 Assistant/Clerk of the Board, at (818) 251-2123 or jguzman@lvmwd.com with any questions.

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

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

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: October 03, 2023 (Pg. 5)

Receive and file.

4.B Proposed Insurance Provider Plan Renewals (Pg. 53)

Accept the proposals from EyeMed, in the annual amount of \$15,000, for employee vision insurance with a four-year rate guarantee; and Anthem Blue Cross, in the annual amount of \$81,985, for employee life, accidental death/dismemberment (AD&D) insurance, and short- and long-term disability coverage.

4.C Annual Report: Records Review and Destruction (Pg. 59)

Authorize the destruction of records in accordance with the District's records retention schedule and the Las Virgenes Municipal Water District Code.

4.D Monthly Cash and Investment Report: August 2023 (Pg. 78)

Receive and file the Monthly Cash and Investment Report for August 2023.

5. ILLUSTRATIVE AND/OR VERBAL PRESENTATION OF AGENDA ITEMS

5.A Proclamation in Recognition of Water Professionals Appreciation Week

5.B Water Supply Conditions Update (Pg. 94)

6. TREASURER

7. BOARD OF DIRECTORS

7.A Local Agency Formation Commission: Election of Special District Alternate (Pg. 96)

Select a candidate to serve as the Local Agency Formation Commission Special District Alternate Member, and authorize the General Manger to execute and return the official voting ballot no later than 5:00 p.m. on Friday, October 27, 2023.

8. ENGINEERING AND EXTERNAL AFFAIRS

8.A 2023 Climate Action and Adaptation Plan: Adoption (Pg. 109)

Pass, approve, and adopt proposed Resolution No. 2627, adopting the 2023 Climate Action and Adaptation Plan.

RESOLUTION NO. 2627

A RESOLUTION OF THE BOARD OF DIRECTORS OF LAS VIRGENES MUNICIPAL WATER DISTRICT ADOPTING THE 2023 CLIMATE ACTION AND ADAPTATION PLAN

(Reference is hereby made to Resolution No. 2627 on file in the District's Resolution Book and by this reference the same is incorporated herein.)

8.B On-Call Grant Writing and Administration Services: Award (Pg. 223)

Accept the proposal from West Yost & Associates, Inc., and authorize the General

Manager to execute a one-year professional services agreement, in the amount of \$100,000, with four one-year renewal options, for on-call grant writing and administration services.

9. **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*

10. **FUTURE AGENDA ITEMS**

11. **PUBLIC COMMENTS**

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12. **CLOSED SESSION**

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

Tort claim by Christopher and Ashley Grismer

13. **OPEN SESSION AND ADJOURNMENT**

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

LAS VIRGENES MUNICIPAL WATER DISTRICT

To: ANDY CORADESCHI, TREASURER

Payments for Board Meeting of : October 3, 2023

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. 107861 through 107980 were issued in the total amount of: \$ 772,470.73

Payments through direct disbursements as follows:

9/5/2023 Las Virgenes Municipal Water District payment number 24035 through 24047: \$ 6,338.58

Payments through wire transfers as follows:

9/12/2023 HR Performance Solutions payment for annual renewal 10/1/23-9/30/24 \$ 2,959.72

\$ 2,959.72

Total Payments \$ 781,769.03

(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 LISTING FOR BOARD MEETING
10/3/2023**

Company Name	Company No.	Check No. 107861-107921 09/05/23 Amount	Check No. 107922-107980 09/12/23 Amount	Total
Potable Water Operations	101	48,123.12	73,020.49	121,143.61
Recycled Water Operations	102			-
Sanitation Operations	130	11,006.97		11,006.97
Potable Water Construction	201	1,013.00		1,013.00
Water Conservation Construction	203			-
Sanitation Construction	230			-
Potable Water Replacement	301	28,461.60	21,590.00	50,051.60
Recycled Water Replacement	302	5,024.99		5,024.99
Sanitation Replacement	330			-
Internal Service	701	90,797.51	83,773.79	174,571.30
JPA Operations	751	111,814.00	122,233.76	234,047.76
JPA Construction	752			-
JPA Replacement	754	175,611.50	3,632.00	179,243.50
Total Printed		471,852.69	304,250.04	776,102.73
Voided Checks/payment stopped:				
Check #107628	754	(3,632.00)		(3,632.00)
				-
				-
				-
				-
				-
				-
Total Voids		(3,632.00)	-	(3,632.00)
Net Total		468,220.69	304,250.04	772,470.73

**DIRECT DISBURSEMENTS LISTING FOR BOARD MEETING
10/3/2023**

Direct Disb. No.
24035-24047
09/05/23

Company Name	Company No.	Amount	Total
Potable Water Operations	101	68.98	68.98
Recycled Water Operations	102		-
Sanitation Operations	130	132.56	132.56
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	1,750.91	1,750.91
JPA Operations	751	4,386.13	4,386.13
JPA Construction	752		-
JPA Replacement	754		-
	Total Printed	6,338.58	6,338.58
Voided Direct Disbursements:			
		-	-
	Total Voids	-	-
	Totals	6,338.58	6,338.58

**WIRE LISTING FOR BOARD MEETING
10/3/2023**

		Wire No. 23 09/12/23	
Company Name	Company No.	Amount	Total
Potable Water Operations	101	-	-
Recycled Water Operations	102	-	-
Sanitation Operations	130	-	-
Potable Water Construction	201	-	-
Water Conservation Construction	203	-	-
Sanitation Construction	230	-	-
Potable Water Replacement	301	-	-
Recycled Water Replacement	302	-	-
Sanitation Replacement	330	-	-
Internal Service	701	2,959.72	2,959.72
JPA Operations	751	-	-
JPA Construction	752	-	-
JPA Replacement	754	-	-
	Total Printed	<u>2,959.72</u>	<u>2,959.72</u>
Voided Wires:		-	-
	Total Voids	<u>-</u>	<u>-</u>
	Totals	<u>2,959.72</u>	<u>2,959.72</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
107861	09/05/2023	PRTD	30595 4IMPRINT, INC	25394222	08/18/2023		090523	1,007.55
			Invoice: 25394222					
				1,007.55	701112	601500		
							INVOICE DTL DESC	
							BOARD MEMBERS APPAREL	
							Directors' Miscellaneous	
							CHECK 107861 TOTAL:	1,007.55
107862	09/05/2023	PRTD	2317 ACORN NEWSPAPER	205933	08/19/2023		090523	865.00
			Invoice: 205933					
				865.00	101900	660400		
							4X5 DISPLAY AD -QTLY TOUR RTN 8/18/23	
							Public Education Programs	
							CHECK 107862 TOTAL:	865.00
107863	09/05/2023	PRTD	5367 ADT COMMERCIAL	151692762	08/09/2023		090523	995.00
			Invoice: 151692762					
				995.00	701001	551500		
							ANNL FIRE ALARM INSPCTN - BLDG#8 8/9/23	
							Outside Services	
							CHECK 107863 TOTAL:	995.00
107864	09/05/2023	PRTD	30083 AQUATIC GARDENS LLC	13266	08/22/2023		090523	175.00
			Invoice: 13266					
				175.00	701001	551500		
							POND MAINT - AUGUST 2023	
							Outside Services	
							CHECK 107864 TOTAL:	175.00
107865	09/05/2023	PRTD	2407 ATLAS TOWING	59815	07/18/2023		090523	202.50
			Invoice: 59815					
				202.50	701325	551500		
							TOWED VEH #876	
							Outside Services	
							CHECK 107865 TOTAL:	202.50
107866	09/05/2023	PRTD	30119 ATS COMMUNICATIONS	7-2023	08/10/2023		090523	4,123.75
			Invoice: 7-2023					
				4,123.75	701310	552500		
							JULY 2023 CELL SITE MGMT	
							Consulting Services	
							CHECK 107866 TOTAL:	4,123.75
107867	09/05/2023	PRTD	5625 ASSOC. OF WATER AGENCIES OF VENTU	06-15093	09/01/2023		090523	1,200.00
			Invoice: 06-15093					
				1,200.00	701121	710500		
							FY 23-24 ANNUAL MEMBERSHIP DUES	
							Dues, Subsc & Memberships	
							CHECK 107867 TOTAL:	1,200.00
107868	09/05/2023	PRTD	30535 BETTER BUSINESS PLANNING, INC	278824	07/28/2023		090523	209.58
			Invoice: 278824					
				195.00	701430	622000		
							FSA DEBIT CARD AUGUST 2023	
							Outside Services	

Las Virgenes Municipal Water District



A/P CASH DISBURSEMENTS JOURNAL

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

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
				INVOICE DTL DESC				
				14.58 701430 622000				
					Outside Services			
Invoice: 278825			BETTER BUSINESS PLANNING, INC	278825	07/28/2023		090523	90.00
				90.00 701430 622000				
					COBRA ADMIN AUGUST 2023 Outside Services			
							CHECK 107868 TOTAL:	299.58
107869	09/05/2023	PRTD	21515 CALIFORNIA ASSOC OF MUTUAL WATER	156	08/23/2023		090523	2,500.00
			Invoice: 156		ONE WATER ECON STUDY Dues, Subsc & Memberships			
				2,500.00 701122 710500				
							CHECK 107869 TOTAL:	2,500.00
107870	09/05/2023	PRTD	20655 CANNON CORPORATION	85490	08/04/2023		090523	3,070.50
			Invoice: 85490		WILDLIFE CROSSING RELOCATION JULY 2023 Capital Asset Expenses			
				3,070.50 301440 900000				
							CHECK 107870 TOTAL:	3,070.50
107871	09/05/2023	PRTD	30050 CANON FINANCIAL SERVICES, INC.	31074472	08/12/2023		090523	677.81
			Invoice: 31074472		AUGUST 2023 CANON COPIER LEASE Equip Rental			
				677.81 701420 620500				
							CHECK 107871 TOTAL:	677.81
107872	09/05/2023	PRTD	11330 DIAL SECURITY	454002	08/01/2023		090523	355.00
			Invoice: 454002		AUGUST 2023 SEC SRV - HQ Outside Services			
				355.00 701001 551500				
Invoice: 454006			DIAL SECURITY	454006	08/01/2023		090523	125.00
				125.00 101600 551800	AUGUST 2023 SEC SRV - WLK Building Maintenance			
Invoice: 454933			DIAL SECURITY	454933	08/11/2023		090523	275.00
				275.00 751820 551500	SERVICE CALL 7/24/23 Outside Services			
Invoice: 454928			DIAL SECURITY	454928	08/10/2023		090523	600.00
				600.00 701001 551500	SERVICE CALL 8/9/23 Outside Services			
Invoice: 454977			DIAL SECURITY	454977	08/15/2023		090523	390.76
				390.76 701002 551500	SERVICE CALL 7/20/23 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 107872 TOTAL:	1,745.76
107873	09/05/2023	PRTD	2638 ENVIRONMENTAL RESOURCE ASSOCIATES	051313	08/14/2023		090523	375.44
	Invoice: 051313				SETTLEABLE SOLIDS, WASTEWATER			
				375.44 701341 551000	Supplies/Material			
							CHECK 107873 TOTAL:	375.44
107874	09/05/2023	PRTD	2654 FAMCON PIPE	S100103900.001	08/15/2023	2230194	090523	36,191.99
	Invoice: S100103900.001				CLA-VAL PARTS			
				36,191.99 701 132000	Storeroom & Truck Inventory			
							CHECK 107874 TOTAL:	36,191.99
107875	09/05/2023	PRTD	2660 FISHER SCIENTIFIC	4907780	07/27/2023		090523	94.30
	Invoice: 4907780				LITHIUM BATTERY			
				94.30 701341 551000	Supplies/Material			
	Invoice: 5388984		FISHER SCIENTIFIC	5388984	08/15/2023		090523	97.34
					SODIUM NITROPRUSSIDE			
				97.34 701341 551000	Supplies/Material			
	Invoice: 5388983		FISHER SCIENTIFIC	5388983	08/15/2023		090523	111.82
					CALCIUM STANDARD			
				111.82 701341 551000	Supplies/Material			
							CHECK 107875 TOTAL:	303.46
107876	09/05/2023	PRTD	30364 GEOTAB USA, INC	IN349539	07/31/2023		090523	1,681.00
	Invoice: IN349539				PRO PLUS PLAN & SUPPORT JULY 2023			
				1,681.00 701326 622500	Radio Maintenance Expense			
							CHECK 107876 TOTAL:	1,681.00
107877	09/05/2023	PRTD	2701 GRAINGER	9773925905	07/18/2023		090523	56.03
	Invoice: 9773925905				RECLOSABLE BAGS			
				56.03 751820 541000	Supplies/Material			
	Invoice: 9791664213		GRAINGER	9791664213	08/02/2023		090523	1,050.95
					WAREHOUSE SUPPLIES			
				1,050.95 101900 572500	Genl Supplies/Small Tools			
	Invoice: 9791664221		GRAINGER	9791664221	08/02/2023		090523	113.21
					RLV FLAGS			
				113.21 751820 551800	Building Maintenance			
			GRAINGER	9794163403	08/04/2023		090523	40.46

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: 9794163403				40.46 101600 551000				
							INVOICE DTL DESC	
							STORAGE LID Supplies/Material	
							CHECK 107877 TOTAL:	1,260.65
107878	09/05/2023	PRTD	2705 HACH COMPANY	13697758	08/14/2023		090523	727.10
Invoice: 13697758				727.10 751750 541000			LAB SUPPLIES Supplies	
							CHECK 107878 TOTAL:	727.10
107879	09/05/2023	PRTD	7421 HAMNER, JEWELL AND ASSOCIATES	202871	08/16/2023		090523	1,013.00
Invoice: 202871				1,013.00 201440 900000			TWIN LAKES P/S JULY 2023 Capital Asset Expenses	
							CHECK 107879 TOTAL:	1,013.00
107880	09/05/2023	PRTD	2711 HEAL THE BAY	HTBONEWATER	08/24/2023		090523	5,000.00
Invoice: HTBONEWATER				5,000.00 701122 710500			SPONSORSHIP ONE WATER DAY 9/22/23 Dues, Subsc & Memberships	
							CHECK 107880 TOTAL:	5,000.00
107881	09/05/2023	PRTD	2727 IDEXX LABORATORIES	3134597926	08/09/2023		090523	1,757.39
Invoice: 3134597926				1,757.39 701341 551000			COLILERT Supplies/Material	
							CHECK 107881 TOTAL:	1,757.39
107882	09/05/2023	PRTD	10102 INFOSEND INC.	244684	07/31/2023		090523	7,256.63
Invoice: 244684				7,256.63 701221 622000			7/12-7/27/23 BILL PAYMENT MAILING Outside Services	
Invoice: 243460				426.62 701221 622000			07/07/2023 7/6-7/7/23 BILL PAYMENT MAILING Outside Services	426.62
							CHECK 107882 TOTAL:	7,683.25
107883	09/05/2023	PRTD	30678 ITAMAR EPSHTAIN	090247/081423	08/14/2023		090523	792.66
Invoice: 090247/081423				792.66 101 230500			RFND ON CLOSED ACCT 0000352540-090247 Deposit Refd Clearing-Billing	
							CHECK 107883 TOTAL:	792.66

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								
107884	09/05/2023	PRTD	2611 LA DWP	8512601000/082423	08/24/2023		090523	44.92
			Invoice: 8512601000/082423		RECTIFIER 7/26-8/23/23			
				44.92 101700 540510	Energy			
							CHECK 107884 TOTAL:	44.92
107885	09/05/2023	PRTD	30141 LUCIDEA TECHNOLOGIES (U.S.) CORP.	INV27441	08/09/2023	2240016	090523	2,928.00
			Invoice: INV27441		ANNUAL RENEWAL 9/1/23-8/31/24			
				2,928.00 701420 621500	System Support and Maintenance			
							CHECK 107885 TOTAL:	2,928.00
107886	09/05/2023	PRTD	30668 MAXIMUS US SERVICES INC	01-2023	08/30/2023		090523	2,499.00
			Invoice: 01-2023		MAXCARS ANNL RENWL 8/1/23-7/31/24			
				2,499.00 701420 621500	System Support and Maintenance			
							CHECK 107886 TOTAL:	2,499.00
107887	09/05/2023	PRTD	2814 MCMaster-CARR SUPPLY CO	12603383	08/14/2023		090523	458.55
			Invoice: 12603383		MISC MAINTENANCE PARTS			
				458.55 101600 541000	Supplies/Material			
			Invoice: 12682250					
			MCMaster-CARR SUPPLY CO	12682250	08/15/2023		090523	119.29
				119.29 751810 551000	ELECTRICAL SUPPLIES			
					Supplies/Material			
							CHECK 107887 TOTAL:	577.84
107888	09/05/2023	PRTD	14322 MILES CHEMICAL COMPANY, INC	693110	08/08/2023		090523	463.91
			Invoice: 693110		53 GAL SODIUM HYPOCHLORITE			
				463.91 751750 541000	Supplies			
							CHECK 107888 TOTAL:	463.91
107889	09/05/2023	PRTD	21558 MKN-MICHAEL K NUNLEY & ASSOCIATES	102913	08/10/2023		090523	5,024.99
			Invoice: 102913		CALABASAS RW PIPE IMPRVMT JULY 2023			
				5,024.99 302440 900000	Capital Asset Expenses			
							CHECK 107889 TOTAL:	5,024.99
107890	09/05/2023	PRTD	7781 NATIONAL WATER RESEARCH INSTITUTE	2023-1053	08/10/2023		090523	19,268.50
			Invoice: 2023-1053		IAP PW PROJ. PROGRESS PMT NO.1			
				19,268.50 754440 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
INVOICE DTL DESC								
							CHECK 107890 TOTAL:	19,268.50
107891	09/05/2023	PRTD	30188 IVO NKWENJI	081023	08/10/2023		090523	395.79
			Invoice: 081023				MS-ISAC EI-ISAC CONFRENCE 8/6-8/9/23 Training & Professional Devel	
				395.79 701420 683000			CHECK 107891 TOTAL:	395.79
107892	09/05/2023	PRTD	30003 NV5, INC	345761	08/14/2023		090523	1,011.10
			Invoice: 345761				INSPECTION SOIL TESTING JULY 2023 Capital Asset Expenses	
				1,011.10 301440 900000			CHECK 107892 TOTAL:	1,011.10
107893	09/05/2023	PRTD	2302 ODP BUSINESS SOLUTIONS LLC	324969436001	08/03/2023		090523	109.46
			Invoice: 324969436001				SURGE 120V 80UT Forms, Supplies And Postage	
				109.46 701410 620000			CHECK 107893 TOTAL:	273.03
			Invoice: 324752687001				08/14/2023 090523	60.20
			ODP BUSINESS SOLUTIONS LLC	324752687001	08/14/2023		090523	60.20
			Invoice: 325162460001				PENS, PAPER Forms, Supplies And Postage	
				60.20 701410 620000			CHECK 107894 TOTAL:	160,160.35
			Invoice: 325162460001				08/15/2023 090523	70.03
			ODP BUSINESS SOLUTIONS LLC	325162460001	08/15/2023		090523	70.03
			Invoice: 326301259001				HOLDER Forms, Supplies And Postage	
				70.03 701410 620000			CHECK 107895 TOTAL:	3,669.00
			Invoice: 326301259001				08/14/2023 090523	33.34
			ODP BUSINESS SOLUTIONS LLC	326301259001	08/14/2023		090523	33.34
				33.34 701410 620000			POST-ITS, MARKERS, HIGHLIGHTERS Forms, Supplies And Postage	
107894	09/05/2023	PRTD	21659 ONTARIO REFRIGERATION SERVICE, IN	GW27321	07/31/2023		090523	7,486.35
			Invoice: GW27321				REPAIR HVAC LS #2 7/26/23 Outside Services	
				7,486.35 130100 551500			CHECK 107894 TOTAL:	160,160.35
			Invoice: PRJ23024-02				08/17/2023 090523	152,674.00
			ONTARIO REFRIGERATION SERVICE, IN	PRJ23024-02	08/17/2023		090523	152,674.00
				152,674.00 754440 900000			RPLC RANCHO HVAC Capital Asset Expenses	
107895	09/05/2023	PRTD	18946 PACIFIC ADVANCED CIVIL ENGINEERIN	7528	07/31/2023		090523	3,669.00
			Invoice: 7528				TAPIA CLARIFIER REHAB JULY 2023 Capital Asset Expenses	
				3,669.00 754440 900000			CHECK 107895 TOTAL:	3,669.00

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
INVOICE DTL DESC								
							CHECK 107895 TOTAL:	3,669.00
107896	09/05/2023	PRTD	30458 PIONEER AMERICAS, LLC 10728	900313134	08/17/2023		090523	10,581.31
			Invoice: 900313134		4,926 GAL SODIUM HYPOCHLORITE			
				10,581.31 751810 541014	Sodium Hypochlorite			
							CHECK 107896 TOTAL:	10,581.31
107897	09/05/2023	PRTD	30155 LEN POLAN	082323	08/23/2023		090523	1,171.23
			Invoice: 082323		CASA CONFRENCE 8/8-8/11/23			
				1,171.23 701112 601000	Directors' Conference Exp			
							CHECK 107897 TOTAL:	1,171.23
107898	09/05/2023	PRTD	18505 RAFTELIS FINANCIAL CONSULTANTS, I 29611		08/10/2023		090523	7,041.25
			Invoice: 29611		CAPACITY FEE STUDY JULY 2023			
				3,520.63 101001 862500	Other Non-Operating Expense			
				3,520.62 130001 862500	Other Non-Operating Expense			
							CHECK 107898 TOTAL:	7,041.25
107899	09/05/2023	PRTD	21594 RECYCLED WOOD PRODUCTS	244736	08/15/2023		090523	1,924.00
			Invoice: 244736		130 YD WOODCHIPS			
				1,924.00 751820 541080	Amendment			
			Invoice: 244787		130 YD WOODCHIPS		090523	1,924.00
				1,924.00 751820 541080	Amendment			
							CHECK 107899 TOTAL:	3,848.00
107900	09/05/2023	PRTD	4586 ROYAL INDUSTRIAL SOLUTIONS	9009-1038250	08/16/2023		090523	210.57
			Invoice: 9009-1038250		SELF TEST GF RCPT			
				210.57 751810 551000	Supplies/Material			
			Invoice: 9009-1038172		08/14/2023		090523	249.92
				249.92 101200 551000	ELECTRICAL SUPPLIES			
					Supplies/Material			
			Invoice: 9009-1038302		08/17/2023		090523	115.80
				115.80 701001 551000	DIMMER CONTROL			
					Supplies/Material			
							CHECK 107900 TOTAL:	576.29

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
107901	09/05/2023	PRTD	20583 RT LAWRENCE CORPORATION	48362	08/17/2023		090523	764.39
			Invoice: 48362					
				764.39 701221 622000			LOCKBOX FEES JULY 2023 Outside Services	
							CHECK 107901 TOTAL:	764.39
107902	09/05/2023	PRTD	20779 SAND MATERIALS & AGGREGATE SALES, 86115		08/14/2023		090523	3,470.79
			Invoice: 86115					
				3,470.79 101700 551000			4 DELIVERIES OF AGGREGATE AUGUST 2023 Supplies/Material	
							CHECK 107902 TOTAL:	3,470.79
107903	09/05/2023	PRTD	2952 SHI INTERNATIONAL CORP	B-23688585	07/20/2023	2240007	090523	13,252.43
			Invoice: B-23688585					
				13,252.43 701420 543000			5 LAPTOPS Capital outlay	
							CHECK 107903 TOTAL:	13,252.43
107904	09/05/2023	PRTD	2948 SMITH PIPE & SUPPLY	4055750	08/09/2023		090523	76.65
			Invoice: 4055750					
				76.65 101800 664000			50 GAL RAIN BARREL PROMO Rain Barrel Program	
			Invoice: 4057469					
			SMITH PIPE & SUPPLY	4057469	08/14/2023		090523	46.13
				46.13 101600 551800			CNSRVTN SUPPLIES Building Maintenance	
							CHECK 107904 TOTAL:	122.78
107905	09/05/2023	PRTD	30117 SOUTHERN CALIFORNIA NEWS GROUP	0000570446	07/31/2023		090523	525.00
			Invoice: 0000570446					
				525.00 101900 660400			DIGITAL AD - JULY 2023 Public Education Programs	
							CHECK 107905 TOTAL:	525.00
107906	09/05/2023	PRTD	2957 SOUTHERN CALIFORNIA EDISON (M-BIL 57161/082223	57161/082223	08/22/2023		090523	68,517.83
			Invoice: 57161/082223					
				68,517.83 751820 540510			RLV COMPOST PLNT 7/24-8/21/23 256,604 KH Energy	
			Invoice: 77683/082423					
			SOUTHERN CALIFORNIA EDISON (M-BIL 77683/082423	77683/082423	08/24/2023		090523	15.65
				15.65 751750 540510			BLDG 1 EV-PEP 7/24-8/21/23 OKH Energy	
			Invoice: 75690/082423					
			SOUTHERN CALIFORNIA EDISON (M-BIL 75690/082423	75690/082423	08/24/2023		090523	3,582.83
				3,582.83 751750 540510			BLDG 1 HM-PWP 7/24-8/21/23 16,766.8 KH Energy	

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 107906 TOTAL:	72,116.31
107907	09/05/2023	PRTD	2958 SOUTHERN CALIFORNIA GAS CO (M-bil	06871284003/082223	08/22/2023		090523	26.55
			Invoice: 06871284003/082223		CONDUIT 7/20-8/18/23 7 THERMS			
			26.55 101101 540530		Gas			
							CHECK 107907 TOTAL:	26.55
107908	09/05/2023	PRTD	3789 T & T TRUCK & CRANE SERVICE	0163702-IN	07/31/2023	2240030	090523	2,637.00
			Invoice: 0163702-IN		CRANE SERVICE INSTL AC UNIT AT RLV 7/20/23			
			2,637.00 751820 551500		Outside Services			
							CHECK 107908 TOTAL:	2,637.00
107909	09/05/2023	PRTD	30534 TAIT ENVIRONMENTAL SERVICES, INC.	000000951819	07/31/2023		090523	155.00
			Invoice: 000000951819		INSPECTION 7/12/23			
			155.00 701325 551500		Outside Services			
							CHECK 107909 TOTAL:	155.00
107910	09/05/2023	PRTD	12149 THATCHER CO. OF CALIFORNIA	2023250111530	08/08/2023		090523	12,375.00
			Invoice: 2023250111530		45,000 LBS SODIUM BISULFITE			
			12,375.00 751810 541011		Sodium Bisulfite			
							CHECK 107910 TOTAL:	12,375.00
107911	09/05/2023	PRTD	9505 TIRE MAN AGOURA	2119589	08/21/2023		090523	1,398.00
			Invoice: 2119589		TIRE SVC #929			
			1,398.00 701325 551500		Outside Services			
							CHECK 107911 TOTAL:	1,398.00
107912	09/05/2023	PRTD	18651 TOYOTA-LIFT OF LOS ANGELES	PSI-0370489	08/11/2023		090523	95.00
			Invoice: PSI-0370489		SERVICE CART #304			
			95.00 751810 551500		Outside Services			
			Invoice: PSI-0370488	TOYOTA-LIFT OF LOS ANGELES	PSI-0370488	08/11/2023	090523	95.00
			95.00 751810 551500		SERVICE FORKLIFT #306			
					Outside Services			
			Invoice: PSI-0370487	TOYOTA-LIFT OF LOS ANGELES	PSI-0370487	08/11/2023	090523	194.55
			194.55 751810 551500		SERVICE FORKLIFT #305			
					Outside Services			
			Invoice: PSI-0370360	TOYOTA-LIFT OF LOS ANGELES	PSI-0370360	08/10/2023	090523	95.00
					SERVICE CART #708			

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			
				95.00 751820 551500	Outside Services			
Invoice: PSI-0370359			TOYOTA-LIFT OF LOS ANGELES	PSI-0370359	08/10/2023		090523	95.00
				95.00 751820 551500	SERVICE CART #712			
					Outside Services			
Invoice: PSI-0370353			TOYOTA-LIFT OF LOS ANGELES	PSI-0370353	08/10/2023		090523	145.00
				145.00 701002 551500	SERVICE FORKLIFT #134			
					Outside Services			
Invoice: PSI-0370352			TOYOTA-LIFT OF LOS ANGELES	PSI-0370352	08/10/2023		090523	194.55
				194.55 751820 551500	SERVICE FORKLIFT #723			
					Outside Services			
							CHECK 107912 TOTAL:	914.10
107913	09/05/2023	PRTD	8764 UNITED IMAGING	5503347	08/17/2023	2240025	090523	275.90
			Invoice: 5503347					
				275.90 101900 541000	TONER CARTRIDGES			
					Supplies/Material			
							CHECK 107913 TOTAL:	275.90
107914	09/05/2023	PRTD	2780 VALLEY NEWS GROUP	8-18	08/18/2023		090523	250.00
			Invoice: 8-18					
				250.00 101900 660400	DISPLAY AD - PODCAST 8/18/23			
					Public Education Programs			
							CHECK 107914 TOTAL:	250.00
107915	09/05/2023	PRTD	18604 VENTURA PEST CONTROL	882025	08/09/2023		090523	148.00
			Invoice: 882025					
				148.00 751810 551500	WASP TREATMENT			
					Outside Services			
Invoice: 882630			VENTURA PEST CONTROL	882630	08/15/2023		090523	450.00
				450.00 701001 551500	RODENT TRAPPING BLDG#1			
					Outside Services			
							CHECK 107915 TOTAL:	598.00
107916	09/05/2023	PRTD	30645 VITAL COATINGS INC	253	08/15/2023		090523	24,380.00
			Invoice: 253					
				24,380.00 301440 900000	POTABLE SYSTEM COATINGS 8/11/23			
					Capital Asset Expenses			
							CHECK 107916 TOTAL:	24,380.00
107917	09/05/2023	PRTD	30464 VOX CIVIC COMMUNICATIONS	1632	08/15/2023		090523	12,500.00
			Invoice: 1632					
				12,500.00 101900 660400	2023 VENTURA/NORTH SPECIAL INSERT			
					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	
CHECK 107917 TOTAL: 12,500.00									
107918	09/05/2023	PRTD	3035 VWR SCIENTIFIC	8813700396	08/09/2023		090523	628.11	
				628.11 701341 551000	AUTOMATIC PIPE DEVICE Supplies/Material				
			VWR SCIENTIFIC	8813707116	08/09/2023		090523	1,102.25	
				1,102.25 701341 551000	LAURYL TRYPTOE BROTH Supplies/Material				
CHECK 107918 TOTAL: 1,730.36									
107919	09/05/2023	PRTD	19685 W. LITTEN INC.	23033	08/12/2023		090523	6,824.95	
				6,824.95 751810 678800	SPRAYFIELD 8/6-8/12/23 District Sprayfield				
CHECK 107919 TOTAL: 6,824.95									
107920	09/05/2023	PRTD	3025 WATER & SANITATION SRV./VENTURA C	2628030	08/23/2023		090523	23,804.01	
				23,804.01 101001 510500	PCH WATER 7/18-8/15/23 Purch Water-Ventura County				
CHECK 107920 TOTAL: 23,804.01									
107921	09/05/2023	PRTD	18914 WECK LABORATORIES, INC.	W3G2344	07/21/2023		090523	272.31	
				272.31 751820 571520	COMPOST INPUT MIX C/N RATIO Other Laboratory Serv				
			WECK LABORATORIES, INC.	W3H0602	08/08/2023		090523	276.91	
				276.91 751810 571520	TAPIA EFFLNT NON NPDES SEMI-ANLN COMP. Other Laboratory Serv				
CHECK 107921 TOTAL: 549.22									
NUMBER OF CHECKS						61	*** CASH ACCOUNT TOTAL ***		471,852.69
TOTAL PRINTED CHECKS					COUNT	61	AMOUNT	471,852.69	
*** GRAND TOTAL ***								471,852.69	

A/P CASH DISBURSEMENTS JOURNAL

JOURNAL ENTRIES TO BE CREATED

CLERK: 3296tchau

YEAR	PER	JNL	SRC	ACCOUNT	JNL	DESC	REF 1	REF 2	REF 3	ACCOUNT	DESC	T	OB	DEBIT	CREDIT
			EFF	DATE						LINE	DESC				
2024	3	10													
APP	701-200000			09/05/2023	090523		090523				Accounts Payable			90,797.51	
											AP CASH DISBURSEMENTS JOURNAL				
APP	999-100100			09/05/2023	090523		090523				Cash-General				471,852.69
											AP CASH DISBURSEMENTS JOURNAL				
APP	101-200000			09/05/2023	090523		090523				Accounts Payable			48,123.12	
											AP CASH DISBURSEMENTS JOURNAL				
APP	301-200000			09/05/2023	090523		090523				Accounts Payable			28,461.60	
											AP CASH DISBURSEMENTS JOURNAL				
APP	751-200000			09/05/2023	090523		090523				Accounts Payable			111,814.00	
											AP CASH DISBURSEMENTS JOURNAL				
APP	201-200000			09/05/2023	090523		090523				Accounts Payable			1,013.00	
											AP CASH DISBURSEMENTS JOURNAL				
APP	302-200000			09/05/2023	090523		090523				Accounts Payable			5,024.99	
											AP CASH DISBURSEMENTS JOURNAL				
APP	754-200000			09/05/2023	090523		090523				Accounts Payable			175,611.50	
											AP CASH DISBURSEMENTS JOURNAL				
APP	130-200000			09/05/2023	090523		090523				Accounts Payable			11,006.97	
											AP CASH DISBURSEMENTS JOURNAL				
GENERAL LEDGER TOTAL														471,852.69	471,852.69
APP	999-207010			09/05/2023	090523		090523				Due to/Due FromInternal Svs			90,797.51	
APP	701-100100			09/05/2023	090523		090523				Cash-General				90,797.51
APP	999-201010			09/05/2023	090523		090523				Due to/Due Frm Potable Wtr Ops			48,123.12	
APP	101-100100			09/05/2023	090523		090523				Cash-General				48,123.12
APP	999-203010			09/05/2023	090523		090523				Due to/Due FrmPotable Wtr Repl			28,461.60	
APP	301-100100			09/05/2023	090523		090523				Cash-General				28,461.60
APP	999-207510			09/05/2023	090523		090523				Due to/Due FromJPA Operations			111,814.00	
APP	751-100100			09/05/2023	090523		090523				Cash-General				111,814.00
APP	999-202010			09/05/2023	090523		090523				Due to/Due FrmPotable Wtr Cnst			1,013.00	
APP	201-100100			09/05/2023	090523		090523				Cash-General				1,013.00
APP	999-203020			09/05/2023	090523		090523				Due to/Due FrmRec1 Wtr Repl			5,024.99	
APP	302-100100			09/05/2023	090523		090523				Cash-General				5,024.99
APP	999-207540			09/05/2023	090523		090523				Due to/Due FromJPA Replacement			175,611.50	

A/P CASH DISBURSEMENTS JOURNAL
JOURNAL ENTRIES TO BE CREATED

YEAR PER	JNL									
SRC ACCOUNT	EFF DATE	JNL DESC	REF 1	REF 2	REF 3	ACCOUNT DESC	T	OB	DEBIT	CREDIT
						LINE DESC				
	09/05/2023	090523	090523							
APP 754-100100						Cash-General				175,611.50
	09/05/2023	090523	090523							
APP 999-201300						Due to/Due FrmSanitation Ops			11,006.97	
	09/05/2023	090523	090523							
APP 130-100100						Cash-General				11,006.97
	09/05/2023	090523	090523							
SYSTEM GENERATED ENTRIES TOTAL									471,852.69	471,852.69
JOURNAL 2024/03/10 TOTAL									943,705.38	943,705.38

A/P CASH DISBURSEMENTS JOURNAL
JOURNAL ENTRIES TO BE CREATED

FUND ACCOUNT	YEAR PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
101 Potable Water Operations 101-100100 101-200000	2024 3	10	09/05/2023	Cash-General Accounts Payable	48,123.12	48,123.12
				FUND TOTAL	48,123.12	48,123.12
130 Sanitation Operations 130-100100 130-200000	2024 3	10	09/05/2023	Cash-General Accounts Payable	11,006.97	11,006.97
				FUND TOTAL	11,006.97	11,006.97
201 Potable Water Construction 201-100100 201-200000	2024 3	10	09/05/2023	Cash-General Accounts Payable	1,013.00	1,013.00
				FUND TOTAL	1,013.00	1,013.00
301 Potable Wtr Replacement Fund 301-100100 301-200000	2024 3	10	09/05/2023	Cash-General Accounts Payable	28,461.60	28,461.60
				FUND TOTAL	28,461.60	28,461.60
302 Recycled Water Replacement 302-100100 302-200000	2024 3	10	09/05/2023	Cash-General Accounts Payable	5,024.99	5,024.99
				FUND TOTAL	5,024.99	5,024.99
701 Internal Service Fund 701-100100 701-200000	2024 3	10	09/05/2023	Cash-General Accounts Payable	90,797.51	90,797.51
				FUND TOTAL	90,797.51	90,797.51
751 JPA Operations 751-100100 751-200000	2024 3	10	09/05/2023	Cash-General Accounts Payable	111,814.00	111,814.00
				FUND TOTAL	111,814.00	111,814.00
754 JPA Replacement 754-100100 754-200000	2024 3	10	09/05/2023	Cash-General Accounts Payable	175,611.50	175,611.50
				FUND TOTAL	175,611.50	175,611.50
999 Pooled Cash	2024 3	10	09/05/2023			

A/P CASH DISBURSEMENTS JOURNAL
 JOURNAL ENTRIES TO BE CREATED

FUND	YEAR PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
999-100100				Cash-General		471,852.69
999-201010				Due to/Due Frm Potable Wtr Ops	48,123.12	
999-201300				Due to/Due FrmSanitation Ops	11,006.97	
999-202010				Due to/Due FrmPotable wtr Cnst	1,013.00	
999-203010				Due to/Due FrmPotable wtr Repl	28,461.60	
999-203020				Due to/Due FrmRecl wtr Repl	5,024.99	
999-207010				Due to/Due FromInternal Sys	90,797.51	
999-207510				Due to/Due FromJPA Operations	111,814.00	
999-207540				Due to/Due FromJPA Replacement	175,611.50	
				FUND TOTAL	471,852.69	471,852.69

A/P CASH DISBURSEMENTS JOURNAL
 JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FR
101	Potable Water Operations		48,123.12
130	Sanitation Operations		11,006.97
201	Potable Water Construction		1,013.00
301	Potable Wtr Replacement Fund		28,461.60
302	Recycled Water Replacement		5,024.99
701	Internal Service Fund		90,797.51
751	JPA Operations		111,814.00
754	JPA Replacement		175,611.50
999	Pooled Cash		
		471,852.69	
TOTAL		471,852.69	471,852.69

** 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
107628	08/01/2023	VOID	11410 LOS ANGELES COUNTY-REGIONAL PLANN	00339201A	06/08/2023			-3,632.00
			Invoice: 00339201A					
				-3,632.00 754440 900000				
							RE-ISSUE REPORTS REVIEW BY LA COUNTY FIRE/FORESTRY Capital Asset Expenses	
							CHECK 107628 TOTAL:	-3,632.00
				NUMBER OF CHECKS	1		*** CASH ACCOUNT TOTAL ***	-3,632.00
				TOTAL VOIDED CHECKS		COUNT	AMOUNT	
						1	3,632.00	
							*** GRAND TOTAL ***	-3,632.00

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	3	37	APP	754-200000	09/06/2023	107628	090623			Accounts Payable					3,632.00
			APP	999-100100	09/06/2023	107628	090623			AP CASH DISBURSEMENTS JOURNAL				3,632.00	
										Cash-General					
										AP CASH DISBURSEMENTS JOURNAL					
										GENERAL LEDGER TOTAL				3,632.00	3,632.00
			APP	999-207540	09/06/2023	080123	090623			Due to/Due FromJPA Replacement					3,632.00
			APP	754-100100	09/06/2023	080123	090623			Cash-General				3,632.00	
										SYSTEM GENERATED ENTRIES TOTAL				3,632.00	3,632.00
										JOURNAL 2024/03/37				7,264.00	7,264.00
										TOTAL					

A/P CASH DISBURSEMENTS JOURNAL

JOURNAL ENTRIES TO BE CREATED

FUND	ACCOUNT	YEAR	PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
754	JPA Replacement 754-100100 754-200000	2024	3	37	09/06/2023	Cash-General	3,632.00	
						Accounts Payable		3,632.00
						FUND TOTAL	3,632.00	3,632.00
999	Pooled Cash 999-100100 999-207540	2024	3	37	09/06/2023	Cash-General	3,632.00	
						Due to/Due From JPA Replacement		3,632.00
						FUND TOTAL	3,632.00	3,632.00

A/P CASH DISBURSEMENTS JOURNAL

JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FR
754	JPA Replacement		3,632.00
999	Pooled Cash		
		3,632.00	
TOTAL		3,632.00	3,632.00

** 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
107922	09/12/2023	PRTD	19269 ACC BUSINESS	232264775	08/27/2023		091223	1,870.47
			Invoice: 232264775					
				187.05 101600 540520				
				561.14 751810 540520				
				187.05 751820 540520				
				467.62 701001 540520				
				467.61 701002 540520				
							CHECK 107922 TOTAL:	1,870.47
107923	09/12/2023	PRTD	20389 AIRGAS SPECIALTY PRODUCTS	9141167956	08/16/2023		091223	7,959.15
			Invoice: 9141167956					
				7,959.15 751810 541013				
							CHECK 107923 TOTAL:	7,959.15
107924	09/12/2023	PRTD	30314 ALLIANCE SOURCE TESTING LLC	INV21909	08/28/2023		091223	1,200.00
			Invoice: INV21909					
				1,200.00 751820 571520				
							CHECK 107924 TOTAL:	1,200.00
107925	09/12/2023	PRTD	2869 AT&T	21506905/082023	08/20/2023		091223	52.72
			Invoice: 21506905/082023					
				52.72 101106 540520				
							CHECK 107925 TOTAL:	52.72
107926	09/12/2023	PRTD	7770 AUTOMATIONDIRECT.COM	15470591	08/18/2023		091223	768.69
			Invoice: 15470591					
				768.69 101100 551000				
							CHECK 107926 TOTAL:	935.13
			Invoice: 15470872					
				166.44 101100 551000				
							CHECK 107926 TOTAL:	935.13
107927	09/12/2023	PRTD	20491 BEST BEST & KRIEGER LLP	973483	08/30/2023		091223	8,180.00
			Invoice: 973483					
				8,180.00 751840 651600				
							CHECK 107927 TOTAL:	8,180.00

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
107934	09/12/2023	PRTD	16364 D&H WATER SYSTEMS INC.	12023-1164	08/16/2023		091223	1,432.84
			Invoice: 12023-1164					
				1,432.84 101600 541000				
							SPARE PUMP TUBES Supplies/Material	
							CHECK 107934 TOTAL:	1,432.84
107935	09/12/2023	PRTD	30593 DION & SONS, INC	V201297	08/17/2023		091223	1,781.11
			Invoice: V201297					
				1,781.11 751830 541010				
							398 GAL RED DYE DIESEL - RANCHO Fuel	
			Invoice: V201296					
			DION & SONS, INC	V201296	08/17/2023		091223	1,141.96
				1,141.96 751820 541010				
							253 GAL RED DYE DIESEL - RANCHO Fuel	
							CHECK 107935 TOTAL:	2,923.07
107936	09/12/2023	PRTD	30486 EIDE BAILLY LLP	EI01552422	08/30/2023		091223	4,106.25
			Invoice: EI01552422					
				4,106.25 701410 652200				
							VULNERBILITY & PENETRATION TEST 8/2-8/26/23 Mgmt Consultant Fees	
							CHECK 107936 TOTAL:	4,106.25
107937	09/12/2023	PRTD	30683 EMANUEL ALLEN	002378/083123	08/31/2023		091223	199.59
			Invoice: 002378/083123					
				199.59 101 230500				
							RFND FINAL CR BAL. 0000270354-002378 Deposit Refd Clearing-Billing	
							CHECK 107937 TOTAL:	199.59
107938	09/12/2023	PRTD	14591 EMISSION COMPLIANT CONTROLS CORP.	PS05741	08/23/2023		091223	2,160.00
			Invoice: PS05741					
				2,160.00 101100 551500				
							EMISSION TEST 8/22/23 Outside Services	
							CHECK 107938 TOTAL:	2,160.00
107939	09/12/2023	PRTD	2654 FAMCON PIPE	S100108344.001	08/22/2023	2240024	091223	1,483.73
			Invoice: S100108344.001					
				1,483.73 101900 572500				
							NUTS & BOLTS Genl Supplies/Small Tools	
			Invoice: S100109154.001					
			FAMCON PIPE	S100109154.001	08/24/2023	2240026	091223	266.09
				266.09 701 132000				
							CLA-VAL O-RING Storeroom & Truck Inventory	
			Invoice: S100108344.002					
			FAMCON PIPE	S100108344.002	08/24/2023	2240024	091223	271.56
				271.56 101900 572500				
							NUTS & BOLTS Genl Supplies/Small Tools	

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 107944 TOTAL:	16,329.00
107945	09/12/2023	PRTD	3038 LARRY WALKER & ASSOC	00532.03-11	08/16/2023		091223	1,677.50
			Invoice: 00532.03-11		JULY 2023 CHLORIDE SSO DEVELOP			
				1,677.50 751810 542500	Consulting Services			
							CHECK 107945 TOTAL:	1,677.50
107946	09/12/2023	PRTD	30636 LEISURE KRAFT PONTUNES INC.	9019	08/22/2023	2240035	091223	3,422.00
			Invoice: 9019		PONTOON BOAT TRAILER			
				3,422.00 101600 541000	Supplies/Material			
			Invoice: 8925A		06/06/2023 2230195		091223	35,598.00
				35,598.00 101600 541000	FINAL PAYMENT FOR REPLACEMENT BOAT			
					Supplies/Material			
							CHECK 107946 TOTAL:	39,020.00
107947	09/12/2023	PRTD	2789 LIEBERT CASSIDY WHITMORE	247484	07/31/2023		091223	2,046.50
			Invoice: 247484		LEGAL SERVICES			
				2,046.50 701430 650000	Legal Services			
			Invoice: 247486		07/31/2023		091223	4,035.00
				4,035.00 701430 650000	LEGAL SERVICES			
					Legal Services			
							CHECK 107947 TOTAL:	6,081.50
107948	09/12/2023	PRTD	20841 LIGHTHOUSE SERVICES, INC.	1045342	08/18/2023		091223	638.55
			Invoice: 1045342		COMPLIANCE HOTLINE ANNL FEE 9/1/23-9/1/24			
				638.55 701410 622000	Outside Services			
							CHECK 107948 TOTAL:	638.55
107949	09/12/2023	PRTD	8484 LINDE GAS AND EQUIPMENT, INC	37773647	08/21/2023		091223	118.28
			Invoice: 37773647		CYLINDER RENT 7/20-8/20/23			
				118.28 101100 541000	Supplies/Material			
							CHECK 107949 TOTAL:	118.28
107950	09/12/2023	PRTD	11410 LOS ANGELES COUNTY-REGIONAL PLANN	00339201A	06/08/2023		091223	3,632.00
			Invoice: 00339201A		RE-ISSUE REPORTS REVIEW BY LA COUNTY FIRE/FORESTRY			
				3,632.00 754440 900000	Capital Asset Expenses			

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 107950 TOTAL:	3,632.00
107951 09/12/2023 PRTD 3514 LOS ANGELES COUNTY, REGISTRAR-REC 10740/NOE	09/05/2023		091223	75.00
Invoice: 10740/NOE CHRG STNS	75.00 301440 900000	CHRG STNS	CHARGING STATIONS NOTICE OF EXEMPTN FILNG FEE	
			Capital Asset Expenses	
			CHECK 107951 TOTAL:	75.00
107952 09/12/2023 PRTD 2814 MCMASTER-CARR SUPPLY CO	08/18/2023		091223	147.75
Invoice: 12904004	147.75 751100 551000	SCREWS	Supplies/Material	
			CHECK 107952 TOTAL:	147.75
107953 09/12/2023 PRTD 3605 MITCHELL INSTRUMENT CO.	06/22/2023		091223	960.04
Invoice: 8004759120	960.04 701326 572500	PROCESS CLAMP METER	Genl Supplies/Small Tools	
			CHECK 107953 TOTAL:	960.04
107954 09/12/2023 PRTD 2302 ODP BUSINESS SOLUTIONS LLC	08/16/2023		091223	27.19
Invoice: 324780851001	27.19 701410 620000	NAME SIGN	Forms, Supplies And Postage	
Invoice: 326300731001	27.19 701410 620000	NAME SIGN	Forms, Supplies And Postage	
Invoice: 325574266001	105.27 701410 620000	LABELS DATER	Forms, Supplies And Postage	
Invoice: 328995468001	22.82 701410 620000	PAD, PENS	Forms, Supplies And Postage	
			CHECK 107954 TOTAL:	182.47
107955 09/12/2023 PRTD 3110 GLEN PETERSON	09/05/2023		091223	1,100.00
Invoice: 57	1,100.00 701112 651600	MWD REP FEES - AUGUST 2023	Other Professional Serv	
			CHECK 107955 TOTAL:	1,100.00

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
INVOICE DTL DESC								
107956	09/12/2023	PRTD	30458 PIONEER AMERICAS, LLC	10728 900311950	08/15/2023		091223	10,254.80
				10,254.80 751810 541014	4,774 GAL SODIUM HYPOCHLORITE			
					Sodium Hypochlorite			
			30458 PIONEER AMERICAS, LLC	10728 900315724	08/24/2023		091223	9,734.98
				9,734.98 751810 541014	4,532 GAL SODIUM HYPOCHLORITE			
					Sodium Hypochlorite			
							CHECK 107956 TOTAL:	19,989.78
107957	09/12/2023	PRTD	30644 PRECISION PAINTING AND RECONSTRUC	2023-13412-F1	08/28/2023		091223	10,200.00
				3,800.00 701001 551500	DISTRICT PAINTING PROJECT			
				3,600.00 701002 551500	Outside Services			
				2,800.00 751820 551500	Outside Services			
							CHECK 107957 TOTAL:	10,200.00
107958	09/12/2023	PRTD	21594 RECYCLED WOOD PRODUCTS	245181	08/25/2023		091223	1,924.00
				1,924.00 751820 541080	130 YD WOODCHIPS			
					Amendment			
			21594 RECYCLED WOOD PRODUCTS	245005	08/21/2023		091223	1,924.00
				1,924.00 751820 541080	130 YD WOODCHIPS			
					Amendment			
							CHECK 107958 TOTAL:	3,848.00
107959	09/12/2023	PRTD	17326 RINCON CONSULTANTS, INC.	50417	08/18/2023		091223	10,840.76
				6,504.46 751840 651600	CLIMATE ACTN & ADAPTN PLN JULY 2023			
				4,336.30 701122 651600	Other Professional Serv			
					Other Professional Serv			
			17326 RINCON CONSULTANTS, INC.	48191	05/19/2023		091223	14,344.75
				8,606.85 751840 651600	CLIMATE ACTN & ADPTN PLN APRIL 2023			
				5,737.90 701122 651600	Other Professional Serv			
					Other Professional Serv			
			17326 RINCON CONSULTANTS, INC.	49736	07/21/2023		091223	9,613.25
				5,767.95 751840 651600	CLIMATE ACTN & ADAPTN PLN JUNE 2023			
				3,845.30 701122 651600	Other Professional Serv			
					Other Professional Serv			
							CHECK 107959 TOTAL:	34,798.76

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
107960	09/12/2023	PRTD	30621 RINGCENTRAL, INC.	CD_000643169	08/18/2023		091223	3,972.96
			Invoice: CD_000643169					
				3,972.96 701420 621500			MONTHLY SUBSCRIPTION 8/17-9/16/23 System Support and Maintenance	
							CHECK 107960 TOTAL:	3,972.96
107961	09/12/2023	PRTD	20779 SAND MATERIALS & AGGREGATE SALES, 86249		08/18/2023		091223	983.82
			Invoice: 86249					
				983.82 101700 551000			25.86 TONS CRUSHED AGGREGATE Supplies/Material	
							CHECK 107961 TOTAL:	983.82
107962	09/12/2023	PRTD	2948 SMITH PIPE & SUPPLY	4062401	08/29/2023		091223	76.65
			Invoice: 4062401					
				76.65 101800 664000			50 GAL RAIN BARREL PROMO Rain Barrel Program	
			SMITH PIPE & SUPPLY	4060799	08/24/2023		091223	76.65
			Invoice: 4060799					
				76.65 101800 664000			50 GAL RAIN BARREL PROMO Rain Barrel Program	
							CHECK 107962 TOTAL:	153.30
107963	09/12/2023	PRTD	2957 SOUTHERN CALIFORNIA EDISON (M-BIL 90504/082523	90504/082523	08/25/2023		091223	1,395.33
			Invoice: 90504/082523					
				1,395.33 751810 678800			N.CYN P/S 5/30-6/27/23 1,908KH District Sprayfield	
							CHECK 107963 TOTAL:	1,395.33
107964	09/12/2023	PRTD	2958 SOUTHERN CALIFORNIA GAS CO (M-bil 05721104007/090623	05721104007/090623	09/06/2023		091223	5,175.77
			Invoice: 05721104007/090623					
				5,175.77 101110 540530			CORNELL 8/4-9/1/23 3,816 THERMS Gas	
			SOUTHERN CALIFORNIA GAS CO (M-bil 03001136005/090623	03001136005/090623	09/06/2023		091223	1,316.41
			Invoice: 03001136005/090623					
				987.31 701001 540530			HQ & OPS 8/3-9/1/23 896 THERMS Gas	
				329.10 701002 540530			Gas	
			SOUTHERN CALIFORNIA GAS CO (M-bil 18121142006/090623	18121142006/090623	09/06/2023		091223	492.46
			Invoice: 18121142006/090623					
				492.46 751820 540530			RANCHO 8/3-9/1/23 255 THERMS Gas	
			SOUTHERN CALIFORNIA GAS CO (M-bil 01951140001/090623	01951140001/090623	09/06/2023		091223	304.66
			Invoice: 01951140001/090623					
				304.66 751810 540530			TAPIA 8/3-9/1/23 162 THERMS Gas	
			SOUTHERN CALIFORNIA GAS CO (M-bil 06551212001/090123	06551212001/090123	09/01/2023		091223	14.30
			Invoice: 06551212001/090123					
							JBR P/S 8/1-8/30/23 0 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
				14.30 101109 540530				
					Gas			
							CHECK 107964 TOTAL:	7,303.60
107965	09/12/2023	PRTD	8645 SOUTHERN CALIFORNIA TROPHY COMPAN	070170-23	07/27/2023		091223	245.74
			Invoice: 070170-23					
				245.74 701430 681500				
					EMPLOYEE ANNIVERSARY GIFTS			
					Empl Recognition Functions			
			Invoice: 080107-23					
			SOUTHERN CALIFORNIA TROPHY COMPAN	080107-23	08/14/2023		091223	305.20
				305.20 701430 681500				
					EMPLOYEE ANNIVERSARY GIFTS			
					Empl Recognition Functions			
							CHECK 107965 TOTAL:	550.94
107966	09/12/2023	PRTD	14479 STEPHEN'S VIDEO PRODUCTIONS	8-29-23	08/29/2023		091223	700.00
			Invoice: 8-29-23					
				700.00 751840 651600				
					VIDEO SRV - JPA MTGS AUGUST 2023			
					Other Professional Serv			
							CHECK 107966 TOTAL:	700.00
107967	09/12/2023	PRTD	30670 SYRUS DEVERS ADVOCACY LLC	1003	09/01/2023		091223	5,730.00
			Invoice: 1003					
				5,730.00 751840 651600				
					CLIENT SVCS 8/1-8/31/23			
					Other Professional Serv			
							CHECK 107967 TOTAL:	5,730.00
107968	09/12/2023	PRTD	3789 T & T TRUCK & CRANE SERVICE	0163703-IN	07/31/2023	2240031	091223	4,277.50
			Invoice: 0163703-IN					
				4,277.50 751810 551500				
					CRANE SVC RAISE AERATION DIFFUSERS-TAPIA 7/19/23			
					Outside Services			
							CHECK 107968 TOTAL:	4,277.50
107969	09/12/2023	PRTD	30534 TAIT ENVIRONMENTAL SERVICES, INC.	000000952176	08/13/2023		091223	155.00
			Invoice: 000000952176					
				155.00 701325 551500				
					INSPECTION 8/7/23			
					Outside Services			
							CHECK 107969 TOTAL:	155.00
107970	09/12/2023	PRTD	30682 TALLEY, INC.	10438352	08/23/2023		091223	72.13
			Invoice: 10438352					
				72.13 101200 551000				
					ANTENNA MOUNTING BRACKET			
					Supplies/Material			
			Invoice: 10438274					
			TALLEY, INC.	10438274	08/22/2023		091223	394.96
				394.96 101200 551000				
					ANTENNA MOUNTING BRACKET			
					Supplies/Material			

A/P CASH DISBURSEMENTS JOURNAL

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

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
INVOICE DTL DESC								
							CHECK 107970 TOTAL:	467.09
107971	09/12/2023	PRTD	8764 UNITED IMAGING	5504323	08/24/2023	2240029	091223	216.74
			Invoice: 5504323				TONER CARTRIDGES	
				216.74	101900	572500	Genl Supplies/Small Tools	
							CHECK 107971 TOTAL:	216.74
107972	09/12/2023	PRTD	2325 UNITED RENTALS, INC	223347510-001	08/17/2023		091223	580.87
			Invoice: 223347510-001				REPAIR MANLIFT #701 8/17/23	
				580.87	751820	551500	Outside Services	
							CHECK 107972 TOTAL:	580.87
107973	09/12/2023	PRTD	2780 VALLEY NEWS GROUP	8-24	08/24/2023		091223	250.00
			Invoice: 8-24				DISPLAY AD - QTRLY TOUR 8/24/23	
				250.00	101900	660400	Public Education Programs	
							CHECK 107973 TOTAL:	250.00
107974	09/12/2023	PRTD	21643 VALLEY SOIL, INC.	27369	08/29/2023		091223	10,574.00
			Invoice: 27369				IRRIGATION CONTROLLER INSTALLS 8/1-8/19/23	
				10,574.00	101800	670900	Res. ET Irrigation Controller	
							CHECK 107974 TOTAL:	10,574.00
107975	09/12/2023	PRTD	21662 SUEZ WTS ANALYTICAL INSTRUMENTS,	902228821	07/20/2023		091223	9,274.65
			Invoice: 902228821				SEMI-ANNUAL SERVICE 6/19/23	
				9,274.65	751750	541500	Outside Services	
							CHECK 107975 TOTAL:	9,274.65
107976	09/12/2023	PRTD	30645 VITAL COATINGS INC	254	08/22/2023		091223	21,515.00
			Invoice: 254				POTABLE SYSTEM COATINGS 8/24/23	
				21,515.00	301440	900000	Capital Asset Expenses	
							CHECK 107976 TOTAL:	21,515.00
107977	09/12/2023	PRTD	3034 VORTEX INDUSTRIES, LLC	01-1698613	08/24/2023		091223	1,514.62
			Invoice: 01-1698613				REPAIR BLDG#2 ROLL-UP DOOR	
				1,514.62	701002	551500	Outside Services	
			VORTEX INDUSTRIES, LLC	01-1697909	08/21/2023		091223	1,160.00
			Invoice: 01-1697909				EMERGENCY REPAIR FOR REACTOR ROLL-UP DOOR	
				1,160.00	751820	551500	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 107977 TOTAL: 2,674.62								
107978	09/12/2023	PRTD	3035 VWR SCIENTIFIC	8813768224	08/16/2023		091223	93.71
			Invoice: 8813768224	93.71 701341 551000	AMMONIUM CHLORIDE			
					Supplies/Material			
			Invoice: 8813768221	8813768221	08/16/2023		091223	1,126.19
				1,126.19 701341 551000	LAB SUPPLIES			
					Supplies/Material			
			Invoice: 8813882201	8813882201	08/28/2023		091223	120.08
				120.08 701341 551000	POTASSIUM SULFATE			
					Supplies/Material			
			Invoice: 8813874508	8813874508	08/28/2023		091223	342.63
				342.63 701341 551000	TUBE CULT			
					Supplies/Material			
			Invoice: 8813843309	8813843309	08/24/2023		091223	35.05
				35.05 701341 551000	HYDROCHLORIC ACID			
					Supplies/Material			
CHECK 107978 TOTAL: 1,717.66								
107979	09/12/2023	PRTD	19685 W. LITTEN INC.	23034	08/21/2023		091223	7,568.13
			Invoice: 23034	7,568.13 751810 678800	SPRAYFIELD	8/13-8/19/23		
					District Sprayfield			
CHECK 107979 TOTAL: 7,568.13								
107980	09/12/2023	PRTD	18914 WECK LABORATORIES, INC.	W3H2024	08/23/2023		091223	1,428.83
			Invoice: W3H2024	1,428.83 751750 571520	PW SAMPLING BI-MONTHLY			
					Other Laboratory Serv			
			Invoice: W3H1877	W3H1877	08/22/2023		091223	106.73
				106.73 751750 571520	PW SAMPLING WEEKLY			
					Other Laboratory Serv			
			Invoice: W3H1871	W3H1871	08/22/2023		091223	1,428.83
				1,428.83 751750 571520	PW SAMPLING BI-MONTHLY			
					Other Laboratory Serv			
			Invoice: W3H1785	W3H1785	08/21/2023		091223	229.04
				229.04 751750 571520	PW SAMPLING WEEKLY			
					Other Laboratory Serv			
			Invoice: W3H1783	W3H1783	08/21/2023		091223	106.73
					PW SAMPLING WEEKLY			



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			
				106.73 751750 571520				
					Other Laboratory Serv			
Invoice: W3H1875			WECK LABORATORIES, INC.	W3H1875	08/22/2023		091223	150.00
				150.00 751820 571520	RANCHO COMPOST INPUT MIX			
					Other Laboratory Serv			
Invoice: W3H1876			WECK LABORATORIES, INC.	W3H1876	08/22/2023		091223	150.00
				150.00 751820 571520	RANCHO COMPOST INPUT MIX			
					Other Laboratory Serv			
Invoice: W3H1784			WECK LABORATORIES, INC.	W3H1784	08/21/2023		091223	27.80
				27.80 701341 551500	DIONIZED WATER			
					Outside Services			
Invoice: W3H1786			WECK LABORATORIES, INC.	W3H1786	08/21/2023		091223	167.91
				167.91 101600 571520	WESTLAKE MONTHLY			
					Other Laboratory Serv			
						CHECK	107980 TOTAL:	3,795.87
				NUMBER OF CHECKS 59	*** CASH ACCOUNT TOTAL ***			304,250.04
						COUNT	AMOUNT	
				TOTAL PRINTED CHECKS		59	304,250.04	
							*** GRAND TOTAL ***	304,250.04

A/P CASH DISBURSEMENTS JOURNAL

JOURNAL ENTRIES TO BE CREATED

CLERK: 3296tchau

YEAR	PER	JNL	SRC	ACCOUNT	EFF DATE	JNL DESC	REF 1	REF 2	REF 3	ACCOUNT DESC LINE DESC	T OB	DEBIT	CREDIT
2024	3	91											
APP	101-200000				09/12/2023	091223	091223			Accounts Payable AP CASH DISBURSEMENTS JOURNAL		73,020.49	
APP	999-100100				09/12/2023	091223	091223			Cash-General AP CASH DISBURSEMENTS JOURNAL			304,250.04
APP	751-200000				09/12/2023	091223	091223			Accounts Payable AP CASH DISBURSEMENTS JOURNAL		122,233.76	
APP	701-200000				09/12/2023	091223	091223			Accounts Payable AP CASH DISBURSEMENTS JOURNAL		83,773.79	
APP	754-200000				09/12/2023	091223	091223			Accounts Payable AP CASH DISBURSEMENTS JOURNAL		3,632.00	
APP	301-200000				09/12/2023	091223	091223			Accounts Payable AP CASH DISBURSEMENTS JOURNAL		21,590.00	
GENERAL LEDGER TOTAL												304,250.04	304,250.04
APP	999-201010				09/12/2023	091223	091223			Due to/Due Frm Potable wtr Ops		73,020.49	
APP	101-100100				09/12/2023	091223	091223			Cash-General			73,020.49
APP	999-207510				09/12/2023	091223	091223			Due to/Due FromJPA Operations		122,233.76	
APP	751-100100				09/12/2023	091223	091223			Cash-General			122,233.76
APP	999-207010				09/12/2023	091223	091223			Due to/Due FromInternal Svs		83,773.79	
APP	701-100100				09/12/2023	091223	091223			Cash-General			83,773.79
APP	999-207540				09/12/2023	091223	091223			Due to/Due FromJPA Replacement		3,632.00	
APP	754-100100				09/12/2023	091223	091223			Cash-General			3,632.00
APP	999-203010				09/12/2023	091223	091223			Due to/Due FrmPotable wtr Repl		21,590.00	
APP	301-100100				09/12/2023	091223	091223			Cash-General			21,590.00
SYSTEM GENERATED ENTRIES TOTAL												304,250.04	304,250.04
JOURNAL 2024/03/91											TOTAL	608,500.08	608,500.08

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 3	91	09/12/2023	Cash-General		73,020.49
				Accounts Payable	73,020.49	
				FUND TOTAL	73,020.49	73,020.49
301 Potable wtr Replacement Fund 301-100100 301-200000	2024 3	91	09/12/2023	Cash-General		21,590.00
				Accounts Payable	21,590.00	
				FUND TOTAL	21,590.00	21,590.00
701 Internal Service Fund 701-100100 701-200000	2024 3	91	09/12/2023	Cash-General		83,773.79
				Accounts Payable	83,773.79	
				FUND TOTAL	83,773.79	83,773.79
751 JPA Operations 751-100100 751-200000	2024 3	91	09/12/2023	Cash-General		122,233.76
				Accounts Payable	122,233.76	
				FUND TOTAL	122,233.76	122,233.76
754 JPA Replacement 754-100100 754-200000	2024 3	91	09/12/2023	Cash-General		3,632.00
				Accounts Payable	3,632.00	
				FUND TOTAL	3,632.00	3,632.00
999 Pooled Cash 999-100100 999-201010 999-203010 999-207010 999-207510 999-207540	2024 3	91	09/12/2023	Cash-General		304,250.04
				Due to/Due Frm Potable wtr Ops	73,020.49	
				Due to/Due FrmPotable wtr Repl	21,590.00	
				Due to/Due FromInternal Svs	83,773.79	
				Due to/Due FromJPA Operations	122,233.76	
				Due to/Due FromJPA Replacement	3,632.00	
				FUND TOTAL	304,250.04	304,250.04

A/P CASH DISBURSEMENTS JOURNAL
 JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FR
101	Potable Water Operations		73,020.49
301	Potable Wtr Replacement Fund		21,590.00
701	Internal Service Fund		83,773.79
751	JPA Operations		122,233.76
754	JPA Replacement		3,632.00
999	Pooled Cash		
		304,250.04	
TOTAL		304,250.04	304,250.04

** 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
24035	09/05/2023	MANL	3352 LAS VIRGENES MUNICIPAL WATER DIST	4736989	08/16/2023			68.98
				Invoice: 4736989				
				68.98 101108 540540				
							JED SMTH P/S 7/10-8/9/23	
							Water	
							CHECK	24035 TOTAL: 68.98
24036	09/05/2023	MANL	3352 LAS VIRGENES MUNICIPAL WATER DIST	4738484	08/16/2023			719.51
				Invoice: 4738484				
				719.51 751810 540540				
							TAPIA 7/10-8/9/23	
							Water	
							CHECK	24036 TOTAL: 719.51
24037	09/05/2023	MANL	3352 LAS VIRGENES MUNICIPAL WATER DIST	4738502	08/16/2023			212.21
				Invoice: 4738502				
				212.21 751830 540540				
							RLV FARM 7/10-8/9/23	
							Water	
							CHECK	24037 TOTAL: 212.21
24038	09/05/2023	MANL	3352 LAS VIRGENES MUNICIPAL WATER DIST	4738503	08/16/2023			3,053.85
				Invoice: 4738503				
				3,053.85 751820 540540				
							RLV 7/10-8/9/23	
							Water	
							CHECK	24038 TOTAL: 3,053.85
24039	09/05/2023	MANL	3352 LAS VIRGENES MUNICIPAL WATER DIST	4738504	08/16/2023			39.55
				Invoice: 4738504				
				39.55 751820 540540				
							SOLAR LANDSCAPING 7/10-8/9/23	
							Water	
							CHECK	24039 TOTAL: 39.55
24040	09/05/2023	MANL	3352 LAS VIRGENES MUNICIPAL WATER DIST	4738530	08/16/2023			361.01
				Invoice: 4738530				
				361.01 751750 540540				
							HQ PWP/DEMO 7/10-8/9/23	
							Water	
							CHECK	24040 TOTAL: 361.01
24041	09/05/2023	MANL	3352 LAS VIRGENES MUNICIPAL WATER DIST	4738531	08/16/2023			365.35
				Invoice: 4738531				
				365.35 701001 540540				
							HQ BLDG #8 7/10-8/9/23	
							Water	
							CHECK	24041 TOTAL: 365.35
24042	09/05/2023	MANL	3352 LAS VIRGENES MUNICIPAL WATER DIST	4738532	08/16/2023			7.50
				Invoice: 4738532				
				7.50 701001 540540				
							FIRE PRTCN #8 7/10-8/9/23	
							Water	

Las Virgenes Municipal Water District



A/P CASH DISBURSEMENTS JOURNAL

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

CHECK NO	CHK DATE	TYPE	VENDOR NAME	INVOICE	INV DATE	PO	CHECK RUN	NET
INVOICE DTL DESC								
							CHECK 24042 TOTAL:	7.50
24043	09/05/2023	MANL	3352 LAS VIRGENES MUNICIPAL WATER DIST	4738533	08/16/2023			7.50
			Invoice: 4738533		FIRE PRCTN #7 7/10-8/9/23			
				7.50 701002 540540	Water			
							CHECK 24043 TOTAL:	7.50
24044	09/05/2023	MANL	3352 LAS VIRGENES MUNICIPAL WATER DIST	4738534	08/16/2023			959.82
			Invoice: 4738534		BLDG #7 7/10-8/9/23			
				959.82 701002 540540	Water			
							CHECK 24044 TOTAL:	959.82
24045	09/05/2023	MANL	3352 LAS VIRGENES MUNICIPAL WATER DIST	4738535	08/16/2023			410.74
			Invoice: 4738535		BLDG #2 7/10-8/9/23			
				410.74 701002 540540	Water			
							CHECK 24045 TOTAL:	410.74
24046	09/05/2023	MANL	3352 LAS VIRGENES MUNICIPAL WATER DIST	4741271	08/16/2023			68.45
			Invoice: 4741271		L/S #2 7/10-8/9/23			
				68.45 130100 540540	Water			
							CHECK 24046 TOTAL:	68.45
24047	09/05/2023	MANL	3352 LAS VIRGENES MUNICIPAL WATER DIST	4741338	08/16/2023			64.11
			Invoice: 4741338		L/S #1 7/10-8/9/23			
				64.11 130100 540540	Water			
							CHECK 24047 TOTAL:	64.11
				NUMBER OF CHECKS	13	*** CASH ACCOUNT TOTAL ***		6,338.58
				TOTAL MANUAL CHECKS	COUNT	AMOUNT		
					13	6,338.58		
						*** GRAND TOTAL ***		6,338.58

A/P CASH DISBURSEMENTS JOURNAL

JOURNAL ENTRIES TO BE CREATED

CLERK: 3296jcortez

YEAR	PER	JNL	SRC	ACCOUNT	EFF DATE	JNL DESC	REF 1	REF 2	REF 3	ACCOUNT DESC LINE DESC	T OB	DEBIT	CREDIT
2024	3	9	APP	101-200000	09/05/2023	CASH DISB	090523			Accounts Payable AP CASH DISBURSEMENTS JOURNAL		68.98	
			APP	999-100100	09/05/2023	CASH DISB	090523			Cash-General AP CASH DISBURSEMENTS JOURNAL			6,338.58
			APP	751-200000	09/05/2023	CASH DISB	090523			Accounts Payable AP CASH DISBURSEMENTS JOURNAL		4,386.13	
			APP	701-200000	09/05/2023	CASH DISB	090523			Accounts Payable AP CASH DISBURSEMENTS JOURNAL		1,750.91	
			APP	130-200000	09/05/2023	CASH DISB	090523			Accounts Payable AP CASH DISBURSEMENTS JOURNAL		132.56	
GENERAL LEDGER TOTAL												6,338.58	6,338.58
			APP	999-201010	09/05/2023	CASH DISB	090523			Due to/Due Frm Potable Wtr Ops		68.98	
			APP	101-100100	09/05/2023	CASH DISB	090523			Cash-General			68.98
			APP	999-207510	09/05/2023	CASH DISB	090523			Due to/Due FromJPA Operations		4,386.13	
			APP	751-100100	09/05/2023	CASH DISB	090523			Cash-General			4,386.13
			APP	999-207010	09/05/2023	CASH DISB	090523			Due to/Due FromInternal Svs		1,750.91	
			APP	701-100100	09/05/2023	CASH DISB	090523			Cash-General			1,750.91
			APP	999-201300	09/05/2023	CASH DISB	090523			Due to/Due FrmSanitation Ops		132.56	
			APP	130-100100	09/05/2023	CASH DISB	090523			Cash-General			132.56
SYSTEM GENERATED ENTRIES TOTAL												6,338.58	6,338.58
JOURNAL 2024/03/9											TOTAL	12,677.16	12,677.16

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 3	9	09/05/2023	Cash-General		68.98
				Accounts Payable	68.98	
				FUND TOTAL	68.98	68.98
130 Sanitation Operations 130-100100 130-200000	2024 3	9	09/05/2023	Cash-General		132.56
				Accounts Payable	132.56	
				FUND TOTAL	132.56	132.56
701 Internal Service Fund 701-100100 701-200000	2024 3	9	09/05/2023	Cash-General		1,750.91
				Accounts Payable	1,750.91	
				FUND TOTAL	1,750.91	1,750.91
751 JPA Operations 751-100100 751-200000	2024 3	9	09/05/2023	Cash-General		4,386.13
				Accounts Payable	4,386.13	
				FUND TOTAL	4,386.13	4,386.13
999 Pooled Cash 999-100100 999-201010 999-201300 999-207010 999-207510	2024 3	9	09/05/2023	Cash-General		6,338.58
				Due to/Due Frm Potable Wtr Ops	68.98	
				Due to/Due Frm Sanitation Ops	132.56	
				Due to/Due From Internal Svs	1,750.91	
				Due to/Due From JPA Operations	4,386.13	
				FUND TOTAL	6,338.58	6,338.58

A/P CASH DISBURSEMENTS JOURNAL
 JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FR
101	Potable Water Operations		68.98
130	Sanitation Operations		132.56
701	Internal Service Fund		1,750.91
751	JPA Operations		4,386.13
999	Pooled Cash		
		6,338.58	
TOTAL		6,338.58	6,338.58

** 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
23	09/12/2023	WIRE	20529 HR PERFORMANCE SOLUTIONS	INV-138800	07/15/2023			2,959.72
Invoice: INV-138800								
			2,959.72	701420	621500		PERFORMANCE PRO RENEWAL 10/1/23-9/30/24 System Support and Maintenance	
							CHECK 23 TOTAL:	2,959.72
				NUMBER OF CHECKS	1		*** CASH ACCOUNT TOTAL ***	2,959.72
				TOTAL WIRE TRANSFERS		COUNT	AMOUNT	
						1	2,959.72	
							*** GRAND TOTAL ***	2,959.72

A/P CASH DISBURSEMENTS JOURNAL

JOURNAL ENTRIES TO BE CREATED

CLERK: 3296jcortez

YEAR	PER	JNL				ACCOUNT DESC	T	OB	DEBIT	CREDIT
SRC	ACCOUNT	EFF DATE	JNL DESC	REF 1	REF 2	REF 3	LINE DESC			
2024	3	85								
APP 701-200000		09/12/2023	CASH DISB	091223			Accounts Payable		2,959.72	
							AP CASH DISBURSEMENTS JOURNAL			
APP 999-100100		09/12/2023	CASH DISB	091223			Cash-General			2,959.72
							AP CASH DISBURSEMENTS JOURNAL			
							GENERAL LEDGER TOTAL		2,959.72	2,959.72
APP 999-207010		09/12/2023	CASH DISB	091223			Due to/Due FromInternal Svs		2,959.72	
APP 701-100100		09/12/2023	CASH DISB	091223			Cash-General			2,959.72
							SYSTEM GENERATED ENTRIES TOTAL		2,959.72	2,959.72
							JOURNAL 2024/03/85 TOTAL		5,919.44	5,919.44

A/P CASH DISBURSEMENTS JOURNAL

JOURNAL ENTRIES TO BE CREATED

FUND	ACCOUNT	YEAR	PER	JNL	EFF DATE	ACCOUNT DESCRIPTION	DEBIT	CREDIT
701	Internal Service Fund	2024	3	85	09/12/2023			
	701-100100					Cash-General		2,959.72
	701-200000					Accounts Payable	2,959.72	
						FUND TOTAL	2,959.72	2,959.72
999	Pooled Cash	2024	3	85	09/12/2023			
	999-100100					Cash-General		2,959.72
	999-207010					Due to/Due From Internal Svs	2,959.72	
						FUND TOTAL	2,959.72	2,959.72

A/P CASH DISBURSEMENTS JOURNAL
JOURNAL ENTRIES TO BE CREATED

FUND		DUE TO	DUE FR
701 Internal Service Fund			2,959.72
999 Pooled Cash		2,959.72	
	TOTAL	2,959.72	2,959.72

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



DATE: October 3, 2023
TO: Board of Directors
FROM: Finance and Administration

SUBJECT: Proposed Insurance Provider Plan Renewals

SUMMARY:

The District contracts with plan carriers to provide employees with insurance coverage for dental, vision, flexible spending accounts, life and accidental death/dismemberment (AD&D) insurance, short- and long-term disability coverage, and an employee assistance program (EAP). The vision, life insurance, AD&D coverage, and short- and long-term disability plans are due for renewal on January 1, 2024. The District's current dental plan has a rate guarantee until January 1, 2026, and the flexible spending account plan has a rate guarantee until January 1, 2025.

Poms & Associates Insurance Brokers, LLC (Poms) serves as the District's broker for the various employee insurance benefits, excluding medical coverage. In anticipation of the renewal process, Poms contacted the District's existing providers to determine their level of interest to renew. The providers both submitted proposals to continue providing the services, effective January 1, 2024, while maintaining their current rates. As a result, staff recommends accepting the proposals from EyeMed and Anthem Blue Cross.

RECOMMENDATION(S):

Accept the proposals from EyeMed, in the annual amount of \$15,000, for employee vision insurance with a four-year rate guarantee; and Anthem Blue Cross, in the annual amount of \$81,985, for employee life, accidental death/dismemberment (AD&D) insurance, and short- and long-term disability coverage.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

The total annual estimated cost of this action is \$96,985, consisting of \$15,000 for vision coverage and \$81,985 for life insurance, AD&D coverage, and short- and long-term disability coverage. The amounts would remain unchanged from 2023.

DISCUSSION:

Renewal periods provide an opportunity for the District to continue with existing plan carriers or change carriers with the same or similar level of benefits at the best possible rates.

EyeMed is the District's current provider for vision insurance. EyeMed's proposal includes no rate increase with a rate guarantee until January 1, 2028. The current annual rate is \$15,000. Anthem Blue Cross is the District's current provider for life and accidental death/dismemberment (AD&D) insurance, short- and long-term disability coverage, and an employee assistance program (EAP). Anthem's overall quote for continuation of the services includes no change in rates through January 1, 2025. The current annual rate is \$81,985. A slight change in the total amounts of the EyeMed and Anthem Blue Cross proposals as compared to last year's amounts, which were \$14,883 and \$79,195, is due to an increase in the number of employees covered rather than a change in the rates.

Attached for reference are the detailed proposals submitted by EyeMed and Anthem Blue Cross.

GOALS:

Ensure Effective Utilization of the Public's Assets and Money

Prepared by: Sophia Crocker, Human Resources Manager

ATTACHMENTS:

[Vision Proposal by EyeMed](#)

[Life, AD&D, STD and LTD Proposal by Anthem Blue Cross](#)



VISION COST ANALYSIS [CURRENT /RENEWAL]

		EyeMed	
		In Network	Non-Network
Exam Copay		\$10	\$10
Materials Copay		\$25	\$25
BENEFIT FREQUENCY			
Exams		12 months	
Lenses		12 months	
Frames		24 months	
ALLOWANCES			
Exams		Covered in Full	Up to \$40
Lenses		Covered in Full	Up to \$30-\$70
Single Vision		Covered in Full	Up to \$30
Bifocal		Covered in Full	Up to \$50
Trifocal		Covered in Full	Up to \$70
Frames		\$130 Allowance	Up to \$91
Contacts		\$130 Allowance	Up to \$130
Medically Necessary		Covered in Full	Up to \$210
[CURRENT/ RENEWAL]			
Employee	42	\$5.09	\$5.09
Two-Party	38	\$9.68	\$9.68
Family	<u>47</u>	\$14.22	\$14.22
Monthly Total	127	\$1,250	\$1,250
Annual Total		\$15,000	\$15,000
(\$) Change		\$0	
(%) Change		0.00%	
Renewal Date		January 1, 2028	

Please note this is a summary of benefits and rates only. Final rates will be determined by the carrier based on actual enrollment.



LIFE & AD&D COST ANALYSIS

[CURRENT/RENEWAL]

Anthem Blue Cross
Basic Life & AD&D

PLAN DESIGN HIGHLIGHTS	Class 1: Supervisors & Above	Class 2: All others	Class 3: Board Members
Employee Life/AD&D Amount	1 x BAE plus \$50,000	\$100,000 Flat	\$25,000 Flat
Minimum Benefit	N/A	N/A	N/A
Maximum Benefit	\$300,000	\$100,000	\$25,000
Guarantee Issue	\$300,000	\$100,000	\$25,000
BENEFITS			
Accelerated Benefit	Included	Included	Included
Conversion	Conversion - 31 days	Conversion - 31 days	Conversion - 31 days
Seat Belt Benefit	< \$25,000 or 25%	< \$25,000 or 25%	< \$25,000 or 25%
Age reduction schedule	35% at age 70; 50% at age 75	35% at age 70; 50% at age 75	35% at age 70; 50% at age 75
COMMENTS			

PREMIUMS	VOLUME	[CURRENT/RENEWAL]	
Life Rate per \$1,000	\$14,131,000	\$0.154	\$0.154
AD&D Rate per \$1,000		\$0.030	\$0.030
Total rate per \$1,000		\$0.184	\$0.184
Monthly Premium		\$2,600	\$2,600
Annual Premium		\$31,201	\$31,201
(\$) Change			\$0
(%) Change			0.00%
Renewal Date			January 1, 2025

Please note this is a summary of benefits and rates only. Final rates will be determined by the carrier based on actual enrollment.



SHORT TERM DISABILITY COST ANALYSIS

[CURRENT/RENEWAL]

Anthem Blue Cross
Short Term Disability

PLAN DESIGN HIGHLIGHTS	Class 1: General Mgr & Dept Heads	Class 2: Executive Professionals & Managers	Class 3: Supervisors, Professionals, Confidential	Class 4: General & Office
Benefit Percentage	66.67%	66.67%	66.67%	66.67%
Maximum Weekly Benefit	\$2,446	\$1,685	\$1,270	\$831
Elimination Period	30 days	30 days	30 days	30 days
Own Occupation Period	Included	Included	Included	Included
Benefit Duration	22 weeks	22 weeks	22 weeks	22 weeks
Contributions	Employer paid	Employer paid	Employer paid	Employer paid
COMMENTS				

PREMIUMS	VOLUME	[CURRENT/RENEWAL]	
Rate per \$10	\$112,358.00	\$0.214	\$0.214
Monthly Premium		\$2,404	\$2,404
Annual Premium		\$28,854	\$28,854
(\$) Change			\$0
(%) Change			0.00%
Renewal Date			January 1, 2025

Please note this is a summary of benefits and rates only. Final rates will be determined by the carrier based on actual enrollment.



LONG TERM DISABILITY COST ANALYSIS

[CURRENT/RENEWAL]

Anthem Blue Cross
Long Term Disability

PLAN DESIGN HIGHLIGHTS	Class 1: General Mgr & Dept Heads	Class 2: Executive Professionals & Managers	Class 3: Supervisors, Professionals, Confidential	Class 4: General & Office
Benefit Percentage	66.67%	66.67%	66.67%	66.67%
Maximum Monthly Benefit	\$10,600	\$7,300	\$5,500	\$3,600
Elimination Period	180 days	180 days	180 days	180 days
Own Occupation Period	24 months	24 months	24 months	24 months
Benefit Duration	SSNRA	SSNRA	SSNRA	SSNRA
Pre-Existing Condition Limitation	3/12	3/12	3/12	3/12
Contributions	Employer paid	Employer paid	Employer paid	Employer paid

COMMENTS

PREMIUMS	VOLUME	[CURRENT/RENEWAL]	
Rate per \$100	\$725,211.00	\$0.252	\$0.252
Monthly Premium		\$1,828	\$1,828
Annual Premium		\$21,930	\$21,930
(\$) Change			\$0
(%) Change			0.00%
Renewal Date			January 1, 2025

Please note this is a summary of benefits and rates only. Final rates will be determined by the carrier based on actual enrollment.



DATE: October 3, 2023
TO: Board of Directors
FROM: General Manager

SUBJECT: Annual Report: Records Review and Destruction

SUMMARY:

Pursuant to Title 2, Section 2-7.507 of the Las Virgenes Municipal Water District Code, the Board Secretary is required to report at least annually, in writing, to the Board at a public meeting concerning District records. A records retention schedule, which has been approved by the Board, is maintained by the Executive Assistant/Clerk of the Board. A list of documents proposed for destruction based on the records retention schedule was presented to the Department Directors, General Manager, District Counsel, and Board Secretary for review and approval. The records destruction list was prepared based on the District's records retention schedule and the Las Virgenes Municipal Water District Code.

Attached is the proposed listing of records scheduled for destruction upon Board approval. Staff recommends authorization to proceed with destruction of the records.

RECOMMENDATION(S):

Authorize the destruction of records in accordance with the District's records retention schedule and the Las Virgenes Municipal Water District Code.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

Sufficient funds for shredding services are available in the adopted Fiscal Year 2023-24 Budget.

GOALS:

Ensure Effective Utilization of the Public's Assets and Money

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

ATTACHMENTS:

[Authority to Destroy Obsolete Records](#)

REQUEST FOR AUTHORITY TO DESTROY OBSOLETE RECORDS

== Records Eligible for Destruction in 2023 ==

ONSITE

RRS: Accounting

RRS ITEM	RECORD SERIES NAME (TOTAL RETENTION PERIOD - in years unless otherwise stated)	From Date	To Date	Comments
282 1099 FORMS (5)				
	▶ 1099 FORMS - 1099-MISC RETURNS 2016 & 2017	1/1/2016	12/31/2017	_____
	▶ 1099 FORMS - 1099-MISC, 1099-INT, 1099-2 JANUARY - DECEMBER 2014	1/1/2014	12/31/2014	_____
	▶ 1099 FORMS - 1099-MISC; 1099-INT JANUARY - DECEMBER 2015	1/1/2015	12/31/2015	_____
25 BANK RECONCILIATIONS (5)				
	▶ BANK RECONCILIATIONS FISCAL YEAR 2016-17	7/1/2016	6/30/2017	_____
53 JOINT VENTURE BILLINGS (5)				
	▶ JOINT VENTURE BILLING FISCAL YEAR 2011-12	7/1/2011	6/30/2012	_____
	▶ JOINT VENTURE BILLING FISCAL YEARS 1995-96; 1996-97	7/1/1995	6/30/1997	_____
	▶ JOINT VENTURE BILLING FISCAL YEARS 2003-04; 2004-05, 2005-06	7/1/2003	6/30/2006	_____
	▶ JOINT VENTURE BILLING FISCAL YEARS 2006-07; 2007-08; 2009-09;	7/1/2006	6/30/2009	_____
	▶ JOINT VENTURE BILLING FISCAL YEARS 2014-15; 2015-16; 2016-17	7/1/2014	6/30/2017	_____
	▶ JOINT VENTURE BILLING JANUARY - JUNE 2014	1/1/2014	6/30/2014	_____
	▶ JOINT VENTURE BILLING JULY - DECEMBER 2017	7/1/2017	12/31/2017	_____
271 SALES AND USE TAX RETURN (5)				
	▶ SALES AND USE TAX RETURNS 2014 - 2015	1/1/2014	12/31/2015	_____
283 WIRE TRANSFERS (5)				
	▶ WIRE TRANSFERS FISCAL YEARS 2013-14; 2014-15; 2015-16; 2016-17	7/1/2013	6/30/2017	_____

The above records are submitted for destruction in accordance with procedures outlined in the Las Virgenes Municipal Water District Records Management Manual, revised 2008.

APPROVALS

DocuSigned by:



DEPARTMENT HEAD: _____
CDA71D6C2A67424...

8/29/2023

DATE: _____

DocuSigned by:



GENERAL MANAGER: _____
12C6BE2F4EC44E2...

9/6/2023

DATE: _____

REQUEST FOR AUTHORITY TO DESTROY OBSOLETE RECORDS

== Records Eligible for Destruction in 2023 ==

ONSITE

RRS: Accounting - Payroll


RRS ITEM	RECORD SERIES NAME (TOTAL RETENTION PERIOD - in years unless otherwise stated)	From Date	To Date	Comments
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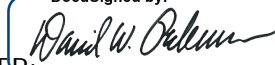
75 TAX FORMS (7)

▶ TAX FORMS FEDERAL RETURNS IRS QUARTERLY REPORT		1/1/2013	6/30/2015	_____
▶ TAX FORMS STATE RETURNS CALIFORNIA EDD SEMI-WEEKLY REPORT		1/1/2013	6/30/2015	_____

The above records are submitted for destruction in accordance with procedures outlined in the Las Virgenes Municipal Water District Records Management Manual, revised 2008.

APPROVALS

DEPARTMENT HEAD:  DocuSigned by: _____ DATE: 8/29/2023

GENERAL MANAGER:  DocuSigned by: _____ DATE: 9/6/2023

CDA71D6C2A67424... 12C6BE2E4EC44E2...

REQUEST FOR AUTHORITY TO DESTROY OBSOLETE RECORDS

== Boxes Eligible for Destruction in 2023 ==

OFFSITE

RRS: Accounting

RRS ITEM	RECORD SERIES NAME (TOTAL RETENTION PERIOD - in years unless otherwise stated) Box Description	From Date	To Date	Date Eligible	Comments
19 ACCOUNTS PAYABLE RECORDS (5)					
	▶ A/P VOUCHERS FY 2016-17 (123 - AT&T)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (123 - ATL)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (AT&T - AWD)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (AT&T)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (AUT - BAN)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (B - BAN)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (B&B - BRE)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (BAN - COU)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (BAN)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (C - E)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (CAS - FED)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (ELE - HDR)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (FER - I)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (I - LVM)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (ICT - LEM)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (LEW - LIP)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (LOS - MWH)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (LOS - NAT)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (N - P)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (O - PAD)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (PAC - PHO)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (PAT - S)	7/1/2016	6/30/2017	12/31/2022	_____

The above records are submitted for destruction in accordance with procedures outlined in the Las Virgenes Municipal Water District Records Management Manual, revised 2008.

APPROVALS

DocuSigned by:



8/29/2023

DEPARTMENT HEAD:

CDA71D6C2A67424...

DATE:

GENERAL MANAGER:

DocuSigned by:



9/6/2023

DATE:

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REQUEST FOR AUTHORITY TO DESTROY OBSOLETE RECORDS

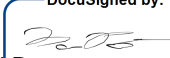
== Boxes Eligible for Destruction in 2023 ==
OFFSITE

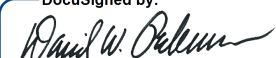
RRS: Accounting

RRS ITEM	RECORD SERIES NAME (TOTAL RETENTION PERIOD - in years unless otherwise stated)	From Date	To Date	Date Eligible	Comments
19 ACCOUNTS PAYABLE RECORDS (5)					
	▶ A/P VOUCHERS FY 2016-17 (PRU - R)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (S - SOU)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (SAW - TRA)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (STA - STE)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (STA - TWO)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (U - W)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (U - XYZ)	7/1/2016	6/30/2017	12/31/2022	_____
	▶ A/P VOUCHERS FY 2016-17 (W LITTEN - XYZ)	7/1/2016	6/30/2017	12/31/2022	_____
41 DEPOSITS (5)					
	▶ CUSTOMER SERVICE DEPOSITS FY 2016/17 APR - MAY (PAYMENT DETAIL LISTING)	4/8/2017	5/31/2017	12/31/2022	_____
	▶ CUSTOMER SERVICE DEPOSITS FY 2016/17 FEB - APR (PAYMENT DETAIL LISTING)	2/22/2017	4/7/2017	12/31/2022	_____
	▶ CUSTOMER SERVICE DEPOSITS FY 2016/17 JAN - FEB (PAYMENT DETAIL LISTING)	1/1/2017	2/21/2017	12/31/2022	_____
	▶ CUSTOMER SERVICE DEPOSITS FY 2016/17 JUN - JUN (PAYMENT DETAIL LISTING)	6/1/2017	6/30/2017	12/31/2022	_____
	▶ CUSTOMER SERVICE DEPOSITS FY 2017/18 JUL - AUG (PAYMENT DETAIL LISTING)	7/1/2017	8/31/2017	12/31/2022	_____
	▶ CUSTOMER SERVICE DEPOSITS FY 2017/18 OCT - DEC (PAYMENT DETAIL LISTING)	10/23/2017	12/19/2017	12/31/2022	_____
	▶ CUSTOMER SERVICE DEPOSITS FY 2017/18 SEPT - OCT (PAYMENT DETAIL LISTING)	9/1/2017	10/22/2017	12/31/2022	_____

The above records are submitted for destruction in accordance with procedures outlined in the Las Virgenes Municipal Water District Records Management Manual, revised 2008.

APPROVALS

DocuSigned by:

 DEPARTMENT HEAD: _____ DATE: 8/29/2023

DocuSigned by:

 GENERAL MANAGER: _____ DATE: 9/6/2023

REQUEST FOR AUTHORITY TO DESTROY OBSOLETE RECORDS

== Boxes Eligible for Destruction in 2023 ==
OFFSITE

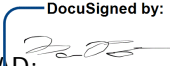
RRS: Accounting

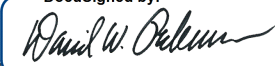
RRS ITEM	RECORD SERIES NAME (TOTAL RETENTION PERIOD - in years unless otherwise stated)	From Date	To Date	Date Eligible	Comments
52 INVENTORY RECORDS (5)					
	▶ INVENTORY RECORDS 2015, 2016, 2017	1/1/2015	12/31/2017	12/31/2022	_____
295 JOURNAL ENTRIES – JE, JG, JI, JK, JM, JN, JP, JR, JS, JT, IA, II, OV, PI (5)					
	▶ JOURNAL ENTRIES FY 2016-17 JN, JR, JP, JS, JT, IA, II, OV, PI (JAN-JUN)	1/1/2017	6/30/2017	12/31/2022	_____
	▶ JOURNAL ENTRIES FY 2017-18 JN, JR, JP, JS, JT, IA, II, OV, PI (JUL-DEC)	7/1/2017	12/31/2017	12/31/2022	_____
	▶ JOURNAL ENTRIES JUNE 2016 - FEB 2017 JE, JG, JI, JK, JM	6/1/2016	2/1/2017	12/31/2022	_____
	▶ JOURNAL ENTRIES MAY 2017 - DEC 2017 JE, JG, JI, JK, JM	3/1/2017	12/31/2017	12/31/2022	_____

Number of Offsite Boxes Eligible for Destruction: 42

The above records are submitted for destruction in accordance with procedures outlined in the Las Virgenes Municipal Water District Records Management Manual, revised 2008.

APPROVALS

DEPARTMENT HEAD:  DATE: 8/29/2023
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GENERAL MANAGER:  DATE: 9/6/2023
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REQUEST FOR AUTHORITY TO DESTROY OBSOLETE RECORDS

== Boxes Eligible for Destruction in 2023 ==
OFFSITE

RRS: Purchasing

RRS ITEM	RECORD SERIES NAME (TOTAL RETENTION PERIOD - in years unless otherwise stated)	From Date	To Date	Date Eligible	Comments
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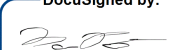
123 PURCHASE ORDER FILES (5)

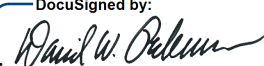
▶ PURCHASE ORDER FILES - OX FY 16/17:: OJ FY 16/17:: OB FY 16/17:: OP FY 16/17	7/1/2016	6/30/2017	12/31/2022		
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Number of Offsite Boxes Eligible for Destruction: 1

The above records are submitted for destruction in accordance with procedures outlined in the Las Virgenes Municipal Water District Records Management Manual, revised 2008.

APPROVALS

DocuSigned by:

DEPARTMENT HEAD: _____ DATE: 8/29/2023

DocuSigned by:

GENERAL MANAGER: _____ DATE: 9/6/2023

REQUEST FOR AUTHORITY TO DESTROY OBSOLETE RECORDS

== Records Eligible for Destruction in 2023 ==

ONSITE

RRS: General Manager

RRS ITEM	RECORD SERIES NAME (TOTAL RETENTION PERIOD - in years unless otherwise stated)	From Date	To Date	Comments
7 CONTRACT FILES (CM+4)				
	▶ ADVANCED UTILITY SYSTEMS CIS INFINITY VERSION 4 UPGRADE	3/3/2017	11/20/2017	_____
	▶ ADVANCED UTILITY SYSTEMS LOCKBOX FILE FOR CIS INPUT	11/30/2016	6/30/2017	_____
	▶ ADVANCED UTILITY SYSTEMS ONSITE BPR	5/12/2016	6/30/2017	_____
	▶ ADVANCED UTILITY SYSTEMS ONSITE BPR	10/4/2016	12/31/2017	_____
	▶ AECOM - DEERLAKE RANCH WSDR 2015 UPDATE	2/15/2015	6/30/2015	_____
	▶ AECOM TECHNICAL SERVICES - TWIN LAKES PUMP STATION EMERGENCY SUPPLY	7/25/2016	9/16/2016	_____
	▶ AMT SYSTEMS, INC. - FURNISH AND INSTALL VIDEO CONFERENCING SYSTEM	6/21/2016	---	_____
	▶ BENNER & CARPENTER - EASEMENTS LEGAL DESCRIPTION TWIN LAKES TANK	11/17/2015	---	_____
	▶ BENNER & CARPENTER - SURVEYING 2016 LAS VIRGENES DAM SETTLEMENT REPORT	12/11/2015	---	_____
	▶ BEST PRACTICE SYSTEM - ELECTRONIC BILL PRESENTMENT & PAYMENT SYSTEMS AND SERVICES	1/26/2011	3/31/2017	_____
	▶ CALIFORNIA WATER AGENCIES - CALIFORNIA DATA COLLABORATIVE PROJECT PHASE ONE PROJECT	11/20/2015	10/31/2016	_____
	▶ CALIFORNIA WILDLIFE CENTER - EMERGENCY TRIAGE AREA ON WATER DISTRICT PROPERTY	4/6/2105	9/30/2015	_____
	▶ CANON - CS PRINTER/COPIER PURCHASE & MAINTENANCE	3/1/2014	2/28/2017	_____
	▶ CSI SERVICES - TAPIA WRF CLARIFIERS 2 & 3 REHABILITATION	9/6/2016	12/31/2016	_____
	▶ DENOVO VENTURES - JD EDWARDS CONSULTING SERVICES	7/12/2013	12/31/2016	_____
	▶ DEPARTMENT OF WATER AND POWER, CITY OF LOS ANGELES - PRELIMINARY DESIGN AND ENVIRONMENTAL REVIEW FOR RECYCLED WATER SERVICE TO THE LOS ANGELES WOODLAND HILLS AREA	11/11/2014	11/11/2016	_____
	▶ ENR DESIGN ARCHITECTURE - BUILDING NO. 1 REHABILITATION ARCHITECTURE & ENGINEERING	6/12/2015	3/31/2016	_____
	▶ FUGRO CONSULTANTS - REPLACEMENT INCLINOMETER LORENZO CT & CONSUELO DR GEOTECHNICAL MONITORING	4/20/2016	12/31/2016	_____

The above records are submitted for destruction in accordance with procedures outlined in the Las Virgenes Municipal Water District Records Management Manual, revised 2008.

APPROVALS

DEPARTMENT HEAD: DocuSigned by:
Josie Guzman
70DA572813114B8...

DATE: 8/28/2023

GENERAL MANAGER: DocuSigned by:
Paul W. Pedersen
T2C6BE2E4EC44E2...

DATE: 9/6/2023

REQUEST FOR AUTHORITY TO DESTROY OBSOLETE RECORDS

== Records Eligible for Destruction in 2023 ==

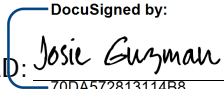
ONSITE

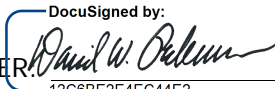
RRS: General Manager

RRS ITEM	RECORD SERIES NAME (TOTAL RETENTION PERIOD - in years unless otherwise stated)	From Date	To Date	Comments
7 CONTRACT FILES (CM+4)				
	▶ HAMILTON, FREDDA - BUILDING NO. 1 LEASE	10/6/2017	12/31/2017	
	▶ HDR ENGINEERING - CALABASAS TANK REHABILITATION	5/14/2013	12/31/2015	
	▶ HDR ENGINEERING - REHABILITATION 18-INCH RECYCLED WATER PIPELINE PHASE II PROJECT	1/30/2015	12/31/2015	
	▶ HDR ENGINEERING - REVISED WSDR TENTATIVE TRACT 45465	8/25/2015	---	
	▶ HDR ENGINEERING - WESTLAKE FILTRATION PLANT EXPANSION PUMP STATION UPGRADE	7/8/2014	12/31/2017	
	▶ HDR ENGINEERING - WSDR TENTATIVE TRACT 73766	3/7/2016	---	
	▶ ICTUS CONSULTING - RECORDS & LIBRARY MANAGEMENT	7/1/2016	6/30/2017	
	▶ ICTUS CONSULTING - RECORDS, INFORMATION AND LIBRARY MANAGEMENT SERVICES	6/23/2009	6/30/2016	
	▶ IRON MOUNTAIN STORAGE - RECORDS MANAGEMENT STORAGE AND SERVICES	10/4/1991	1/31/2015	
	▶ KATZ AND ASSOCIATES - PROJECT COMMUNICATION PLAN RECYCLED WATER SEASONAL STORAGE	5/2/2016	---	
	▶ KENNEDY/JENKS - 2015 URBAN WATER MANAGEMENT PLAN	2/2/2016	6/30/2016	
	▶ KENNEDY/JENKS - CONSTRUCTION MANAGEMENT WESTLAKE FILTRATION PLANT & PUMP UPGRADE	12/8/2015	---	
	▶ KENNEDY/JENKS - WATER SYSTEM MODEL EVALUATION PRESSURE REDUCING STATION	12/7/2015	---	
	▶ LEMIEUX & O'NEILL - PROFESSIONAL LEGAL SERVICES	7/1/2014	3/31/2017	
	▶ M6 CONSULTING - PRELIMINARY DESIGN SERVICES CALLEGUAS - LAS VIRGENES INTERCONNECTION	6/22/2015	12/31/2015	
	▶ MOSS ADAMS, LLP - INFORMATION SYSTEMS VULNERABILITY ASSESSMENT AND PENETRATING TESTING	5/12/2016	7/1/2016	
	▶ MSO TECHNOLOGIES - AS NEEDED ENGINEERING SERVICES	1/1/2014	12/31/2014	

The above records are submitted for destruction in accordance with procedures outlined in the Las Virgenes Municipal Water District Records Management Manual, revised 2008.

APPROVALS

DEPARTMENT HEAD:  DATE: 8/28/2023

GENERAL MANAGER:  DATE: 9/6/2023

REQUEST FOR AUTHORITY TO DESTROY OBSOLETE RECORDS

== Records Eligible for Destruction in 2023 ==

ONSITE

RRS: General Manager

RRS ITEM	RECORD SERIES NAME (TOTAL RETENTION PERIOD - in years unless otherwise stated)	From Date	To Date	Comments
7 CONTRACT FILES (CM+4)				
	▶ MSO TECHNOLOGIES - PLC PROGRAMMING AND ENGINEERING SERVICES FOR CORNELL MORRISON EQUESTRIAN VALVE MODIFICATION	11/1/2015	---	_____
	▶ MSO TECHNOLOGIES - SCADA SYSTEM ASSOCIATED WITH WESTLAKE FILTRATION PLANT EXPANSION & WESTLAKE PUMP STATION UPGRADE PROJECT	7/8/2014	6/30/2015	_____
	▶ MWH GLOBAL - PRELIMINARY DESIGN REPORT EVALUATE RANCHO LAS VIRGENES COMPOSTING FACILITY	9/27/2016	---	_____
	▶ NEXLEVEL INFORMATION TECHNOLOGY - CONSULTING SERVICES FOR DEVELOPMENT OF AN INFORMATION SYSTEMS MASTER PLAN AND OPERATIONAL REVIEW	10/28/2014	3/2/2015	_____
	▶ OAKRIDGE GEOSCIENCE - RANCHO LAS VIRGENES CENTRATE EQUALIZATION TANK PROJECT	8/11/2016	---	_____
	▶ OAKRIDGE GEOSCIENCE - RAS PUMP STRUCTURE SETTING MONITORING TAPIA WRF	5/4/2016	9/1/2016	_____
	▶ OAKRIDGE GEOSCIENCE - WESTLAKE FILTRATION PLANT EXPANSION & PUMP STATION UPGRADE	1/21/2016	---	_____
	▶ PACIFIC ADVANCED CIVIL ENGINEERING - DESIGN SERVICES PROPOSAL RANCHO LAS VIRGENES COMPOSTING FACILITY RAW SLUDGE WET WELL	8/16/2016	12/31/2016	_____
	▶ PACIFIC ADVANCED CIVIL ENGINEERING - DESIGN SERVICES SLUDGE WET WELL	2/17/2016	12/31/2016	_____
	▶ PACIFIC ADVANCED CIVIL ENGINEERING - RANCHO LAS VIRGENES CENTRATE EQUALIZATION TANK & PIPELINE REHABILITATION	3/24/2015	12/31/2017	_____
	▶ PARKWAY CALABASAS INVESTORS, LCC - RIGHT OF ENTRY AGREEMENT	4/24/2014	5/31/2016	_____
	▶ PARSONS TRANSPORTATION GROUP - CONSTRUCTION MANAGEMENT SERVICES LOST HILLS OVERPASS RECYCLED WATER MAIN RELOCATION	3/2/2015	3/31/2017	_____
	▶ RAFTELIS FINANCIAL CONSULTANTS - FEE STUDY	4/15/2016	1/1/2017	_____
	▶ RMC WATER & ENVIRONMENT - PRELIMINARY DESIGN CEQA STUDY WOODLAND HILLS COUNTRY CLUB	7/6/2015	---	_____
	▶ SIRIUS COMPUTER SOLUTIONS - MASTER SALES AGREEMENT	3/24/2003	---	_____

The above records are submitted for destruction in accordance with procedures outlined in the Las Virgenes Municipal Water District Records Management Manual, revised 2008.

APPROVALS

DEPARTMENT HEAD: DocuSigned by: <i>Josie Guzman</i> <small>70DA572813114B8...</small>	DATE: <u>8/28/2023</u>	GENERAL MANAGER: DocuSigned by: <i>David W. Pedrum</i> <small>12G6BE2E4EG44E2...</small>	DATE: <u>9/6/2023</u>
--	------------------------	---	-----------------------

REQUEST FOR AUTHORITY TO DESTROY OBSOLETE RECORDS

== Records Eligible for Destruction in 2023 ==

ONSITE

RRS: General Manager

RRS ITEM	RECORD SERIES NAME (TOTAL RETENTION PERIOD - in years unless otherwise stated)	From Date	To Date	Comments
7 CONTRACT FILES (CM+4)				
	▶ STEPHEN'S VIDEO & PHOTOGRAPHY - VIDEO RECORDING SERVICES BOARD MEETINGS	11/15/2016	12/31/2017	
	▶ TOM ASH & ASSOCIATES - BUDGET-BASED WATER RATES	4/15/2014	5/31/2015	
	▶ TRITON WATER TECHNOLOGIES OF CALIFORNIA - AMI IMPLEMENTATION PROGRAM	6/5/2015	1/31/2016	
	▶ VAULT ACCESS SOLUTIONS - VAULT LIDS	12/14/2014	12/31/2017	
	▶ VELOCITY (FORMALLY WTS, INC.) - OFFSITE DISASTER RECOVERY FOR INFORMATION SYSTEMS	5/15/2009	---	
	▶ W. LITTEN - SPRAYFIELD OPERATION & MAINTENANCE SERVICES	1/5/2016	1/5/2017	
	▶ W. LITTEN LAND PREPARATION - SPRAYFIELD OPERATION & MAINTENANCE SERVICES	1/6/2015	1/6/2016	
	▶ WATER QUALITY & TREATMENT SOLUTIONS - PREPARE STUDY LEAD & COPPER RULE	9/2/2015	---	
	▶ WESTCORD COMMERCIAL REAL ESTATE SERVICES - REAL ESTATE SERVICES FOR LEASE OF BUILDING NOS. 1 AND 8	11/3/2014	5/18/2016	
	▶ WILDAN ENGINEERING - EVALUATION & IMPROVEMENT RECOMMENDATIONS DISTRICT HQ, ACCESS ROAD, PARKING AREAS	5/6/2015	6/15/2015	
	▶ WUNDERLICH - MALEC ENGINEERING - PLC DESIGN SUPPORT & CONTROLS CENTRATE TANK	11/9/2015	---	
	▶ XEROX - LEASE COLOR COPIERS	12/30/2010	12/20/2015	
	▶ XEROX - LEASE COPIER AT HEADQUARTERS	4/20/2012	4/20/2016	
	▶ XEROX - LEASE COPIER AT HEADQUARTERS LOBBY	10/25/2010	10/25/2015	
	▶ XEROX - SALE/MAINTENANCE AGREEMENT COPIER AT WESTLAKE FILTRATION PLANT	4/20/2014	---	
	▶ ZENNER PERFORMANCE METERS, INC. - ANNUAL SUPPLY OF WATER METERS	12/1/2004	11/30/2016	
18 SUBJECT & CORRESPONDENCE (2AR)				
	▶ GENERAL MANAGER CORRESPONDENCE	1/1/2018	12/31/2020	
	▶ GLEN PETERSON CORRESPONDENCE	5/10/2005	12/31/2018	

The above records are submitted for destruction in accordance with procedures outlined in the Las Virgenes Municipal Water District Records Management Manual, revised 2008.

APPROVALS

DEPARTMENT HEAD: 70DA572813114B8  DATE: 8/28/2023

GENERAL MANAGER: 12C6BE2E4EC44E2  DATE: 9/6/2023

REQUEST FOR AUTHORITY TO DESTROY OBSOLETE RECORDS

== Boxes Eligible for Destruction in 2023 ==
OFFSITE

RRS: General Manager

RRS ITEM	RECORD SERIES NAME (TOTAL RETENTION PERIOD - in years unless otherwise stated)	From Date	To Date	Date Eligible	Comments
1 AGENDA PACKETS (10)					
	▶ AGENDA PACKETS 2010 JAN-JUN	1/1/2010	6/30/2010	12/31/2020	_____
	▶ AGENDA PACKETS 2010 JUL-DEC	7/1/2010	12/31/2010	12/31/2020	_____
	▶ AGENDA PACKETS 2011	1/1/2011	12/31/2011	12/31/2021	_____
	▶ AGENDA PACKETS 2012	1/1/2012	12/31/2012	12/31/2022	_____

Number of Offsite Boxes Eligible for Destruction: 4

The above records are submitted for destruction in accordance with procedures outlined in the Las Virgenes Municipal Water District Records Management Manual, revised 2008.

APPROVALS

DEPARTMENT HEAD:  DocuSigned by: Josie Guzman
70DA572813114B8... DATE: 8/28/2023

GENERAL MANAGER:  DocuSigned by: Daniel W. Pellem
12C6BE2E4EC44E2... DATE: 9/6/2023

REQUEST FOR AUTHORITY TO DESTROY OBSOLETE RECORDS

== Boxes Eligible for Destruction in 2023 ==

OFFSITE

RRS: Resource Conservation - Customer Service

RRS ITEM	RECORD SERIES NAME (TOTAL RETENTION PERIOD - in years unless otherwise stated)	From Date	To Date	Date Eligible	Comments
86 CUSTOMER SERVICE ORDERS (CSO's) (2)					
	▶ CUSTOMER SERVICE ORDERS 2017 (APRIL - JUNE) CSOs	4/1/2017	6/30/2017	12/31/2022	_____
	▶ CUSTOMER SERVICE ORDERS 2017 (JANUARY - MARCH) CSOs	1/1/2017	3/31/2017	12/31/2022	_____
	▶ CUSTOMER SERVICE ORDERS 2017 (JULY - SEPTEMBER) CSOs	7/1/2017	9/30/2017	12/31/2022	_____
	▶ CUSTOMER SERVICE ORDERS 2017 (OCTOBER - DECEMBER) CSOs	10/1/2017	12/31/2017	12/31/2022	_____

Number of Offsite Boxes Eligible for Destruction: 4

The above records are submitted for destruction in accordance with procedures outlined in the Las Virgenes Municipal Water District Records Management Manual, revised 2008.

APPROVALS

DEPARTMENT HEAD: DocuSigned by:
Joe McDermott DATE: 8/29/2023

GENERAL MANAGER: DocuSigned by:
Paul W. O'Brien DATE: 9/6/2023

REQUEST FOR AUTHORITY TO DESTROY OBSOLETE RECORDS

== Records Eligible for Destruction in 2023 ==

ONSITE

RRS: Resource Conservation - Customer Service


RRS ITEM	RECORD SERIES NAME (TOTAL RETENTION PERIOD - in years unless otherwise stated)	From Date	To Date	Comments
----------	--	-----------	---------	----------

86 CUSTOMER SERVICE ORDERS (CSO's) (2)

▶ CUSTOMER SERVICE ORDERS		1/1/2020	3/31/2020	_____
▶ CUSTOMER SERVICE ORDERS		4/1/2020	6/30/2020	_____
▶ CUSTOMER SERVICE ORDERS		7/1/2020	9/30/2020	_____
▶ CUSTOMER SERVICE ORDERS		10/1/2020	12/31/2020	_____

The above records are submitted for destruction in accordance with procedures outlined in the Las Virgenes Municipal Water District Records Management Manual, revised 2008.

APPROVALS

DEPARTMENT HEAD:  DocuSigned by:
3A25DD40997A42C... DATE: 8/29/2023

GENERAL MANAGER:  DocuSigned by:
12C6BE2E4EC44E2... DATE: 9/6/2023

REQUEST FOR AUTHORITY TO DESTROY OBSOLETE RECORDS

== Records Eligible for Destruction in 2023 ==


ONSITE

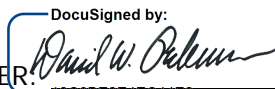
RRS: Resource Conservation

RRS ITEM	RECORD SERIES NAME (TOTAL RETENTION PERIOD - in years unless otherwise stated)	From Date	To Date	Comments
179 DISTRICT BUSINESS FILES (2AR)				
	▶ DISTRICT BUSINESS FILES - DUPLICATE BOARD MEMOS	1/1/2005	12/31/2010	_____
	▶ DISTRICT BUSINESS FILES - RANCHO ODORS	9/30/1996	3/22/2006	_____
	▶ DISTRICT BUSINESS FILES - TAPIA	1/1/1998	12/31/2005	_____
	▶ DISTRICT BUSINESS FILES - WESTLAKE	1/1/1998	12/31/1998	_____
	▶ DISTRICT BUSINESS FILES - WESTLAKE DRILLING	1/1/1992	12/31/1992	_____
	▶ DISTRICT BUSINESS FILES - WESTLAKE FILTRATION PLANT DEDICATION 01/01/1990	1/1/1990	12/31/1990	_____
	▶ DISTRICT BUSINESS FILES - BUDGET BASED RATES	1/1/2014	12/31/2015	_____
	▶ DISTRICT BUSINESS FILES - DUPLICATE CONTRACTS AND AGREEMENTS - VARIOUS	5/3/2002	12/31/2020	_____
	▶ DISTRICT BUSINESS FILES - RANCHO	1/1/2000	9/13/2000	_____
185 SUBJECT & CORRESPONDENCE FILES (2AR)				
	▶ SUBJECT AND CORRESPONDENCE	1/1/2005	12/31/2017	_____

The above records are submitted for destruction in accordance with procedures outlined in the Las Virgenes Municipal Water District Records Management Manual, revised 2008.

APPROVALS

DEPARTMENT HEAD:  DATE: 8/29/2023

GENERAL MANAGER:  DATE: 9/6/2023

REQUEST FOR AUTHORITY TO DESTROY OBSOLETE RECORDS

== Boxes Eligible for Destruction in 2023 ==
OFFSITE

RRS: Facilities and Operations (Operations - Tapia)

RRS ITEM	RECORD SERIES NAME (TOTAL RETENTION PERIOD - in years unless otherwise stated)	From Date	To Date	Date Eligible	Comments
135 LAB RAW DATA FILES (10)					
	▶ TAPIA LAB RAW DATA FILES 2012 (FROM BINDERS)	1/1/2012	12/31/2012	12/31/2022	_____
	▶ TAPIA LAB RAW DATA FILES 2012 JAN - JUNE (IN ENVELOPES)	1/1/2012	6/30/2012	12/31/2022	_____
	▶ TAPIA LAB RAW DATA FILES 2012 JULY - DEC (IN ENVELOPES)	7/1/2012	12/31/2012	12/31/2022	_____

Number of Offsite Boxes Eligible for Destruction: 3

The above records are submitted for destruction in accordance with procedures outlined in the Las Virgenes Municipal Water District Records Management Manual, revised 2008.

APPROVALS

DEPARTMENT HEAD: 
DocuSigned by: 2F114EF689354DB...

DATE: 8/30/2023

GENERAL MANAGER: 
DocuSigned by: 12C6BE2E4EC44E2...

DATE: 9/6/2023

REQUEST FOR AUTHORITY TO DESTROY OBSOLETE RECORDS

== Records Eligible for Destruction in 2023 ==

ONSITE

RRS: Facilities and Operations (Operations - Westlake)

RRS ITEM	RECORD SERIES NAME (TOTAL RETENTION PERIOD - in years unless otherwise stated)	From Date	To Date	Comments
171 EQUIPMENT FILES (CM)				
	▶ Monthly Emission Testing	1/1/2015	12/31/2015	_____
173 FACILITY MAINTENANCE FILES (CM)				
	▶ RMP Mechanical Integrity Work Order Repair Record	1/1/2002	12/31/2007	_____
175 MONITORING FILES (5)				
	▶ Westlake Aeration Compressor Log	1/1/2013	12/31/2017	_____
	▶ Westlake Filtration Plant Compressor Log	3/22/2004	12/2/2017	_____
	▶ Westlake Filtration Plant Generator Log	12/18/1997	3/26/2017	_____
	▶ Westlake Filtration Plant Generator Run Log	1/4/2007	11/30/2017	_____
	▶ Westlake Filtration Plant On-Line Daily Logs	6/3/2004	7/2/2014	_____
	▶ Westlake Filtration Plant Pump Station Generator Log (Emergency Generator Log Sheet)	2/24/1994	1/3/2011	_____
	▶ Westlake Filtration Plant Punch Lists	1/1/1989	12/31/1991	_____
	▶ Westlake Pump Station Disinfection Log	12/20/1997	12/16/2016	_____
	▶ Westlake Pump Station Natural Gas Consumption Log	1/1/2004	12/7/2016	_____
	▶ Westlake Pump Station Work Order/Repair Records	2/26/1990	12/20/2014	_____
	▶ Westlake Pump Station Daily Operation Dta Filtered Water Filter Pumps #1, #2, #3	9/22/1997	11/7/2015	_____
	▶ Westlake Pump Station Daily Operations Data Raw Water Eng. #1, #2, #3	9/22/1997	11/5/2015	_____
293 REPORTS (3)				
	▶ Las Virgenes Reservoir Monthly Reports	1/1/2015	12/31/2017	_____
	▶ Southern California Air Quality Management District Annual Emissions Report (copies of original report submittal)	7/26/2007	2/14/2011	_____
	▶ Westlake Filtration Plant Lead and Copper Study (copies)	1/1/1997	12/31/2000	_____
	▶ Westlake Filtration Plant Lead and Copper Study (copy)	1/1/1992	12/31/1992	_____
	▶ Westlake Filtration Plant Monthly Reports	1/1/2015	12/31/2017	_____

The above records are submitted for destruction in accordance with procedures outlined in the Las Virgenes Municipal Water District Records Management Manual, revised 2008.

APPROVALS

DEPARTMENT HEAD: DocuSigned by:
John Zhao DATE: 8/30/2023

GENERAL MANAGER: DocuSigned by:
Paul W. O'Brien DATE: 9/6/2023

REQUEST FOR AUTHORITY TO DESTROY OBSOLETE RECORDS

== Records Eligible for Destruction in 2023 ==

ONSITE

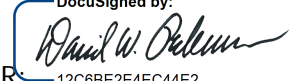
RRS: Facilities and Operations (Operations - Westlake)

RRS ITEM	RECORD SERIES NAME (TOTAL RETENTION PERIOD - in years unless otherwise stated)	From Date	To Date	Comments
177 SUBJECT & CORRESPONDENCE (2AR)				
	▶ Southern California Air Quality Management District Documents - Permit Renewal (removed and replaced equipment)	11/9/1987	4/6/2016	_____
	▶ Southern California Air Quality Management District Documents (removed and replaced equipment)	5/27/1988	5/8/2009	_____

The above records are submitted for destruction in accordance with procedures outlined in the Las Virgenes Municipal Water District Records Management Manual, revised 2008.

APPROVALS

DEPARTMENT HEAD:  DATE: 8/30/2023

GENERAL MANAGER:  DATE: 9/6/2023



DATE: October 3, 2023
TO: Board of Directors
FROM: Finance and Administration

SUBJECT: Monthly Cash and Investment Report: August 2023

SUMMARY:

During the month of August 2023, the value of the District’s total cash and investments increased from \$119,323,626, held on July 31, 2023, to \$121,783,998. The total held in the District’s investment portfolio increased from \$118,254,424 to \$120,019,325 at book value. Four investments matured, and two investments were purchased. The book value of the District’s investment portfolio decreased from \$86,777,616 to \$86,154,917. The value of the District’s Local Agency Investment Fund (LAIF) account was flat at \$3,887,228, and the District’s California Asset Management Program (CAMP) account increased to \$29,914,143. The remaining funds were held in the District’s checking and money market accounts.

RECOMMENDATION(S):

Receive and file the Monthly Cash and Investment Report for August 2023.

DISCUSSION:

As of August 31, 2023, the District held \$121,783,998 in its cash and investment accounts at book value, up 2.06% month-over-month. The majority of the funds were held in the District’s self-managed investment account, which had an August 31st book value of \$86,154,917. CAMP held the majority of the remaining funds, in the amount of \$29,914,143. LAIF held \$3,887,228, and the remaining portion was held in the District’s checking and money market accounts. The annualized yield of the District’s investment portfolio was 2.35% in August, up from 2.32% in July. The annualized yield on the District’s CAMP funds was 5.52%, up 21 basis points from July. The annualized yield on the District’s LAIF funds was 3.43%, up 13 basis points from July. The combined total yield on the District’s accounts was 3.20% in August, up from 3.07% in July.

The following investments were purchased in August:

- 08/07/23 – FFCB agency bullet, in the amount of \$996,660, a face value of \$1,000,000, and a maturity of 08/07/28; YTM 4.325%.
- 08/07/23 – Liberty First Credit Union insured CD, in the amount of \$249,000, and a

maturity of 08/07/28; YTM 4.700%.

The following investments matured during August:

- 08/01/23 – Rowland Unified School District municipal bond, in the amount of \$242,000; YTM 0.541%
- 08/04/23 – FHLB agency bond, in the amount of \$1,000,000; YTM 3.232%
- 08/14/23 – First Missouri State Bank CD, in the amount of \$245,000; YTM 2.850%
- 08/15/23 – Customers Bank CD, in the amount of \$242,000; YTM 3.000%

There were no transactions in the District's LAIF account.

The following transactions were posted in the District's CAMP account:

- 08/15/23 – Deposit in the amount of \$1,500,000.
- 08/16/23 – Deposit in the amount of \$1,000,000.
- 08/31/23 – Monthly interest in the amount of \$134,787.

The District's investments are in compliance with the adopted Investment Policy, and the District has sufficient funds to meet expenditures during the next six months from funds held in local agency investment pool liquid accounts.

Cash Analysis:

Another important aspect of the Monthly Cash and Investment Report is to monitor the District's performance as compared to its adopted Financial Policies. Attachment B shows the District's total cash and investments as of August 31st, 2023, and compares the balances to the adopted Financial Policies. As shown for August, the Potable Water Enterprise had \$5.2 million available for capital projects, the Sanitation Enterprise had \$1.3 million funds available for capital, and the Recycled Water Enterprise had \$12.3 million available for capital. The Board has assigned \$15 million in potable water funds, \$10 million in recycled water funds and \$10 million in sanitation funds for the Pure Water Project Las Virgenes-Triunfo.

GOALS:

Ensure Effective Utilization of the Public's Assets and Money

Prepared by: Donald Patterson, Director of Finance and Administration

ATTACHMENTS:

[LVMWD Investment Portfolio 08.31.2023.pdf](#)

[Investment_Report_Definitions.pdf](#)

[Cash Report - Aug 2023.pdf](#)



**LAS VIRGENES MUNICIPAL WATER DISTRICT
MONTHLY CASH AND INVESTMENT REPORT
AUGUST 31, 2023**

District investments are included in this report and all investments, except those relating to debt issues and deferred compensation programs funds, conform to District investment policy. All investment transactions within the period covered by this report, except for the exceptions noted above, conform to District Investment policy. Deferred compensation program funds are not included in this report; their investment is directed by individual employees participating in the deferred compensation program and not by the District. Debt issue funds are included in this report; their investment is controlled by specific provisions of the issuance documents and not by the District."

"The deposits and investments of the District safeguard the principal and maintain the liquidity needs of the District, providing the District with the ability to meet expenditure requirements for the next six months. The maturity dates are compatible with foreseeable cash flow requirements. The deposits and investments can be easily and rapidly converted into cash without substantial loss of value."

Fund Name	Face Amount/Shares	Market Value	Book Value	% of Portfolio	YTM @ Cost	Days To Maturity
1 Investments	86,430,000.00	82,072,797.42	86,154,917.30	70.74	2.35	804
2 LAIF	3,887,227.80	3,887,227.80	3,887,227.80	3.19	3.43	1
3 CAMP	29,914,142.60	29,914,142.60	29,914,142.60	24.56	5.52	1
4 US Bank Blackrock	63,038.09	63,038.09	63,038.09	0.05	5.23	1
5 Wells Fargo Operating	1,764,671.93	1,764,671.93	1,764,671.93	1.45	5.21	1
Total / Average	122,059,080.42	117,701,877.84	121,783,997.72	100.00	3.20	569

David W. Pedersen, General Manager

Date

Andy Coradeschi, Treasurer

Date



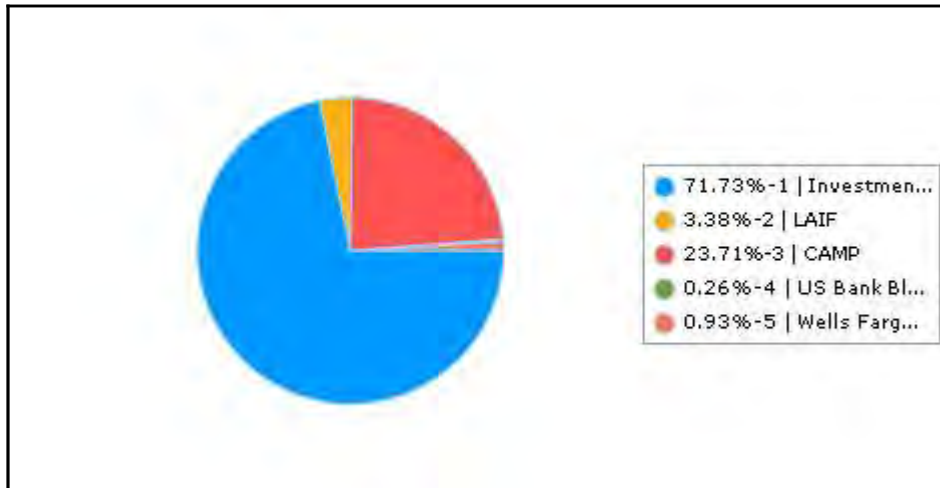
Las Virgenes Municipal Water District CA Distribution by Main Fund - Market Value All Portfolios

Begin Date: 7/31/2023, End Date: 8/31/2023

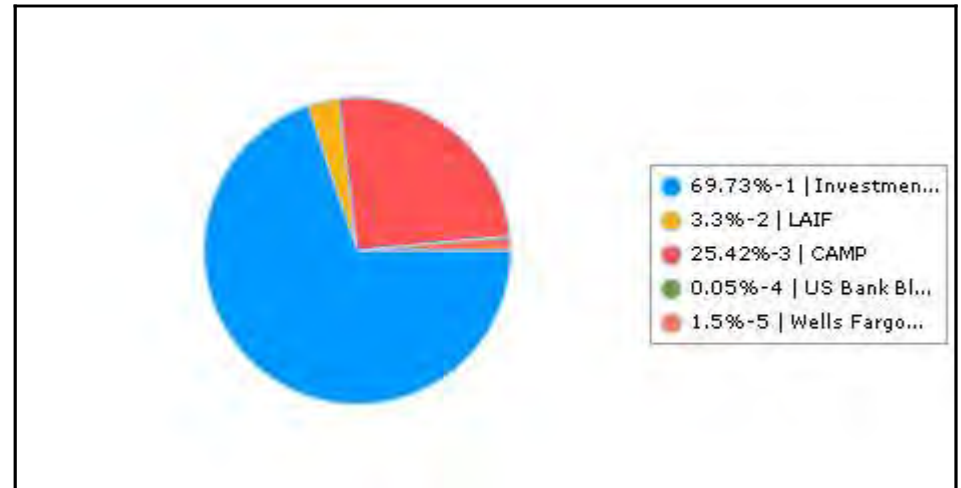
Main Fund Allocation

Main Fund	Market Value 7/31/2023	% of Portfolio 7/31/2023	Market Value 8/31/2023	% of Portfolio 8/31/2023
1 Investments	82,573,368.00	71.73	82,072,797.42	69.73
2 LAIF	3,887,227.80	3.38	3,887,227.80	3.30
3 CAMP	27,294,707.55	23.71	29,914,142.60	25.42
4 US Bank Blackrock	294,872.03	0.26	63,038.09	0.05
5 Wells Fargo Operating	1,069,202.35	0.93	1,764,671.93	1.50
Total / Average	115,119,377.73	100.00	117,701,877.84	100.00

Portfolio Holdings as of 7/31/2023



Portfolio Holdings as of 8/31/2023





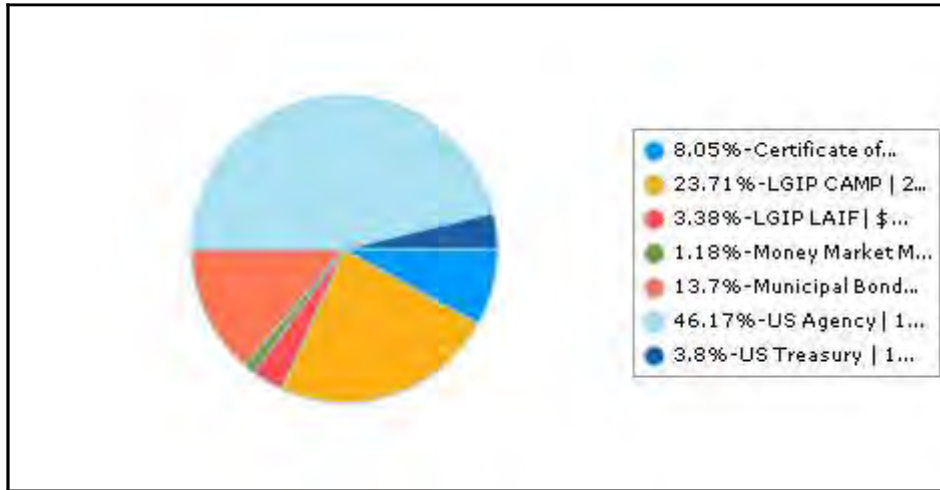
Las Virgenes Municipal Water District CA Distribution by Asset Category - Market Value All Portfolios

Begin Date: 7/31/2023, End Date: 8/31/2023

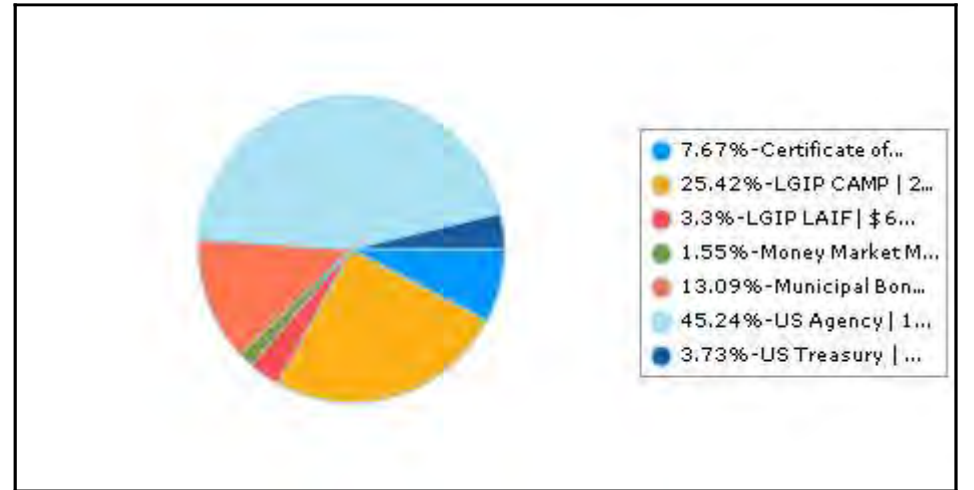
Asset Category Allocation

Asset Category	Market Value 7/31/2023	% of Portfolio 7/31/2023	Market Value 8/31/2023	% of Portfolio 8/31/2023
Certificate of Deposit 25 %	9,266,442.10	8.05	9,030,218.37	7.67
LGIP CAMP 25 %	27,294,707.55	23.71	29,914,142.60	25.42
LGIP LAIF \$ 65M	3,887,227.80	3.38	3,887,227.80	3.30
Money Market Mutual Funds 20 %	1,364,074.38	1.18	1,827,710.02	1.55
Municipal Bonds 100 %	15,776,050.90	13.70	15,406,005.80	13.09
US Agency 100 %	53,154,555.00	46.17	53,246,608.25	45.24
US Treasury 100 %	4,376,320.00	3.80	4,389,965.00	3.73
Total / Average	115,119,377.73	100.00	117,701,877.84	100.00

Portfolio Holdings as of 7/31/2023



Portfolio Holdings as of 8/31/2023



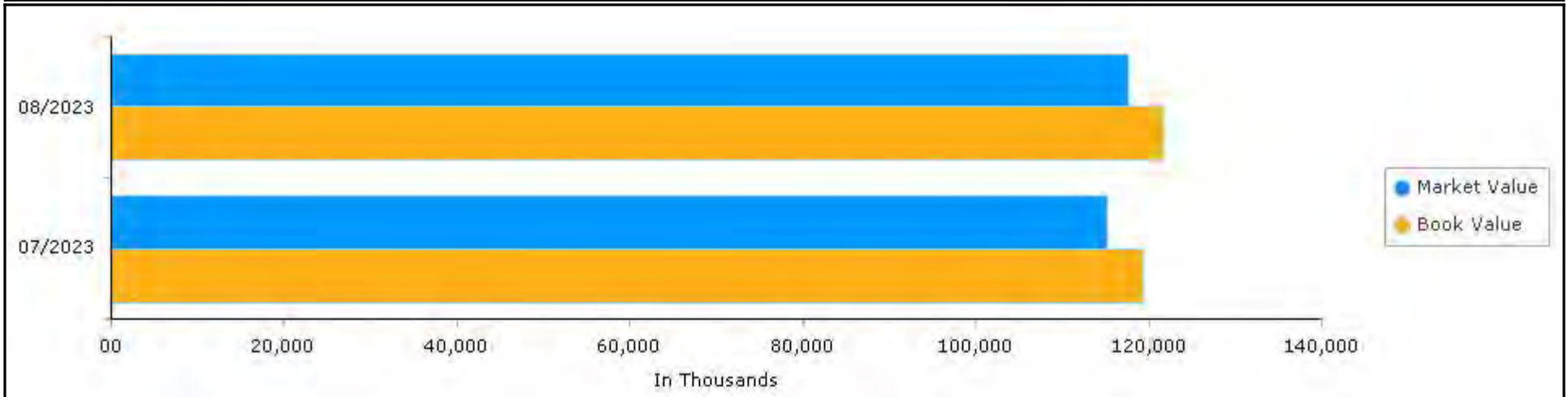


Las Virgenes Municipal Water District CA Portfolio Summary by Month All Portfolios

Begin Date: 7/31/2023, End Date: 8/31/2023

Month	Market Value	Book Value	Unrealized Gain/Loss	YTM @ Cost	YTM @ Market	Duration	Days To Maturity
7/31/2023	115,119,377.73	119,323,626.02	-4,204,248.29	3.07	5.06	1.53	585
8/31/2023	117,701,877.84	121,783,997.72	-4,082,119.88	3.21	5.09	1.50	570
Total / Average	116,410,627.79	120,553,811.87	-4,143,184.09	3.14	5.08	1.51	577

Market Value / Book Value Comparison





**Las Virgenes Municipal Water District CA
Total Rate of Return - Book Value by Month
All Portfolios**

Begin Date: 7/31/2023, End Date: 8/31/2023

Month	Beginning BV + Accrued Interest	Interest Earned During Period-BV	Realized Gain/Loss-BV	Investment Income-BV	Average Capital Base-BV	TRR-BV	Annualized TRR-BV	Treasury 3 Year
7/31/2023	120,911,028.30	347,411.65	0.00	347,411.65	120,218,436.94	0.29	3.52	4.47
8/31/2023	119,806,998.50	289,124.64	0.00	289,124.64	120,193,396.72	0.24	2.93	4.59
Total/Average	120,911,028.30	636,536.29	0.00	636,536.29	120,109,291.14	0.53	3.22	4.53



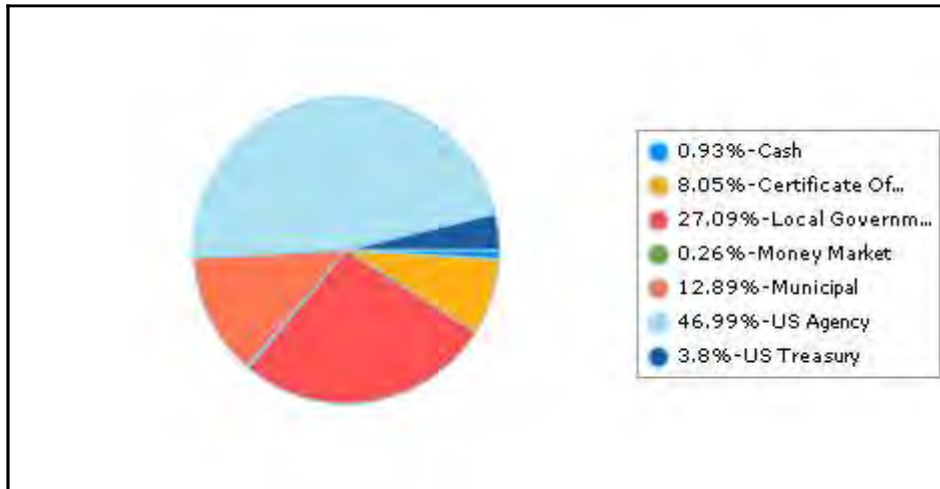
Las Virgenes Municipal Water District CA Distribution by Security Sector - Market Value All Portfolios

Begin Date: 7/31/2023, End Date: 8/31/2023

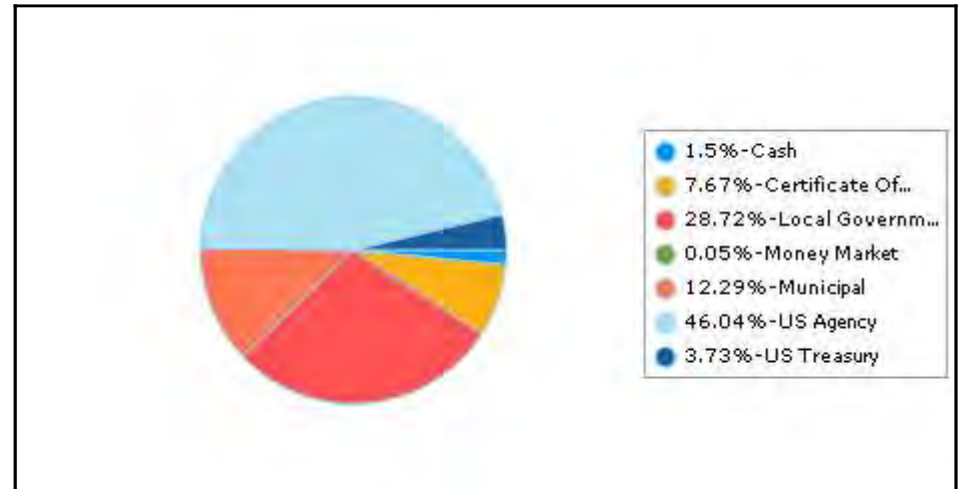
Security Sector Allocation

Security Sector	Market Value 7/31/2023	% of Portfolio 7/31/2023	Market Value 8/31/2023	% of Portfolio 8/31/2023
Cash	1,069,202.35	0.93	1,764,671.93	1.50
Certificate Of Deposit	9,266,442.10	8.05	9,030,218.37	7.67
Local Government Investment Pool	31,181,935.35	27.09	33,801,370.40	28.72
Money Market	294,872.03	0.26	63,038.09	0.05
Municipal	14,839,010.90	12.89	14,466,275.80	12.29
US Agency	54,091,595.00	46.99	54,186,338.25	46.04
US Treasury	4,376,320.00	3.80	4,389,965.00	3.73
Total / Average	115,119,377.73	100.00	117,701,877.84	100.00

Portfolio Holdings as of 7/31/2023



Portfolio Holdings as of 8/31/2023





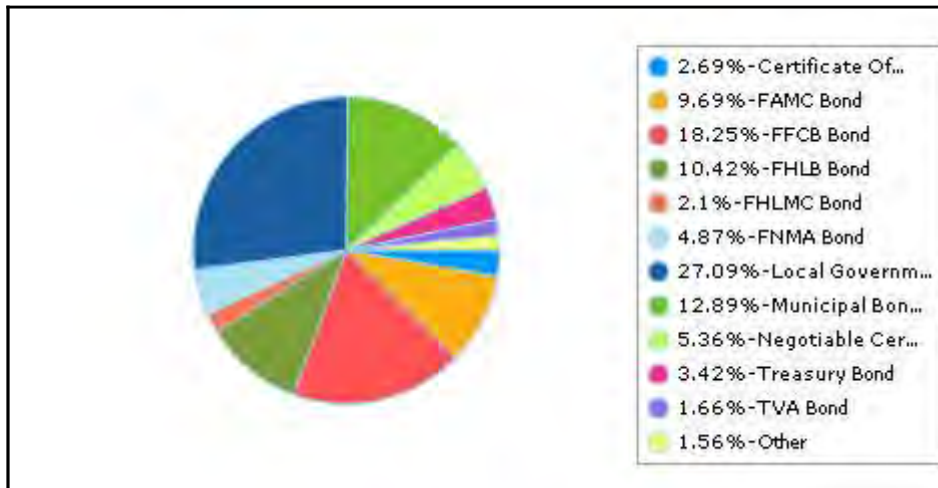
Las Virgenes Municipal Water District CA Distribution by Security Type - Market Value All Portfolios

Begin Date: 7/31/2023, End Date: 8/31/2023

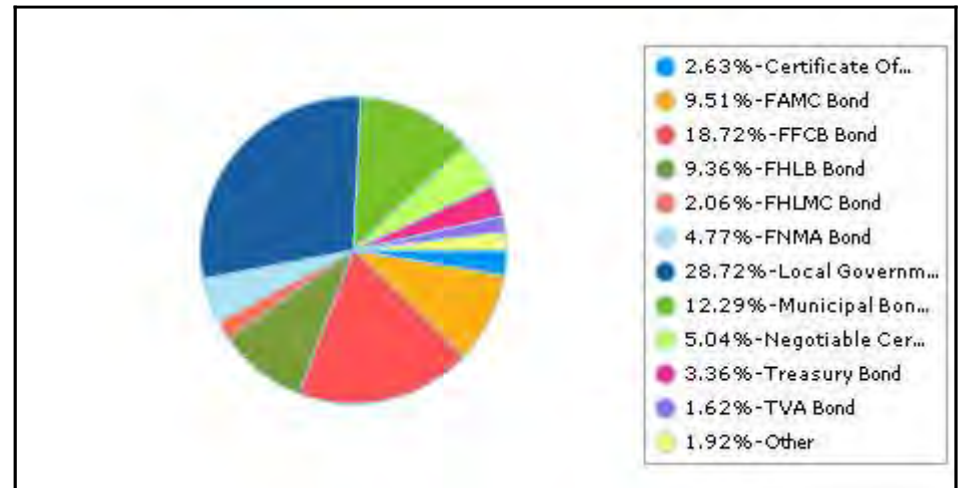
Security Type Allocation

Security Type	Market Value 7/31/2023	% of Portfolio 7/31/2023	Market Value 8/31/2023	% of Portfolio 8/31/2023
Certificate Of Deposit	3,097,349.43	2.69	3,096,148.61	2.63
FAMC Bond	11,157,910.00	9.69	11,188,530.00	9.51
FFCB Bond	21,010,800.00	18.25	22,035,080.00	18.72
FHLB Bond	11,996,517.00	10.42	11,020,596.25	9.36
FHLMC Bond	2,413,618.00	2.10	2,420,182.00	2.06
FNMA Bond	5,602,430.00	4.87	5,613,580.00	4.77
Local Government Investment Pool	31,181,935.35	27.09	33,801,370.40	28.72
Municipal Bond	14,839,010.90	12.89	14,466,275.80	12.29
Negotiable Certificate Of Deposit	6,169,092.67	5.36	5,934,069.76	5.04
Treasury Bond	3,940,500.00	3.42	3,954,710.00	3.36
TVA Bond	1,910,320.00	1.66	1,908,370.00	1.62
Other	1,799,894.38	1.56	2,262,965.02	1.92
Total / Average	115,119,377.73	100.00	117,701,877.84	100.00

Portfolio Holdings as of 7/31/2023



Portfolio Holdings as of 8/31/2023





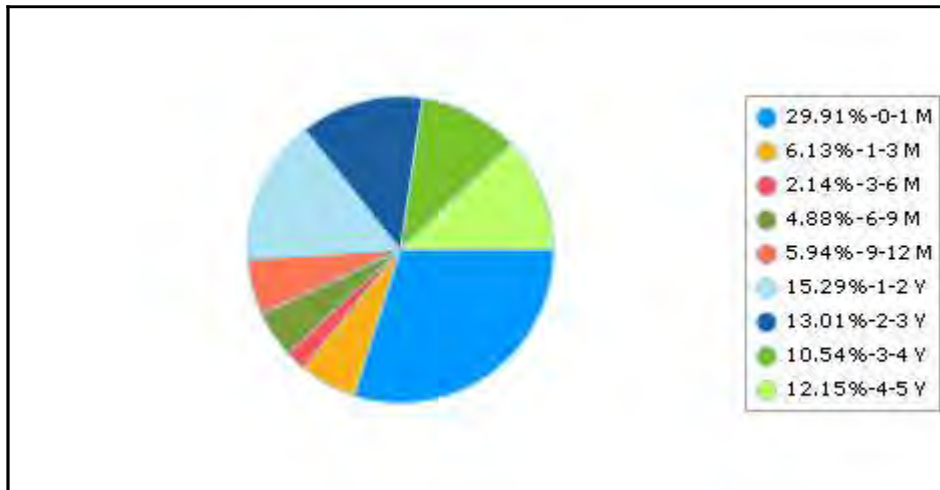
Las Virgenes Municipal Water District CA Distribution by Maturity Range - Market Value All Portfolios

Begin Date: 7/31/2023, End Date: 8/31/2023

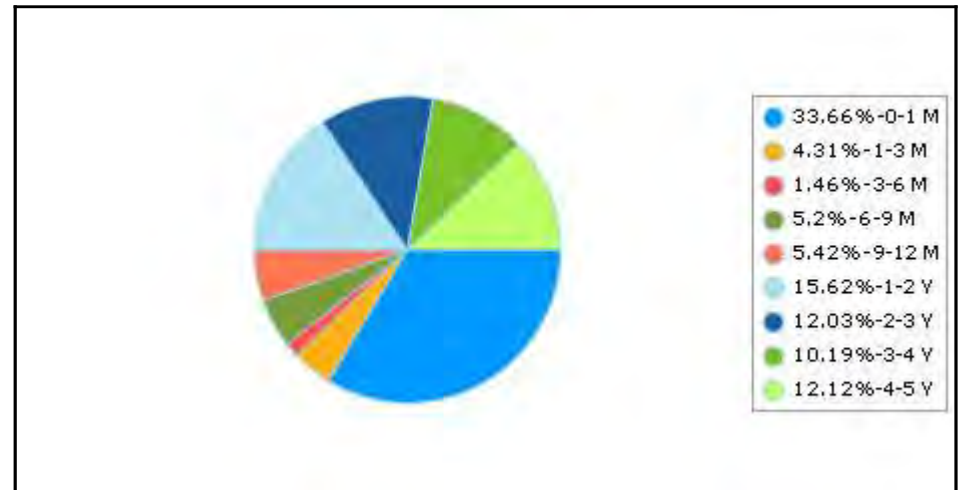
Maturity Range Allocation

Maturity Range	Market Value 7/31/2023	% of Portfolio 7/31/2023	Market Value 8/31/2023	% of Portfolio 8/31/2023
0-1 Month	34,432,351.52	29.91	39,620,490.42	33.66
1-3 Months	7,058,278.00	6.13	5,073,172.00	4.31
3-6 Months	2,460,095.10	2.14	1,714,313.85	1.46
6-9 Months	5,618,827.15	4.88	6,118,678.55	5.20
9-12 Months	6,839,953.49	5.94	6,374,783.15	5.42
1-2 Years	17,605,933.88	15.29	18,383,543.97	15.62
2-3 Years	14,981,787.35	13.01	14,160,707.45	12.03
3-4 Years	12,129,896.43	10.54	11,992,833.77	10.19
4-5 Years	13,992,254.81	12.15	14,263,354.68	12.12
Total / Average	115,119,377.73	100.00	117,701,877.84	100.00

Portfolio Holdings as of 7/31/2023



Portfolio Holdings as of 8/31/2023



Las Virgenes Municipal Water District CA
Portfolio Holdings
Investment Portfolio | by Maturity Range - Monthly Report
Report Format: By Transaction
Group By: Maturity Range
Average By: Cost Value
Portfolio / Report Group: Report Group | Investment Portfolio
As of 8/31/2023

Description	CUSIP/Ticker	YTM @ Cost	Security Sector	Bullet/Callable	Maturity Date	Book Value	Market Value	% of Portfolio
0-1 Month								
FFCB 0.3 9/1/2023-21	3133EL5J9	0.300	US Agency	Callable	9/1/2023	1,000,000.00	1,000,000.00	1.16
FHLB 3.375 9/8/2023	313383YJ4	2.227	US Agency	Bullet	9/8/2023	1,000,237.93	999,590.00	1.22
T-Bond 0.25 9/30/2023	91282CDA6	3.385	US Treasury	Bullet	9/30/2023	1,994,982.11	1,991,820.00	2.25
Total / Average 0-1 Month		2.305				3,995,220.04	3,991,410.00	4.63
1-3 Months								
Oklahoma Water Resources OK 0.432 10/1/2023-23	67920QWY0	0.432	Municipal	Callable	10/1/2023	100,000.00	99,622.00	0.12
California State 2.25 10/1/2023	13063DDG0	3.092	Municipal	Bullet	10/1/2023	999,341.51	997,640.00	1.12
FFCB 0.27 10/5/2023-21	3133EMBQ4	0.282	US Agency	Callable	10/5/2023	999,988.81	994,910.00	1.16
FFCB 4.125 10/17/2023	3133ENN63	4.164	US Agency	Bullet	10/17/2023	999,954.92	998,190.00	1.16
State of Ohio 2.3 11/1/2023	677522SQ8	3.451	Municipal	Bullet	11/1/2023	998,102.34	995,270.00	1.15
FNMA 0.25 11/27/2023	3135G06H1	3.328	US Agency	Bullet	11/27/2023	992,801.06	987,540.00	1.12
Total / Average 1-3 Months		2.808				5,090,188.64	5,073,172.00	5.83
3-6 Months								
Medallion Bank UT 1.7 12/22/2023	58404DFX4	1.700	Certificate Of Deposit	Bullet	12/22/2023	245,000.00	242,238.85	0.28
Morgan Stanley Bank 3.35 1/10/2024	61760ATZ2	3.350	Certificate Of Deposit	Bullet	1/10/2024	245,000.00	243,182.10	0.28
FFCB 2.37 2/5/2024	3133EH5S8	2.524	US Agency	Bullet	2/5/2024	999,378.06	986,730.00	1.15
TIAA FSB FL 3 2/22/2024	87270LBU6	3.000	Certificate Of Deposit	Bullet	2/22/2024	245,000.00	242,162.90	0.28
Total / Average 3-6 Months		2.592				1,734,378.06	1,714,313.85	2.01
6-9 Months								
T-Bond 1.5 2/29/2024	91282CEA5	4.833	US Treasury	Bullet	2/29/2024	984,015.13	980,940.00	1.12
FHLB 3.25 3/8/2024	3130A0XE5	2.625	US Agency	Bullet	3/8/2024	1,003,146.52	988,250.00	1.18
T-Bond 2.25 3/31/2024	91282CEG2	5.096	US Treasury	Bullet	3/31/2024	984,067.13	981,950.00	1.13
California State 3 4/1/2024	13063DLZ9	2.500	Municipal	Bullet	4/1/2024	1,002,736.63	985,660.00	1.19
FHLB 2.5 4/26/2024-23	3130ARLS8	2.500	US Agency	Callable	4/26/2024	475,000.00	466,236.25	0.55
Comenity Capital Bank UT 2.75 4/30/2024	20033AU95	2.750	Certificate Of Deposit	Bullet	4/30/2024	245,000.00	240,646.35	0.28
Pasadena Pension CA 1.8 5/1/2024	70227RBK5	1.800	Municipal	Bullet	5/1/2024	260,000.00	253,627.40	0.30
FAMC 2.65 5/2/2024	31422XYB2	2.690	US Agency	Bullet	5/2/2024	999,740.59	981,320.00	1.16
Bank New England NH 2.65 5/23/2024	06426KBE7	2.650	Certificate Of Deposit	Bullet	5/23/2024	245,000.00	240,048.55	0.28

Description	CUSIP/Ticker	YTM @ Cost	Security Sector	Bullet/Callable	Maturity Date	Book Value	Market Value	% of Portfolio
Total / Average 6-9 Months		3.308				6,198,706.00	6,118,678.55	7.20
9-12 Months								
University Northern CO 2.147 6/1/2024	914733DV9	2.147	Municipal	Bullet	6/1/2024	1,000,000.00	974,070.00	1.16
FFCB 2.16 6/3/2024	3133EKNX0	1.865	US Agency	Bullet	6/3/2024	1,002,124.38	976,620.00	1.18
FFCB 3.25 6/17/2024	3133ENYX2	3.300	US Agency	Bullet	6/17/2024	999,617.84	983,420.00	1.16
Lafayette Fed Credit Union 2.85 6/17/2024	50625LBK8	2.850	Certificate Of Deposit	Bullet	6/17/2024	249,000.00	243,858.15	0.29
FNMA 1.75 7/2/2024	3135G0V75	3.319	US Agency	Bullet	7/2/2024	987,348.53	969,460.00	1.13
FHLB 4.8 7/10/2024	3130A0U77	4.800	US Agency	Bullet	7/10/2024	1,000,000.00	994,470.00	1.16
Enerbank UT 2.15 8/7/2024	29278TKJ8	2.150	Certificate Of Deposit	Bullet	8/7/2024	245,000.00	237,405.00	0.28
City of Los Angeles 5 9/1/2024	544351QP7	4.142	Municipal	Bullet	9/1/2024	1,007,991.63	995,480.00	1.18
Total / Average 9-12 Months		3.203				6,491,082.38	6,374,783.15	7.55
1-2 Years								
First Farmers Bank & Trust 1.75 9/4/2024	320165JK0	1.750	Certificate Of Deposit	Bullet	9/4/2024	245,000.00	235,775.75	0.28
FHLB 3.5 9/13/2024	3130AT6G7	4.068	US Agency	Bullet	9/13/2024	994,377.99	981,680.00	1.15
FAMC 1.74 9/26/2024	31422BMD9	1.664	US Agency	Bullet	9/26/2024	1,000,778.41	962,350.00	1.17
South Gate Utility CA 2.224 10/1/2024-24	83789TBQ1	2.224	Municipal	Callable	10/1/2024	500,000.00	482,670.00	0.58
FFCB 4.62 10/17/2024-23	3133ENS68	4.620	US Agency	Callable	10/17/2024	1,000,000.00	989,810.00	1.16
California State University 0.563 11/1/2024	13077DQC9	0.563	Municipal	Bullet	11/1/2024	400,000.00	378,092.00	0.47
FAMC 1.79 11/1/2024	31422BPG9	1.804	US Agency	Bullet	11/1/2024	999,844.19	960,180.00	1.16
California State 1.646 11/1/2024-24	13077DKC5	1.646	Municipal	Callable	11/1/2024	400,000.00	382,872.00	0.47
California State 0.56 12/1/2024-24	13067WRB0	0.560	Municipal	Callable	12/1/2024	250,000.00	235,707.50	0.29
FFCB 1.08 1/6/2025	31422XRD6	1.080	US Agency	Bullet	1/6/2025	1,000,000.00	946,330.00	1.16
KEMBA Financial Credit Union 1.8 1/8/2025	48836LAJ1	1.800	Certificate Of Deposit	Bullet	1/8/2025	245,000.00	233,036.65	0.28
FAMC 1.2 1/14/2025	31422XSU7	1.195	US Agency	Bullet	1/14/2025	1,000,068.70	947,170.00	1.16
Knoxville TVA TN 1.95 1/16/2025	499724AL6	1.950	Certificate Of Deposit	Bullet	1/16/2025	245,000.00	233,342.90	0.28
FFCB 1.67 2/14/2025-24	3133ENN4	1.670	US Agency	Callable	2/14/2025	1,000,000.00	947,810.00	1.16
Technology FCU 5 2/24/2025	87868YAJ2	5.000	Certificate Of Deposit	Bullet	2/24/2025	248,000.00	246,125.12	0.29
Somerset Trust Company 1 3/19/2025	835104BZ2	1.000	Certificate Of Deposit	Bullet	3/19/2025	245,000.00	228,543.35	0.28
Iberia Bank LA 1 3/20/2025	45083ANS7	1.000	Certificate Of Deposit	Bullet	3/20/2025	245,000.00	228,692.80	0.28
Pacific Western Bank CA 1.35 4/16/2025	69506YRG6	1.350	Certificate Of Deposit	Bullet	4/16/2025	245,000.00	229,315.10	0.28
Celtic Bank UT 1.5 4/17/2025	15118RUX3	1.500	Certificate Of Deposit	Bullet	4/17/2025	245,000.00	229,694.85	0.28
First National Bank TX 1.35 4/28/2025	32112UDR9	1.350	Certificate Of Deposit	Bullet	4/28/2025	245,000.00	228,852.05	0.28
Alexandria Utilities LA 1.498 5/1/2025-25	015086NJ6	1.498	Municipal	Callable	5/1/2025	400,000.00	375,272.00	0.47
TVA 0.75 5/15/2025	880591EW8	0.625	US Agency	Bullet	5/15/2025	1,002,097.43	928,690.00	1.17
Beverly Hills CA 0.719 6/1/2025	088013FG7	0.719	Municipal	Bullet	6/1/2025	500,000.00	463,010.00	0.58
State Bank India NY 1.05 6/10/2025	856285TR2	1.050	Certificate Of Deposit	Bullet	6/10/2025	245,000.00	226,752.40	0.28
San Francisco California 0.728 6/15/2025-25	79773KDC5	0.728	Municipal	Callable	6/15/2025	500,000.00	462,650.00	0.58
FAMC 0.48 6/19/2025	31422BD98	0.531	US Agency	Bullet	6/19/2025	999,102.73	922,170.00	1.16
FHLMC 0.65 6/30/2025-22	3134GVT99	0.650	US Agency	Callable	6/30/2025	1,000,000.00	924,050.00	1.16

Description	CUSIP/Ticker	YTM @ Cost	Security Sector	Bullet/Callable	Maturity Date	Book Value	Market Value	% of Portfolio
Minnwest Bank South MN 0.5 7/15/2025	60425SHY8	0.500	Certificate Of Deposit	Bullet	7/15/2025	245,000.00	223,283.20	0.28
Preferred Bank CA 0.5 7/17/2025	740367MA2	0.500	Certificate Of Deposit	Bullet	7/17/2025	245,000.00	223,224.40	0.28
FNMA 0.625 7/21/2025-22	3136G4ZJ5	0.625	US Agency	Callable	7/21/2025	1,000,000.00	918,640.00	1.16
Bank Baroda NY 0.6 7/22/2025	06063HMR1	0.600	Certificate Of Deposit	Bullet	7/22/2025	245,000.00	223,687.45	0.28
Flagstar Bank MI 0.6 7/22/2025	33847E3W5	0.600	Certificate Of Deposit	Bullet	7/22/2025	245,000.00	223,687.45	0.28
FNMA 0.65 8/14/2025-22	3136G4C43	0.650	US Agency	Callable	8/14/2025	1,000,000.00	917,270.00	1.16
FHLMC 3.45 8/25/2025-23	3134GXR55	3.530	US Agency	Callable	8/25/2025	599,106.98	582,882.00	0.70
City of Santa Rosa 0.977 9/1/2025-25	802649TJ2	0.977	Municipal	Callable	9/1/2025	500,000.00	460,225.00	0.58
Total / Average 1-2 Years		1.546				19,478,376.43	18,383,543.97	22.65

2-3 Years								
FHLMC 0.5 9/30/2025-22	3134GWWQ5	0.500	US Agency	Callable	9/30/2025	1,000,000.00	913,250.00	1.16
FNMA 0.54 10/27/2025-22	3136G45C3	0.540	US Agency	Callable	10/27/2025	1,000,000.00	908,670.00	1.16
FFCB 0.46 11/3/2025	3133EMFS6	0.493	US Agency	Bullet	11/3/2025	999,289.95	911,910.00	1.16
FNMA 0.57 11/17/2025-22	3135GA3X7	0.570	US Agency	Callable	11/17/2025	1,000,000.00	912,000.00	1.16
California State 0.751 12/1/2025-25	13067WSV5	0.751	Municipal	Callable	12/1/2025	250,000.00	227,360.00	0.29
FFCB 0.47 12/22/2025-22	3133EMLC4	0.470	US Agency	Callable	12/22/2025	1,000,000.00	901,250.00	1.16
JPMorgan Chase 0.5 1/6/2026	48128UVT3	0.500	Certificate Of Deposit	Bullet	1/6/2026	245,000.00	218,655.15	0.28
FAMC 0.48 1/15/2026	31422B6K1	0.489	US Agency	Bullet	1/15/2026	999,765.79	908,330.00	1.16
FFCB 0.45 2/2/2026-23	3133EMPD8	0.450	US Agency	Callable	2/2/2026	1,000,000.00	899,800.00	1.16
FFCB 0.8 3/9/2026-23	3133EMSU7	0.800	US Agency	Callable	3/9/2026	1,000,000.00	902,720.00	1.16
FHLB 0.65 3/10/2026-22	3130ALDS0	0.650	US Agency	Callable	3/10/2026	1,000,000.00	903,810.00	1.16
FAMC 0.83 3/27/2026	31422XDX7	0.828	US Agency	Bullet	3/27/2026	1,000,052.08	909,350.00	1.16
Nelnet Bank UT 0.75 4/15/2026	64034KAF8	0.750	Certificate Of Deposit	Bullet	4/15/2026	245,000.00	217,518.35	0.28
Greenstate Credit Union 0.95 4/16/2026	39573LBC1	0.950	Certificate Of Deposit	Bullet	4/16/2026	245,000.00	218,410.15	0.28
Oceanside Water CA 1.103 5/1/2026	675413DL9	1.103	Municipal	Bullet	5/1/2026	210,000.00	189,732.90	0.24
FAMC 0.95 5/4/2026-23	31422XFP2	0.950	US Agency	Callable	5/4/2026	1,000,000.00	902,130.00	1.16
FAMC 0.925 6/10/2026-22	31422XHF2	0.925	US Agency	Callable	6/10/2026	1,000,000.00	898,300.00	1.16
Toyota Financial Savings NV 0.95 7/29/2026	89235MLE9	0.950	Certificate Of Deposit	Bullet	7/29/2026	245,000.00	216,205.15	0.28
Upper Santa Clara Valley Water District 1.175 8/1/	916544EV7	3.350	Municipal	Bullet	8/1/2026	941,304.87	898,480.00	1.06
FFCB 0.71 8/10/2026-23	3133EM2C5	0.710	US Agency	Callable	8/10/2026	1,000,000.00	887,140.00	1.16
UBS Bank UT 0.95 8/11/2026	90348JR93	0.950	Certificate Of Deposit	Bullet	8/11/2026	245,000.00	215,685.75	0.28
Total / Average 2-3 Years		0.825				15,625,412.69	14,160,707.45	18.14

3-4 Years								
FHLB 0.75 9/28/2026-21	3130ANY38	0.750	US Agency	Callable	9/28/2026	1,000,000.00	892,970.00	1.16
FAMC 0.9 10/2/2026-22	31422XNH1	0.900	US Agency	Callable	10/2/2026	1,000,000.00	889,280.00	1.16
Synchrony Bank 1 10/22/2026	87164YE34	1.000	Certificate Of Deposit	Bullet	10/22/2026	248,000.00	217,376.96	0.29
City of Palm Springs 1.402 11/1/2026	69666JHX9	1.402	Municipal	Bullet	11/1/2026	500,000.00	446,495.00	0.58
FFCB 1.34 11/30/2026	3133ENFV7	1.291	US Agency	Bullet	11/30/2026	1,001,535.20	902,930.00	1.17
California State 1.051 12/1/2026-26	13067WSW3	1.918	Municipal	Callable	12/1/2026	973,181.04	885,580.00	1.12

Description	CUSIP/Ticker	YTM @ Cost	Security Sector	Bullet/Callable	Maturity Date	Book Value	Market Value	% of Portfolio
FHLB Step 12/22/2026-22	3130AQ2B8	1.869	US Agency	Callable	12/22/2026	1,000,000.00	923,260.00	1.16
FAMC 1.5 1/19/2027	31422XSV5	1.517	US Agency	Bullet	1/19/2027	999,444.50	907,640.00	1.16
Beal Bank (Texas) 1.55 2/3/2027	07371AWQ2	1.550	Certificate Of Deposit	Bullet	2/3/2027	245,000.00	216,646.15	0.28
American Express 2 3/9/2027	02589ABQ4	3.585	Certificate Of Deposit	Bullet	3/9/2027	237,203.05	224,147.50	0.27
State of Maryland 4.05 3/15/2027	574193WF1	4.114	Municipal	Bullet	3/15/2027	997,905.88	978,000.00	1.16
FHLB 3 4/21/2027-22	3130ARGE5	3.000	US Agency	Callable	4/21/2027	1,000,000.00	939,730.00	1.16
San Jose California 3.594 5/1/2027	798153PY2	3.594	Municipal	Bullet	5/1/2027	1,000,000.00	942,130.00	1.16
Capital One Bank NA 3.05 5/4/2027	14042TFW2	3.050	Certificate Of Deposit	Bullet	5/4/2027	246,000.00	228,278.16	0.29
FFCB 3.24 6/28/2027	3133ENZK9	3.260	US Agency	Bullet	6/28/2027	999,295.76	954,880.00	1.16
Commonwealth of Massachusetts 3.679 7/15/2027	576004HD0	3.679	Municipal	Bullet	7/15/2027	500,000.00	479,990.00	0.58
FHLB 4.05 8/10/2027-22	3130ASUC1	4.050	US Agency	Callable	8/10/2027	1,000,000.00	963,500.00	1.16
Total / Average 3-4 Years		2.392				12,947,565.43	11,992,833.77	15.04
4-5 Years								
FFCB 3.375 9/15/2027	3133ENL99	3.451	US Agency	Bullet	9/15/2027	997,203.20	958,290.00	1.16
Security Bank & Trust 3.9 9/28/2027	814010CR3	3.900	Certificate Of Deposit	Bullet	9/28/2027	245,000.00	234,553.20	0.28
FFCB 4 9/29/2027	3133ENQ29	4.064	US Agency	Bullet	9/29/2027	997,658.11	984,660.00	1.16
FHLB 4.7 9/30/2027-22	3130ATC21	4.700	US Agency	Callable	9/30/2027	1,000,000.00	976,490.00	1.16
Discover Bank 4.9 11/8/2027	254673Y67	4.900	Certificate Of Deposit	Bullet	11/8/2027	244,000.00	241,355.04	0.28
FHLB 4.25 12/10/2027	3130ATUS4	3.738	US Agency	Bullet	12/10/2027	1,019,737.77	990,610.00	1.19
University Bank 4.05 12/16/2027	914098DM7	4.050	Certificate Of Deposit	Bullet	12/16/2027	249,000.00	238,006.65	0.29
FFCB 4 1/6/2028	3133EN5N6	3.662	US Agency	Bullet	1/6/2028	1,013,323.97	984,180.00	1.18
Lakeside Bank 3.85 1/13/2028	51210STA5	3.850	Certificate Of Deposit	Bullet	1/13/2028	245,000.00	232,032.15	0.28
Austin Telco FCU 4.75 1/27/2028	052392CN5	4.750	Certificate Of Deposit	Bullet	1/27/2028	248,000.00	243,508.72	0.29
State of California 1.7 2/1/2028	13063DC48	3.959	Municipal	Bullet	2/1/2028	910,136.79	876,640.00	1.05
TVA 3.875 3/15/2028	880591EZ1	3.886	US Agency	Bullet	3/15/2028	999,560.79	979,680.00	1.16
FFCB 3.5 4/12/2028	3133EPFU4	3.667	US Agency	Bullet	4/12/2028	993,014.22	964,420.00	1.15
Dort Financial Credit Unio 4.25 4/21/2028	25844MAS7	4.250	Certificate Of Deposit	Bullet	4/21/2028	247,000.00	237,040.96	0.29
Freedom Northwest Credit Union 5 5/9/2028-24	356436AJ4	5.000	Certificate Of Deposit	Callable	5/9/2028	248,000.00	245,629.12	0.29
Morgan Stanley Bank NA 4.5 5/10/2028	61690U5S5	4.500	Certificate Of Deposit	Bullet	5/10/2028	244,000.00	236,558.00	0.28
T-Note 1.25 5/19/2028	91282CCE9	3.678	US Treasury	Bullet	5/19/2028	448,123.45	435,255.00	0.52
FFCB 3.875 5/30/2028	3133EPLD5	3.886	US Agency	Bullet	5/30/2028	999,525.45	981,270.00	1.16
FFCB 3.875 6/8/2028	3133EPME2	3.875	US Agency	Bullet	6/8/2028	1,000,000.00	981,310.00	1.16
FAMC 4.32 7/17/2028	31422X4Y5	4.320	US Agency	Bullet	7/17/2028	1,000,000.00	1,000,310.00	1.16
FFCB 4.25 8/7/2028	3133EPSK2	4.325	US Agency	Bullet	8/7/2028	996,703.88	996,500.00	1.16
Liberty First Credit Union 4.7 8/7/2028	530520AK1	4.700	Certificate Of Deposit	Bullet	8/7/2028	249,000.00	245,055.84	0.29
Total / Average 4-5 Years		4.024				14,593,987.63	14,263,354.68	16.96
Total / Average		2.344				86,154,917.30	82,072,797.42	100

Monthly Investment Report Definitions

- Disc./Cpn Rate – The yield paid by a fixed income security.
- Yield to Call (YTC) – The rate of return of a security held to call when interest payments, market value and par value are considered.
- Yield to Maturity (YTM) – The rate of return of a security held to maturity when interest payments, market value and par value are considered.
- Bullet – A fixed income security that cannot be redeemed by the issuer until the maturity date.
- Callable – A fixed income security that can be redeemed by the issuer before the maturity date.
- Book Value – The price paid for the security.
- Par Value – The face value of a security.
- Market Value – The current price of a security.
- Sinking Bond – In the case of the CASPWR Bond held by the District, a sinking bond pays a portion of principal on a defined schedule throughout the life of the bond.
- Custodian – The financial institution that holds securities for an investor.

Investment Abbreviations

- FHLB – Federal Home Loan Bank
- FHLMC – Federal Home Loan Mortgage Corporation (Freddie Mac)
- FNMA – Federal National Mortgage Association (Fannie Mae)
- FFCB – Federal Farm Credit Bank
- FAMCA/AGM – Federal Agricultural Mortgage Corporation (Farmer Mac)
- TVA – Tennessee Valley Authority

LVMWD CASH ANALYSIS - August 31, 2023

	Restricted Cash	Cash Held by Policy	Policy Requirement	Funds Available for Capital
101 - Potable Water Operations		13,641,285	10,830,708	
201 - Potable Water Construction	4,376,630			
301 - Potable Water Replacement		9,218,053	11,177,935	
Potable Water Assigned Funds		15,000,000		
603 - Rate Stabilization Fund		8,000,000	8,000,000	
Total Potable Water	4,376,630	45,859,338	30,008,643	5,227,325
102 - Recycled Water Operations		3,324,086	1,846,729	
203 - Recycled Water Construction	650,871			
302 - Recycled Water Replacement		12,676,019	2,539,440	
Recycled Water Assigned Funds		10,000,000		
Total Recycled Water	650,871	26,000,105	4,386,169	12,264,807
130 - Sanitation Operations		5,304,127	4,609,371	
230 - Sanitation Construction	4,865,067			
330 - Sanitation Replacement		8,270,209	12,573,074	
Sanitation Assigned Funds		10,000,000		
Total Sanitation	4,865,067	23,574,336	17,182,445	1,256,958
701 - Vested Sick Leave Reserve	1,088,027			
720 - Insurance Reserve		8,918,105	8,520,505	397,600
JPA	9,183,614			
701 - Internal Services Fund	(2,732,095)			
<i>Subtotal</i>	<i>17,432,114</i>	<i>104,351,884</i>		
TOTAL		121,783,998		

Financial Policy - Cash required to comply with District's adopted Financial Policy.

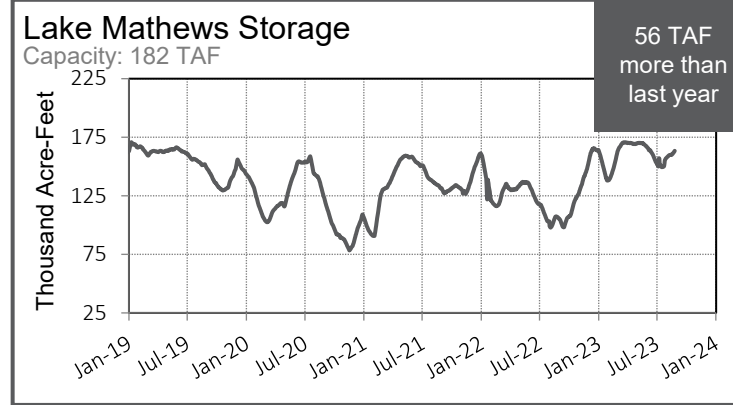
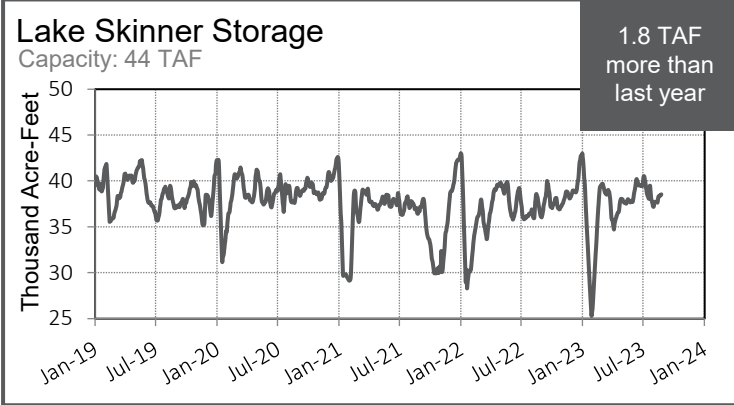
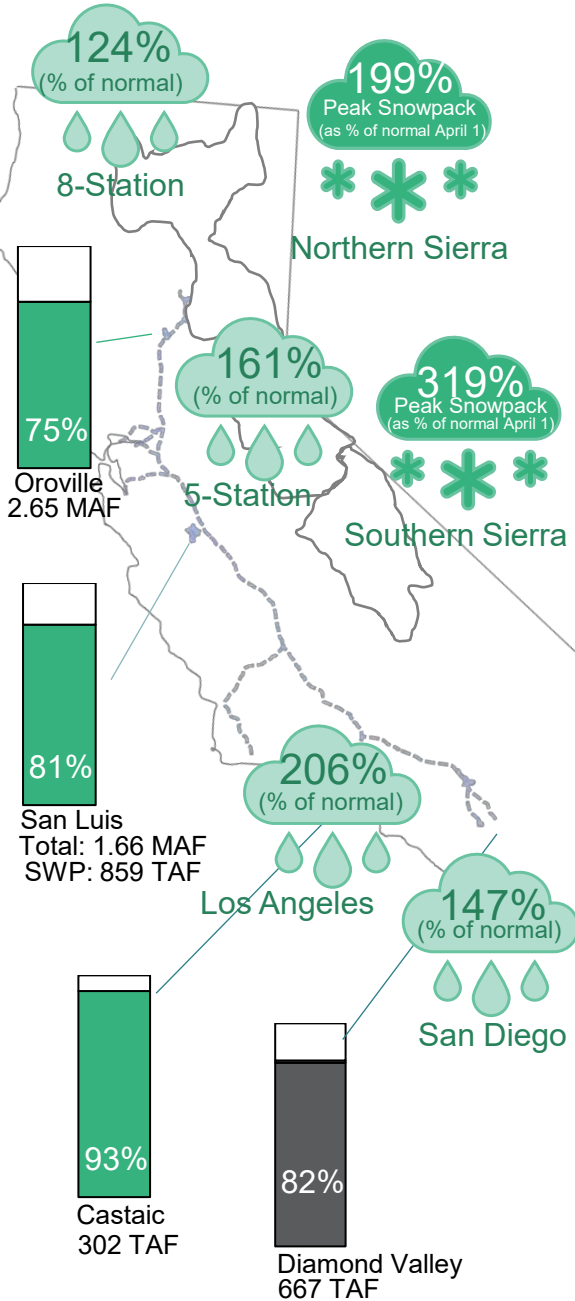
Assigned Fund - Revenue restricted to a particular purpose.



SWP Table A – 100% - 1,911,500 AF

Projected CRA Diversions – 644,000 AF

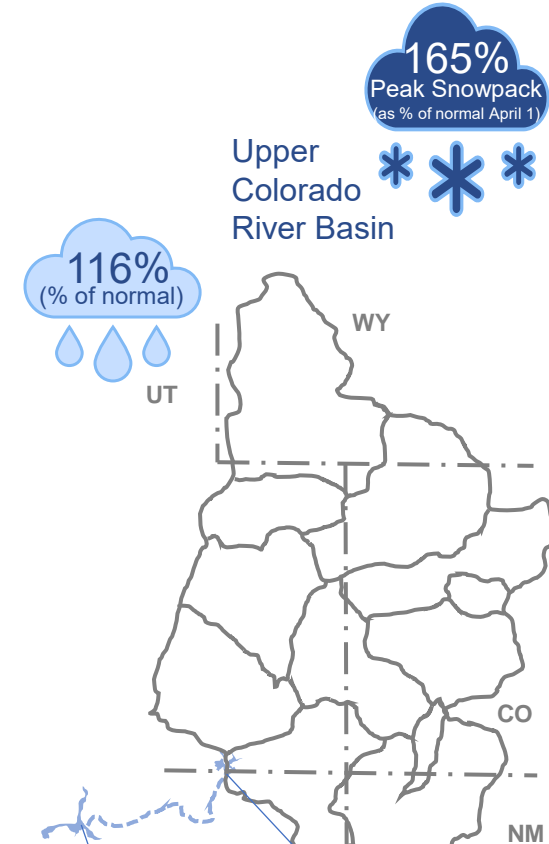
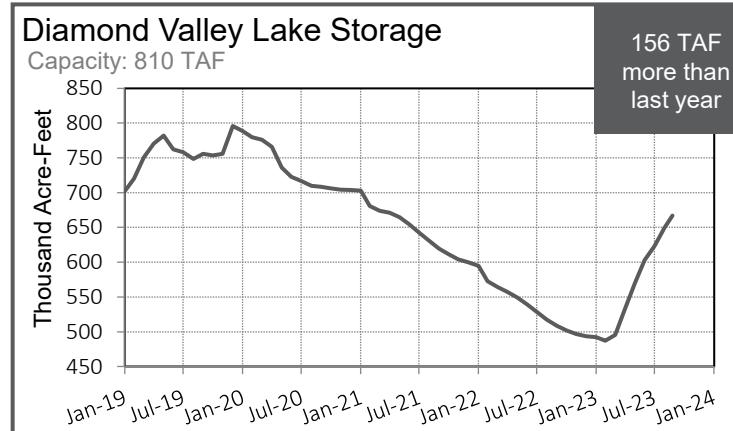
Metropolitan Resources



MWD WSDM Storage

Calendar Year 2023

	Projected Storage Balance (end of 2023)
SWP Carryover and Flexible Storage	400 TAF
In-Region Storage	621 TAF
Out-of-Region Storage	392 TAF
Desert Water & Coachella Valley	171 TAF
Lake Mead ICS and Other Actions	1,584 TAF



Highlights

Learn more about imported supplies:

- State Water Project - <https://www.mwdh2o.com/state-water-project-map/>
- Colorado River Aqueduct - <https://www.mwdh2o.com/colorado-river-aqueduct-map/>

This report is produced by the Water Resource Management Group and contains information from various federal, state, and local agencies. The Metropolitan Water District of Southern California cannot guarantee the accuracy or completeness of this information. Readers should refer to the relevant state, federal, and local agencies for additional or for the most up to date water supply information. Reservoirs, lakes, aqueducts, maps, watersheds, and all other visual representations on this report are not drawn to scale. Questions? Email mferreira@mwdh2o.com

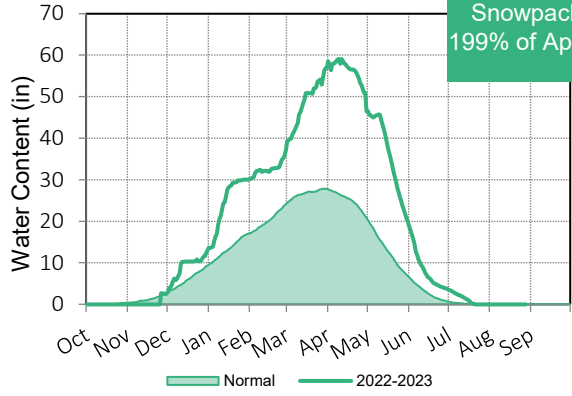


State Water Project Resources

As of: 09/24/2023

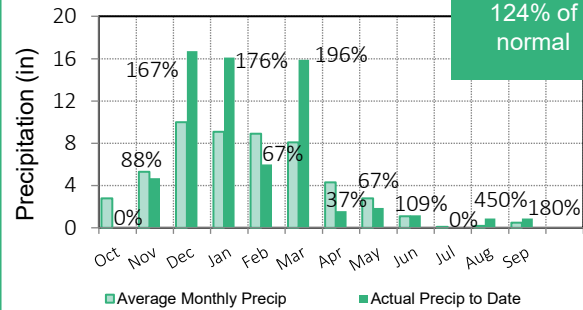
Northern Sierra Snowpack

Peak Snowpack:
199% of April 1



8 Station Index Precipitation

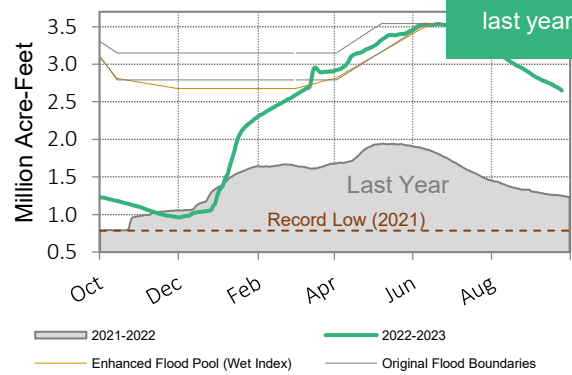
65.9 in
124% of normal



Oroville Reservoir Storage

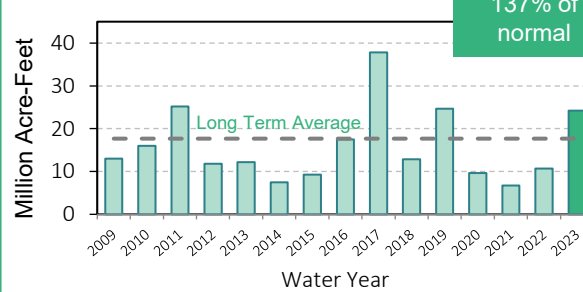
Capacity: 3.54 MAF

1.40 MAF
more than last year



Sacramento River Runoff

Forecast:
137% of normal



Other SWP Supplies

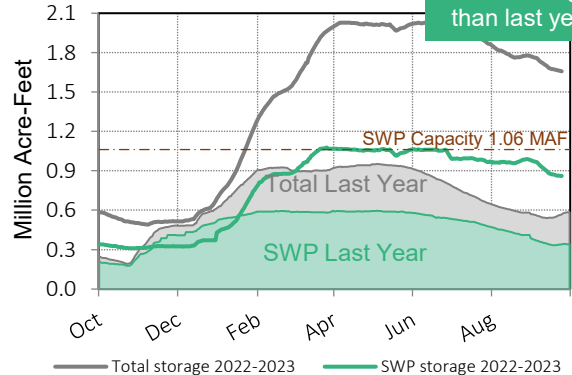
Calendar Year 2023

Carryover 39,000 acre-feet
Article 21 134,000 acre-feet

San Luis Reservoir Storage

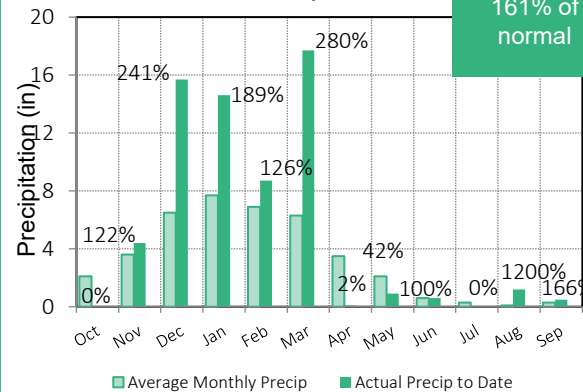
Capacity: 2.04 MAF

520 TAF more
SWP storage
than last year



5 Station Index Precipitation

64.4 in
161% of normal

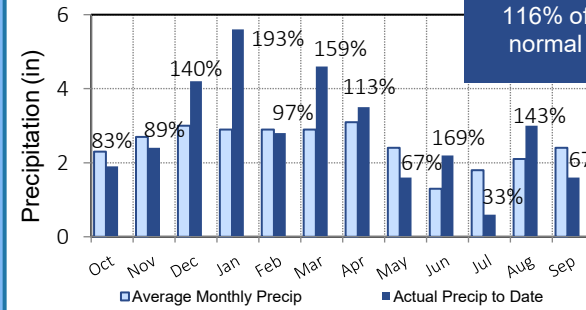


Colorado River Resources

As of: 09/24/2023

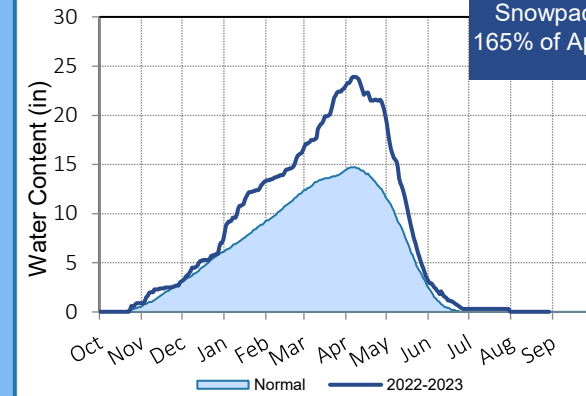
Upper Colorado Precipitation

42.0 in
116% of normal



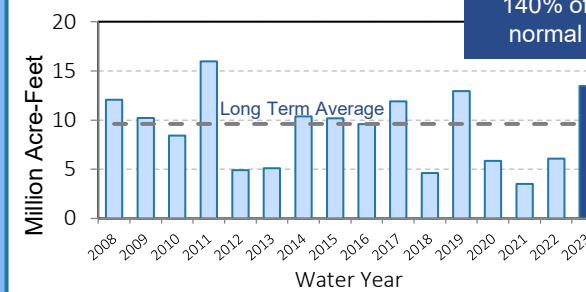
Upper Colorado Snowpack

Peak Snowpack:
165% of April 1



Powell Unregulated Inflow

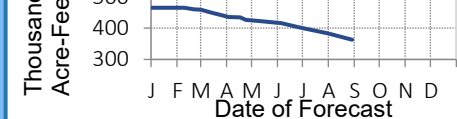
Forecast:
140% of normal



PVID/Yuma Agricultural Use

Annual Forecasted for 2023

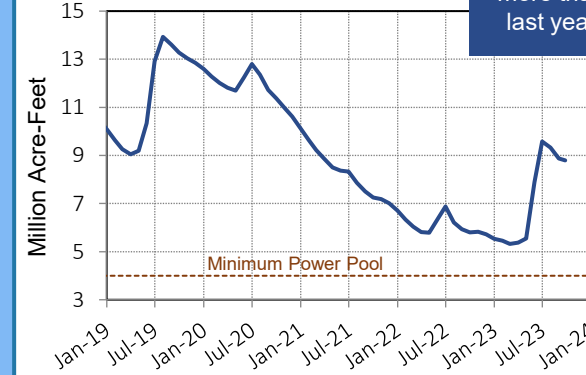
Forecasted
Use for 2023:
338 TAF



Lake Powell Storage

Capacity: 24.3 MAF

2.98 MAF
more than last year



Projected Lake Mead ICS

Calendar Year 2023

Put (+) / Take (-)
TBD

Lake Mead Surplus/Shortage Outlook

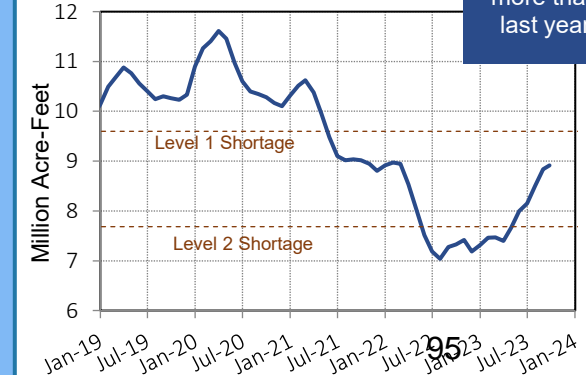
	2024	2025	2026
Surplus	0%	0%	0%
Shortage	100%	93%	77%
Metropolitan DCP*			20% 195 TAF

Likelihood based on results from the August 2023 CRMMS in Ensemble Model/CRSS model run. Includes DCP Contributions.
* Chance of required DCP contribution by Metropolitan. Volume is average contribution when needed.

Lake Mead Storage

Capacity: 26.1 MAF

1.60 MAF
more than last year





DATE: October 3, 2023
TO: Board of Directors
FROM: General Manager

SUBJECT: Local Agency Formation Commission: Election of Special District Alternate

SUMMARY:

On September 5, 2023, the District received notification from Lagerlof, LLP, on behalf of the Local Agency Formation Commission (LAFCO), that ballots for LAFCO's Special District Alternate Member must be returned by October 27, 2023. There are five candidates for the position of Special District Alternate Member: (1) Micah Ali; (2) Steve Appleton; (3) Stephen H. Brown; (4) Gary Burns; and (5) Sharon S. Raghavachary.

Information on the candidates is provided with the attached ballot package. LVMWD Director Gary Burns is one of the candidates.

RECOMMENDATION(S):

Select a candidate to serve as the Local Agency Formation Commission Special District Alternate Member, and authorize the General Manger to execute and return the official voting ballot no later than 5:00 p.m. on Friday, October 27, 2023.

Prepared by: David Pedersen, General Manager

ATTACHMENTS:
[LAFCO Ballot Package](#)



MEMORANDUM

TO: PRESIDING OFFICER OF EACH INDEPENDENT SPECIAL DISTRICT IN
LOS ANGELES COUNTY

FROM: WILLIAM F. KRUSE

RE: BALLOT; SPECIAL DISTRICT LAFCO REPRESENTATIVE

DATE: August 30, 2023

Enclosed is the Ballot and the supplementary materials submitted for each of the candidates for Special District LAFCO **ALTERNATE MEMBER** for the term expiring in May 2026. Nominations closed as of 5:00 p.m. on August 25, 2023.

Please vote for ONE candidate for the position. The marked ballot should be placed in the envelope marked "Ballot Envelope" and sealed. Please write the name of your agency and sign your name on the outside of the ballot envelope and return the completed ballot by mail to:

William F. Kruse, Esq.
Lagerlof, LLP
155 N. Lake Avenue, 11th Floor
Pasadena, CA 91101.

No ballot will be counted if it is missing the name of the voting agency and the signature of the Presiding Officer on the ballot envelope.

The candidate receiving the highest number of votes will be declared the Special District **Alternate Member** to LAFCO.

Ballots must be returned by 5:00 p.m. on October 27, 2023.

WFK/dc
Enclosures

cc(w/ encls.): Paul Novak

Lagerlof LLP
155 N Lake Avenue, 11th Flr
Pasadena, CA 91101

Lagerlof.com
Email: wfkruise@lagerlof.com

T: (626)-793-9400
F: (626)-793-5900

BALLOT

SPECIAL DISTRICT LAFCO ALTERNATE MEMBER

Please vote for no more than one candidate.

MICAH ALI

Occupation: Board of Trustees
Sponsor: Compton Creek Mosquito Abatement District

STEVEN APPLETON

Occupation: Board of Directors
Sponsor: Greater Los Angeles County Vector Control District

STEPHEN H. BROWN

Occupation: Board of Directors
Sponsor: Kinneloa Irrigation District

GARY BURNS

Occupation: Board of Directors
Sponsor: Las Virgenes Municipal Water District

SHARON S. RAGHAVACHARY

Occupation: Board of Directors
Sponsor: Crescenta Valley Water District

NOMINATION
OF
INDEPENDENT SPECIAL DISTRICT **ALTERNATE MEMBER**
TO THE
LOS ANGELES COUNTY LOCAL AGENCY FORMATION COMMISSION

To: Independent Special District Selection Committee
From: Mitchel R. Weinbaum
Date: August 23, 2023
Name of Candidate: Mr. Micah Ali

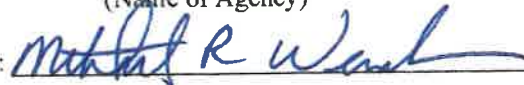
Compton Creek Mosquito Abatement District is pleased to nominate
Mr. Micah Ali as a candidate for appointment as special district **alternate**
member to the Los Angeles Local Agency Formation Commission. The nominee is an elected official or a
member of the board of an independent special district appointed for a fixed term. For your consideration,
we submit the following additional information together with a resume of the candidate's qualifications.

Elective office: President, Board of Trustees
Agency: Compton Creek Mosquito Abatement District

Type of Agency: Special District, Mosquito Abatement District
Term Expires: 2025
Residence Address: 1224 S. Santa Fe Ave, Compton, CA 90221

Telephone: (310) 933-5321

PLEASE ATTACH RESUME OR CANDIDATE STATEMENT (limit one page)

Compton Creek Mosquito Abatement District
(Name of Agency)
By: 
Its: General Manager



Micah Ali

Strategist, Consultant, Public Sector And Governance Expert

Experienced strategist, catalyst for innovation and organizational effectiveness. Regarded as a pioneer in public affairs/government relations and board governance for clients in public education, public health and economic development spheres. Catalyzes private/public partnerships, coalition building and broad based initiatives intended to achieve impact in areas often deemed resistant to change. Co-author of the California Association of Black School Educators' Blueprint for Education Equity

EXPERIENCE AND ACCOMPLISHMENTS

Founder, Managing Director

Synergistic Solutions Consulting
November 2004-Present

Strategy consultancy providing expertise in organizational culture, politics, and effective practices of School Boards and School District leadership, as well as other governmental and global organizations seeking to achieve next level results, sustainable change and improving overall organizational performance.

CONSULTING AREAS

Government Affairs and Crisis Management.
Land Use and Development Consulting
High-stakes and Large Project Negotiation
Community Development

Director

Los Angeles County Education Foundation
July 2012 - January 2014

Expanded supports for public schools across Los Angeles County in the area by way of innovation in health and education policy, including large-dollar investment projects, public education and achievement initiatives for districts across Los Angeles County, and innovated policy efforts.

Project Manager

Raytheon Space and Airborne Systems
October 2008 - June 2012

Oversee and ensure the successful completion of complex projects across several divisions of the global technology and aerospace organization.

Special Assistant, Government Relations

California State Legislature, Assemblymember Merv Dymally
August 2006 - November 2008

Established and maintained relationships with strategic community leaders, legislators, legislative aides, local elected officials, business trade leaders, public health agencies and organizations, charitable organizations, school districts, health care industry leaders and grassroots constituency groups.

OTHER POSITIONS HELD

Project Coordinator

Boeing Satellite Systems
July 2003- October 2004

Project Manager, Policy and Governmental Affairs

Community Redevelopment Agency
August 2002 - July 2003

Council Liaison Officer, Government Relations

City of Compton
August 1998 - August 2002

SKILLS

High-Stakes Negotiation

Board Effectiveness

Gov't/Private Partnerships

National/State Policy

EDUCATION

Loyola Marymount University
Masters of Arts in Education
School Administration

California State University, Dominguez Hills
Bachelor of Science
Public Administration

CIVIC & COMMUNITY INVOLVEMENT

Chair-elect
National Black Council of School Board Members

Chair Emeritus,
Council of Urban Boards of Education

Founder and President Emeritus
California Association of Black School Educators

President
Compton Unified School District Board of Trustees

President Emeritus
Los Angeles County School Trustees Association

President
Compton Creek Mosquito Abatement District
Board of Trustees

Emeritus Member
National School Boards Association

Emeritus Member
California School Boards Association

Immediate Past Member
California Racial and Identity Profiling Advisory Board

Alternate
South Coast Air Quality Management District
Hearing Board

INTERESTS

Education Innovation

Environmentalism

Land Use and Improvement Projects

Community Development

K-12 Education Systems

NOMINATION
OF
INDEPENDENT SPECIAL DISTRICT **ALTERNATE MEMBER**
TO THE
LOS ANGELES COUNTY LOCAL AGENCY FORMATION COMMISSION

To: Independent Special District Selection Committee

From: GREATER LOS ANGELES COUNTY VECTOR CONTROL DISTRICT

Date: AUGUST 10th, 2023

Name of Candidate: STEVE APPLETON

GREATER LOS ANGELES COUNTY VECTOR CONTROL DISTRICT is pleased to nominate
STEVE APPLETON as a candidate for appointment as special district **alternate member** to the Los Angeles Local Agency Formation Commission. The nominee is an elected official or a member of the board of an independent special district appointed for a fixed term. For your consideration, we submit the following additional information together with a resume of the candidate's qualifications.

Elective office: BOARD OF DIRECTOR

Agency: GREATER LOS ANGELES COUNTY VECTOR CONTROL DISTRICT

Type of Agency: SPECIAL DISTRICT

Term Expires: MAY, 2026

Residence Address: 2825 BENEDICT STREET

LOS ANGELES, CA 90039

Telephone: 310/740-7294

PLEASE ATTACH RESUME OR CANDIDATE STATEMENT (limit one page)

GREATER LOS ANGELES COUNTY VECTOR CONTROL DISTRICT

(Name of Agency)

By: 

Its: BOARD SECRETARY



Steven Appleton

Technical knowledge, interdisciplinary skills, and a collaborative approach

As the past President of the Greater Los Angeles County Vector Control District (2020) and the current Trustee for the City of Los Angeles, I have worked in collaboration with many public agencies. I have also engaged with municipal, State and Federal partners around watershed improvement and ecological restoration projects.

I serve as Board Member on the Los Angeles County Second District Consolidated Oversight Board and has served in a variety of capacities on watershed issues, including as a Technical Stakeholder to the yearly "State of the Watershed" report for the Los Angeles Region by the Council on Watershed Health. My interests and experience are especially attuned to balancing issues related to climate change, watershed protection, water quality improvement, parkland, and community engagement.

As a commissioner I would endeavor to render decisions in the best interest of the diverse set of Special Districts and the citizenry of the region. As those who have worked with me in local and regional agencies can attest, I show up ready and prepared to contribute, approaching issues in a collaborative manner.

Please consider voting for me as a Special District Alternative Commissioner to the Los Angeles Local Agency Formation Organization (LA LAFCO).

Sincerely,

A handwritten signature in black ink, appearing to read "S. Appleton", with a long horizontal line extending to the right.

NOMINATION
OF
INDEPENDENT SPECIAL DISTRICT **ALTERNATE MEMBER**
TO THE
LOS ANGELES COUNTY LOCAL AGENCY FORMATION COMMISSION

To: Independent Special District Selection Committee
From: Tom Majich, General Manager, Kinneloa Irrigation District
Date: August 23, 2023

Name of Candidate: Stephen H. Brown

Kinneloa Irrigation District is pleased to nominate
Stephen H. Brown as a candidate for appointment as special district **alternate**

member to the Los Angeles Local Agency Formation Commission. The nominee is an elected official or a member of the board of an independent special district appointed for a fixed term. For your consideration, we submit the following additional information together with a resume of the candidate's qualifications.

Elective office: Board of Directors

Agency: Kinneloa Irrigation District

Type of Agency: Special District, Public Water Agency

Term Expires: December 5, 2025

Residence Address: 1906 Country Lane; Pasadena, CA 91107

Telephone: (202) 744-5578

PLEASE ATTACH RESUME OR CANDIDATE STATEMENT (limit one page)

Kinneloa Irrigation District

(Name of Agency)

By: 

Its: General Manager

STEPHEN H. BROWN

My name is Stephen Brown and I am seeking to fill the recent vacancy of Alternate for Independent Special Districts on the Los Angeles County Local Agency Formation Commission (LAFCO).

I am currently on the Board of Directors for the Kinneloa Irrigation District (KID) where I have served since May 2022. I reside in an unincorporated area of Los Angeles County (the North Kinneloa Ranch community in the San Gabriel foothills) with my wife and two young children. My family moved to this area in 2019 after residing in Northern Virginia for nearly forty years. I also serve on the Finance & Audit Committee of the Mayfield Junior School in Pasadena, which my children attend. In addition to these local community endeavors, I work as a private consultant providing legislative, political, and communications strategy development to various clients in the energy field.

Prior to re-locating to Southern California, I was employed for over three decades in Washington, DC, in a variety of positions in the public and private sectors. These positions included US Congressional leadership staff, serving as Of Counsel at a prominent law firm to create and run a federal lobbying practice, serving as Senior Vice President and Deputy General Counsel of a "top ten" federal and state lobbying company, and finally moving in-house as Vice President and Legislative Counsel with a major energy provider to manage its federal affairs office. Collectively, these positions afforded me the opportunity to represent a broad array of corporate and trade association clients on multiple matters before Congress and the Executive Branch. I was honored to be annually recognized from 2005 through 2018 as a "Top Lobbyist" by *The Hill*, a leading newspaper in Washington covering such activities.

There are multiple reasons why I am interested to make an investment of time in LAFCO. First, the challenge of working to constantly improve the establishment of spheres of influence for local units of governments or special districts so that the needs of their respective constituents or customers are efficiently met would be intrinsically rewarding. Second, the public policy issues inherent to LAFCO's mission and the matters pending before it would intersect broadly with many that I advocated on throughout my career in Washington. Water issues (supply, demand, conveyance), in particular, have always captured my attention and few other topics are as crucial to Southern California's future as this is. Finally, given that I am relatively new to the region, I am always looking to better understand and appreciate the rich tapestry of the greater Los Angeles community. Clearly, working on issues before LAFCO would provide that exposure.

To conclude, I believe that my legal education, professional experience in various public policy and political arenas, and desire to integrate more fully into our local community will allow me to make a positive and lasting contribution to the work of the Los Angeles County LAFCO. I ask for your consideration of my credentials and seek your support for my nomination to this position.

NOMINATION
OF
INDEPENDENT SPECIAL DISTRICT **ALTERNATE MEMBER**
TO THE
LOS ANGELES COUNTY LOCAL AGENCY FORMATION COMMISSION

To: Independent Special District Selection Committee

From: Las Virgenes Municipal Water District

Date: August 1, 2023

Name of Candidate: Gary Burns

Las Virgenes Municipal Water District is pleased to nominate

Gary Burns as a candidate for appointment as special district **alternate**

member to the Los Angeles Local Agency Formation Commission. The nominee is an elected official or a member of the board of an independent special district appointed for a fixed term. For your consideration, we submit the following additional information together with a resume of the candidate's qualifications.

Elective office: Director, Division 3

Agency: Las Virgenes Municipal Water District

Type of Agency: Water District

Term Expires: December 4, 2026

Residence Address: 22118 Dardenne Street

Calabasas, CA 91302

Telephone: (818) 222-4200

PLEASE ATTACH RESUME OR CANDIDATE STATEMENT (limit one page)

Las Virgenes Municipal Water District

By:  (Name of Agency)

Its: General Manager

Local Agency Formation Commission (LAFCO):

Nomination of Candidates for Special District Alternate Member

Gary Burns, Candidate to fill LAFCO Alternate Member Position 8/2023

Gary Burns was elected to the LVMWD Board in December 2022. (Division 3, Secretary) He is the first direct Calabasas resident to serve on the District Water Board.

Gary desires to serve as the LAFCO Independent Special District Alternate Member to further serve the community and provide input to the Los Angeles Region.

Gary grew up in the New York New / Jersey area. He attended Fairleigh Dickenson (FDU) and Hofstra University where he received a BA and Master's in Psychology. He returned to FDU and received an MBA in Business and Finance.

He moved to the Calabasas area in 1989, and has been a resident of Calabasas since the inception of the City in 1991.

Gary has been President of Mulholland Heights Homeowners Association for the past 10 years. Additionally, he is a Board Member of Community Associations Institute, 2018 - 2024 (CAI of Greater Los Angeles County) and a Board Member of CAI International, National Homeowner Leaders Council 2021 – 2024. He was recognized by CAI Los Angeles for Excellence in Community Leadership in 2021 - 22

He is also a founding member of EPIC, (Emergency Preparedness in Calabasas) and volunteers for many local events. He is a partner in the Just Pure Foods Distribution company and a licensed Life and Health Insurance Broker.

Gary is searching for new sources of water to ensure there is sufficient future supplies for the community. He is available to advocate for his constituents whenever needed.

NOMINATION
OF
INDEPENDENT SPECIAL DISTRICT **ALTERNATE MEMBER**
TO THE
LOS ANGELES COUNTY LOCAL AGENCY FORMATION COMMISSION

To: Independent Special District Selection Committee
From: Crescenta Valley Water District Board of Directors
Date: August 22, 2023
Name of Candidate: Sharon S. Raghavachary

Crescenta Valley Water District Board of Directors is pleased to nominate Sharon S. Raghavachary as a candidate for appointment as special district **alternate member** to the Los Angeles Local Agency Formation Commission. The nominee is an elected official or a member of the board of an independent special district appointed for a fixed term. For your consideration, we submit the following additional information together with a resume of the candidate's qualifications.

Elective office: Member of the Board of Directors
Agency: Crescenta Valley Water District

Type of Agency: Water and Wastewater
Term Expires: December 2024
Residence Address: 2209 Maurice Avenue
La Crescenta, CA 91214
Telephone: 818 248-3925

PLEASE ATTACH RESUME OR CANDIDATE STATEMENT (limit one page)

Crescenta Valley Water District

(Name of Agency)

By: 
Its: President of the Board of Directors



Sharon Raghavachary
President of the Board of Directors
Crescenta Valley Water District

Director Raghavachary has been active in the La Crescenta Community for over 20 years and has a background in accounting and computer systems.

Currently Ms. Raghavachary is the President of the Board of Directors for the Crescenta Valley Water District. She has served on the Board since 2019 and has been a past President as well as Vice President.

Ms. Raghavachary is a founder of the Crescenta Valley Community Association. She served for seven years on the Crescenta Valley Town Council, during which time she was co-chair of the Foothill Design Committee, that wrote design standards for Foothill Boulevard, and was a member of Supervisors Michael Antonovich's Library Committee. She also served as Council Vice President and Land Use Committee Chair.

Additionally, Director Raghavachary served three years on the Parent Advisory Council for Children's Hospital Los Angeles, providing input for the new hospital tower. She has been a volunteer for the Los Angeles County Sheriff's Department and Treasurer of the Crescenta Valley Arts Council, as well as a Girl Scout troop leader for ten years, and for over five years she wrote a featured column for the Glendale News Press and the Crescenta Valley Weekly. She also served on the Clark Magnet High School's School Site Council for four years.

Ms. Raghavachary has teenage twins, one currently studying at USC and the other who looks forward to studying abroad.



DATE: October 3, 2023
TO: Board of Directors
FROM: Engineering and External Affairs

SUBJECT: 2023 Climate Action and Adaptation Plan: Adoption

SUMMARY:

The State of California has enacted legislation over the past several years that aims to reduce greenhouse gas emissions to mitigate the effects of climate change. On January 9, 2023, the JPA authorized the Administering Agent/General Manager to execute a professional services agreement with Rincon Consultants, Inc., for development of a Climate Action and Adaptation Plan (CAAP). Since that time, the CAAP has been under development, which will cover all JPA and LVMWD-only operations. The CAAP provides a roadmap for reducing greenhouse gas (GHG) emissions in alignment with State goals. It will also provide guidance for increasing the resilience of critical facilities, infrastructure, services, and resources to climate change impacts.

On July 18, 2023, the Board received and filed a progress report on the development of the CAAP and provided staff with feedback on the effort. On September 5, 2023, the Board was presented with a draft of the CAAP and provided staff with comments on the document. The comments from the Board have been incorporated, and a final version of the CAAP is presented for adoption.

RECOMMENDATION(S):

Pass, approve, and adopt proposed Resolution No. 2627, adopting the 2023 Climate Action and Adaptation Plan.

RESOLUTION NO. 2627

A RESOLUTION OF THE BOARD OF DIRECTORS OF LAS VIRGENES MUNICIPAL WATER DISTRICT ADOPTING THE 2023 CLIMATE ACTION AND ADAPTATION PLAN

(Reference is hereby made to Resolution No. 2627 on file in the District's Resolution Book and by this reference the same is incorporated herein.)

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

There is no financial impact associated with the recommended action. It is important to note that specific measures and actions outlined in the report pertaining to LVMWD facilities and operations will not be acted upon without Board authorization. The CAAP provides a “roadmap” for staff to pursue future studies, which will help determine the feasibility of implementing specific measures and actions.

DISCUSSION:

The State of California has enacted legislation over the past several years that aims to reduce greenhouse gas emissions to mitigate the effects of climate change. Signed into law by Governor Brown in 2016, Senate Bill (SB) 32 established a requirement to reduce statewide GHG emissions by 40% below 1990 levels by the year 2030. Executive Order (EO) B-55-18 set a longer-term target to achieve carbon neutrality by the year 2045. While the District is not directly required to meet these targets, the District should do its part to limit its carbon footprint, while simultaneously preparing for the effects of climate change that lie ahead. Future legislation and regulations may also set mandates on water and wastewater utilities because the conveyance and treatment of water accounts for a large percentage of energy demands. Additionally, most grant and low-interest loan programs now require applicants to have an adopted CAAP to be eligible and competitive for funding. The development of the CAAP will ensure that the District remains competitive for grant and low interest loans, particularly those for the Pure Water Project Las Virgenes-Triunfo. A CAAP is also necessary to renew the NPDES Permit for discharges to Malibu Creek.

LVMWD has been “ground zero” for the current drought emergency in Southern California. The acute local impact is due in part to the location of the service area within the broader service territory of Metropolitan Water District of Southern California (MWD). The District is part of MWD's State Water Project-dependent area that has been hit especially hard with water shortages beginning on June 1, 2022. Water conservation has been the primary near-term means of response to the current drought emergency. However, for the long-term, LVMWD has been working together through the Las Virgenes-Triunfo Joint Powers Authority (JPA) on planning and design efforts for the Pure Water Project Las Virgenes-Triunfo. Once completed, the Pure Water Project Las Virgenes-Triunfo will diversify the water supply portfolio available to both agencies. Water supply diversification is a key strategy for climate change adaptation.

On January 9, 2023, the JPA authorized the Administering Agent/General Manager to execute a professional services agreement with Rincon Consultants, Inc. for development of a CAAP. The CAAP will provide a roadmap for reducing GHG emissions in alignment with State goals. It will also provide guidance for increasing the resilience of critical facilities, infrastructure, services, and resources to climate change impacts. Benefits include additional State funding opportunities that can assist with infrastructure and operational costs, mitigation of risks associated with future State requirements, and the identification, development and

implementation of solutions for inefficiencies and vulnerabilities. LVMWD-only facilities and operations primarily consists of those associated with the drinking water system, including pump stations and the Westlake Filtration Plant. The CAAP also incorporates JPA facilities and operations.

On July 18, 2023, the Board received and filed a progress report for the CAAP and provided comments to staff. On September 5, 2023, the Board provided final comments on the draft CAAP report, which has since been finalized. At this time, it is recommended that the attached CAAP be adopted via Resolution No. 2627 (also attached).

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:

[Proposed Resolution No. 2627](#)
[2023 Climate Action and Adaptation Plan](#)

RESOLUTION NO. 2627

**A RESOLUTION OF THE BOARD OF DIRECTORS OF
LAS VIRGENES MUNICIPAL WATER DISTRICT ADOPTING THE
2023 CLIMATE ACTION AND ADAPTATION PLAN**

WHEREAS, the State of California has enacted legislation over the past several years that aims to reduce greenhouse gas (GHG) emissions to mitigate the effects of climate change;

WHEREAS, on January 9, 2023, the Governing Board of the Las Virgenes – Triunfo Joint Powers Authority (JPA) authorized the Administering Agent/General Manager to execute a professional services agreement with Rincon Consultants, Inc. for development of a Climate Action and Adaptation Plan (CAAP);

WHEREAS, the CAAP will provide a roadmap for reducing GHG emissions in alignment with State goals and guidance for increasing the resilience of critical facilities, infrastructure, services, and resources to climate change impacts;

WHEREAS, on July 18, 2023, the Board of Directors of Las Virgenes Municipal Water District (LVMWD) received and filed a progress report on components of the CAAP that relate to LVMWD-only facilities and operations and provided comments to staff;

WHEREAS, on September 5, 2023 a draft of the CAAP was presented to the Board of Directors of LVMWD to solicit final comments, which have been incorporated to the extent appropriate, and the CAAP has been finalized;

WHEREAS, unless otherwise mandated by the State or federal government, cost analysis and feasibility studies will be conducted and individual reduction and adaptation measures will be implemented only if deemed feasible and authorized by the Board of Directors of LVMWD for its facilities and operations; and

WHEREAS, progress reports will be provided to the Board of Directors of LVMWD on an annual basis and the CAAP will be updated every 5 years or as otherwise deemed necessary to include the latest GHG emissions forecast, assessment of climate change vulnerabilities, implementation status, and/or revised measures and actions related to LVMWD facilities and operations.

NOW THEREFORE, BE IT RESOLVED by the Board of Directors of Las Virgenes Municipal Water District that the 2023 Climate Action and Adaptation Plan, Report is hereby adopted.

PASSED, APPROVED, AND ADOPTED this ____ day of _____, 2023.

Jay Lewitt, President

ATTEST:

Gary Burns, Secretary

(SEAL)

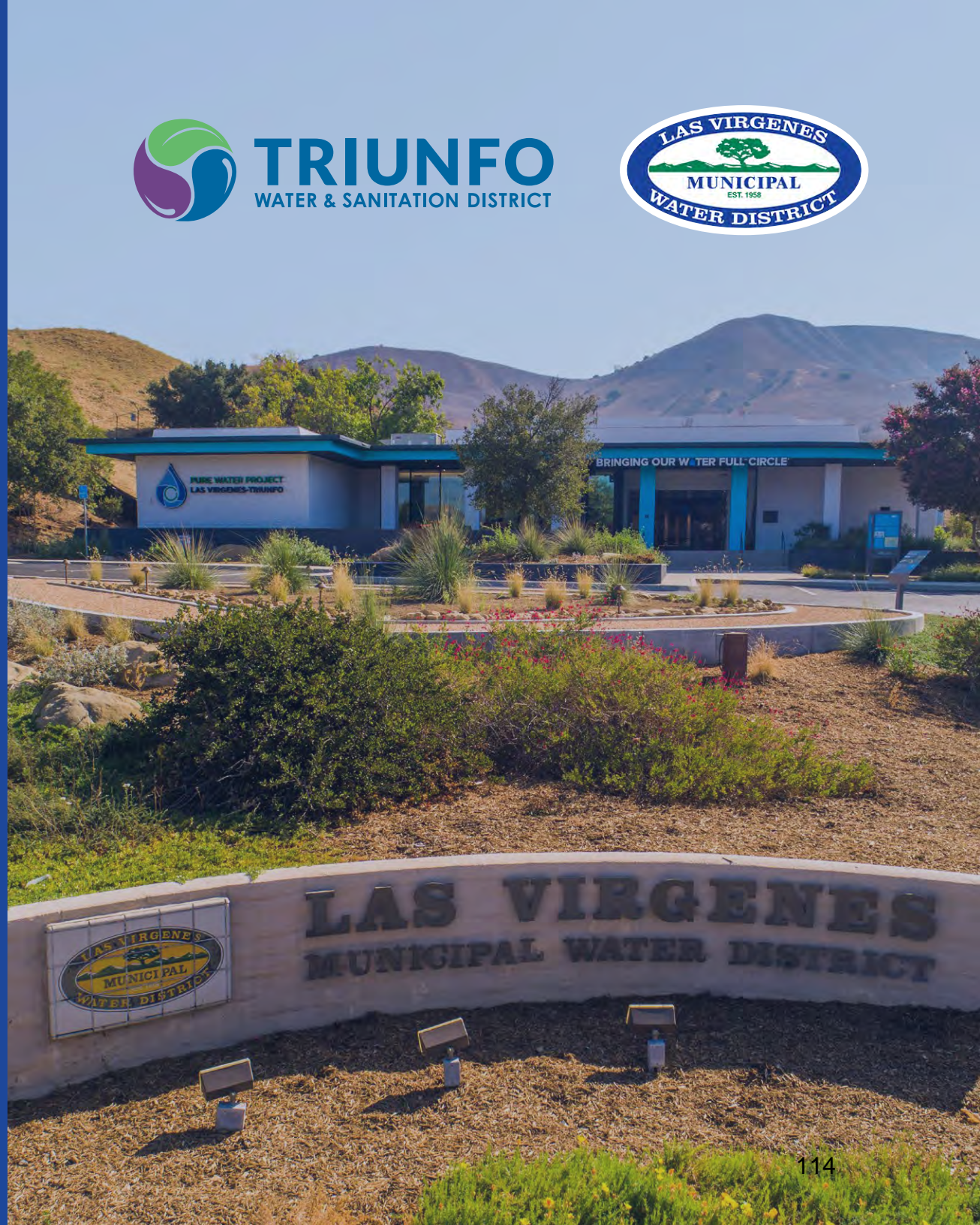
APPROVED AS TO FORM:

W. Keith Lemieux, District Counsel

Las Virgenes Municipal
Water District &
Las Virgenes-Triunfo Joint
Powers Authority

Climate Action & Adaptation Plan

September 2023



ACKNOWLEDGMENTS

The CAAP was prepared by a LVMWD project team in partnership with the Triunfo JPA and with support from consultants. The following are specifically acknowledged for their contributions.

LVMWD PROJECT TEAM

Joe McDermott,
Director of Engineering
and External Affairs

John Zhao,
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and Operations

Craig Jones,
Resource Conservation
Manager

Douglas Anders,
Administrative Services Coordinator

Debbie Rosales,
Financial Analyst

CONSULTANT SUPPORT



Rincon Consultants, Inc.



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ACRONYMS, ABBREVIATIONS, AND GLOSSARY

A list of acronyms, abbreviations, and glossary terms used in the Climate Action and Adaptation Plan.

A

AB – Assembly Bill

Action – The act, policy, or measure that will be implemented and achieved to reduce greenhouse gases and/or increase resilience to climate change.

Adaptation – The process of adjustment to actual or expected climate and its effects, either to minimize harm or exploit beneficial opportunities. In natural systems, human intervention may facilitate adjustment to expected climate.

Anthropogenic – Made by people or resulting from human activities.

Atmosphere – The envelope of gases surrounding the earth. These gases include nitrogen (78.1%), oxygen (20.9%), and argon, helium, GHGs, ozone, and water vapor in trace amounts.

B

BAU – Business-as-Usual Forecast. This forecast estimates emissions into the future if no additional actions were taken.

Biofuels – A renewable fuel source derived from biomass such as algae or animal waste.

C

CAAP – Climate Action and Adaptation Plan

CARB – California Air Resources Board

CCA – Community Choice Aggregation. A CCA is a nonprofit electricity provider.

Carbon dioxide (CO₂) – A gas produced by burning organic compounds containing carbon and by respiration.

Carbon dioxide equivalent (CO₂e) – A metric measure used to directly compare emissions from various GHGs based on their global warming potential conversion factor.

Carbon footprint – The total emissions caused in a year by an individual, event, organization, or product, expressed in carbon dioxide equivalent.

Carbon Neutrality – Achieving a balance between emitting carbon and atmospheric carbon removal.

Cal Recycle – California Department of Resources, Recycling, and Recovery

Cascading Impact – Climate hazard-caused impacts that compromise infrastructure or disrupt critical services (i.e., power supply or water conveyance) broadening the scope of impact past a singular subject to reliant subsystems and populations.

CEQA – The California Environmental Quality Act

Climate – The usual condition of temperature, humidity, atmospheric pressure, wind, rainfall, and other meteorological elements in an area of the earth's surface over a long period of time (typically 30 years or more).

Climate Change – A change in the average conditions – such as temperature and rainfall – in a region over a long period of time.

Climate Driver – An increase in the proportion of greenhouse gases in the atmosphere is the primary human-caused driver source of change to the earth's climate.

Climate Hazard – A dangerous or potentially dangerous condition created by the effects of the local climate.

Co-benefit – The secondary benefits that occur due to implementation of a program, measure or policy.

CPA – Clean Power Alliance. A CCA in the Los Angeles region.

CWC – California Water Commission

D

Decarbonization – The reduction or removal of carbon dioxide.

DWR – California Department of Water Resources

Dry Weather Diversion – A diversion of non-stormwater and stormwater flows from the storm drain system into the sanitary sewer system.

E

EF – Emissions Factor

EO – Executive Order

Electrification – The process of generating power from electricity, and in many contexts, the transition to such power from an earlier power source.

Emissions – The release of a substance (usually a gas when referring to the subject of climate change) into the atmosphere.

EV(s) – Electric Vehicle(s)

F

FEMA – Federal Emergency Management Agency

Fossil fuel – A general term for fuel formed from decayed plants and animals that have been converted to crude oil, coal, natural gas, or heavy oils by exposure to heat and pressure in the earth's crust.

G

Greenhouse gas (GHG) – A gas that absorbs infrared radiation, traps heat in the atmosphere, and contributes to the greenhouse effect.

Greenhouse Effect – A process that occurs when gases in Earth's atmosphere traps the Sun's heat.

GWP – Global Warming Potential – total contribution to global warming resulting from the emission of one unit of that gas relative to one unit of the reference gas, carbon dioxide, which is assigned a value of 1.

H

I

ICLEI – International Council for Local Environmental Initiatives

Impact – Effects on natural and human systems including effects on lives, livelihoods, health, ecosystems, economies, societies, cultures, services, and infrastructure due to the interaction of climate hazards and the vulnerabilities of the system or asset affected.

IPCC – United Nations Intergovernmental Panel on Climate Change – prepares comprehensive

Assessment Reports about the state of scientific, technical and socio-economic knowledge on climate change, its impact and future risks, and options for reducing the rate at which climate change is taking place.

J

JPA – Las Virgenes – Triunfo Joint Powers Authority

K

L

LED – Light-emitting diode

LVMWD – Las Virgenes Municipal Water District

M

Methane (CH₄) – A hydrocarbon that is a greenhouse gas that is produced through anaerobic (without oxygen) decomposition of waste in landfills, wastewater treatment plants, animal digestion, decomposition of animal wastes, production and distribution of natural gas and petroleum, coal production, and incomplete fossil fuel combustion.

Metric Ton (MT) – common international measurement for the quantity of greenhouse gas emissions – one metric ton is equal to 2,204.6 pounds or 1.1 short tons.

MT CO₂e – Metric tons of carbon dioxide equivalent is the standard units to measure GHG emissions.

MWD – Metropolitan Water District of Southern California

N

Nitrous oxide (N₂O) – A powerful greenhouse gas with a high global warming potential; major sources of nitrous oxide include soil cultivation practices, especially the use of commercial and organic fertilizers, fossil fuel combustion, nitric acid production, and biomass burning.

O

Offroad Equipment – Any non-stationary device powered by an internal combustion engine or electric motor used primarily off roadways such as agricultural, landscaping or construction equipment.

OPR – California Governor’s Office of Planning and Research

P

PSPS – Power Safety Power Shutoffs

PV – Photovoltaic (solar energy)

Q

R

Renewable Diesel – Direct substitute for diesel fuel refined from lower carbon and renewable source material.

RCP – Representative Concentration Pathway

Resilience – The capacity of an entity (an individual a community, an organization, or a natural system) to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience.

S

SB – Senate Bill

SCE – Southern California Edison

Scope – Categorization of GHG-generating activities based on the level of the entity’s operational control of the source.

Service population – Residents receiving services

SWP – State Water Project

T

TWSD – Triunfo Water & Sanitation District

TWRF – Tapia Water Reclamation Facility

U

U.S. EPA – United States Environmental Protection Agency

UWMP – Urban Water Management Plan

V

VMT – Vehicle miles traveled

Vulnerability – The propensity or predisposition to be adversely affected.

W

WBCSD – World Business Council for Sustainable Development

Wet Weather Diversion – A diversion of both non-stormwater and stormwater flows from the storm drain system into the sanitary sewer system.

Y

Z

ZEV – Zero emission vehicle

1. INTRODUCTION

A Climate Action and Adaptation Plan (CAAP) for a municipal water district provides a strategic framework of measures and strategies designed to address the impacts of climate change on water resources, water supply, and water and wastewater infrastructure within the jurisdiction of Las Virgenes Municipal Water District (LVMWD or District) and the Las Virgenes – Triunfo Joint Powers Authority (JPA). The JPA is a long-term partnership between LVMWD and Triunfo Water and Sanitation District (TWS). LVMWD is the Administering Agent for the JPA. The goal

of this CAAP is to both mitigate contributions to climate change (climate action) and adapt operations and systems to the threats and impacts of a changing climate (climate adaptation). The CAAP will play a crucial role in ensuring a reliable and resilient water supply and wastewater services in the face of climate change challenges. It demonstrates a proactive commitment to both reducing the impacts of climate change and adapting to the changing conditions to provide safe and sustainable water and wastewater services to the community.

LVMWD AND TRIUNFO JPA MISSION AND VISION

The CAAP supports the mission of the District and the JPA to provide high-quality, reliable water and wastewater treatment services in a cost-effective and environmentally sensitive manner. This mission applies to all LVMWD and joint LVMWD/JPA activities, as they collectively provide drinking water, recycled water, wastewater services, and biosolids composting.

This CAAP has been developed to align with LVMWD and JPA goals and long-range planning efforts, with the intent to adapt District/JPA operations and infrastructure to a changing climate and reduce greenhouse gas (GHG) emissions over time. Through innovative strategies, collaborative partnerships, and

responsible stewardship, LVMWD and the JPA aspire towards a sustainable, cost effective, and equitable water supply, valuing every drop and bringing water full circle. By embracing adaptive measures and progressing towards carbon neutrality, LVMWD and the JPA are dedicated to providing high-quality water and wastewater services in a cost effective and environmentally resilient manner. The following section provides an overview of the CAAPs purpose, a system/facilities overview, and the plans that the CAAP aligns with to ensure cohesion among long-range planning efforts by LVMWD and the JPA.



CAAP PURPOSE

The CAAP is a long-range planning document that provides LVMWD and the JPA with a roadmap for achieving long-term GHG emissions reduction and improved resilience to climate change impacts in alignment with the State of California goals, mandates, and current legislation. It includes an analysis of LVMWD and JPA operations, associated GHG emissions sources, forecasted future emissions, climate vulnerabilities, and emissions reduction and adaptation goals and strategies. This document is intended to inform future policy and planning decisions on operations, water resources, capital investments, conservation, and local resource programs. Additionally, the CAAP aligns with LVMWD and JPA long-range plans including the 2020 Las Virgenes Municipal Water District Urban Water Management Plan, 2014 Integrated Master Plan for Las Virgenes Municipal Water District and Triunfo Sanitation District (IMP), and 2019 Hazard Mitigation Plan. The CAAP will support LVMWD and JPA efforts to adjust operations as feasible in order to adapt to climate change effects and to obtain infrastructure grant/loan funding necessary for increasing resiliency.

The CAAP establishes GHG emissions reduction targets that align with those goals set by the State of California, as well as with the international consensus regarding the GHG reductions needed to avoid the most serious climate change impacts. The emissions inventory and forecast presented in Chapter 4 provide a basis for establishing targets for future GHG reductions. LVMWD and the JPA are establishing an annual reduction rate to meet the State's 2045 carbon neutrality goal, as set forth by Assembly Bill (AB) 1279. By setting a straight line to the 2045 target, LVMWD and the JPA commit to

reducing mass GHG emissions 69 percent below 1990 levels by 2030, surpassing Senate Bill 32, which requires a 40 percent reduction in emissions from 1990 levels.

The CAAP creates a roadmap that will provide LVMWD and the JPA with a broad range of strategies and measures to mitigate or reduce GHG emissions in line with State goals based on operational feasibility, cost, and the availability of State and federal grant funding. It will help LVMWD and the JPA to reduce overall GHG emissions from its operations and will align them with State mandates and legislation. In addition to establishing a pathway to an emissions reduction goal of 69 percent below 1990 levels by 2030 and carbon neutrality by 2045, the CAAP:

- Incorporates legislation and guidance from State, federal, and international sources,
- Identifies cost-effective energy efficiency and decarbonization measures,
- Provides co-benefits, such as improved operational resilience and improved air quality, and
- Integrates actions to transition away from fossil fuel use in alignment with California's clean fleet goals and overall strategies to reduce GHG emissions from the transportation sector.



CAAP Intent and Use

The CAAP provides a comprehensive analysis of climate threats and operational GHG emissions sources, as well as a programmatic guide for opportunities to increase resiliency and reduce GHG emissions. It is not intended to serve as a qualified GHG Reduction Plan per the California Environmental Quality Act (CEQA) requirements of Section 15183.5(b). Although the CAAP discusses climate-related impacts and provides GHG reduction strategies, it cannot be used to tier or streamline development projects as it relates to CEQA requirements. LVMWD and the JPA provide critical services to the communities they serve and are committed to implementing GHG reduction strategies to the extent they are both feasible and cost-effective. The CAAP's intent is to serve as an informative document that introduces concepts related to climate action planning and establishes a set of strategies that align with the State's GHG-reduction goals and associated legislation that can be used to implement mitigation and adaptation strategies. By defining specific reduction goals, LVMWD and the JPA can track their progress towards meeting their goals and measure the success of their CAAP strategies. LVMWD and the JPA are committed to developing new measures and strategies, leverage emerging technologies and products, and updating the CAAP in an effort to adapt to emerging climate threats and maintain progress with their established carbon neutrality target.



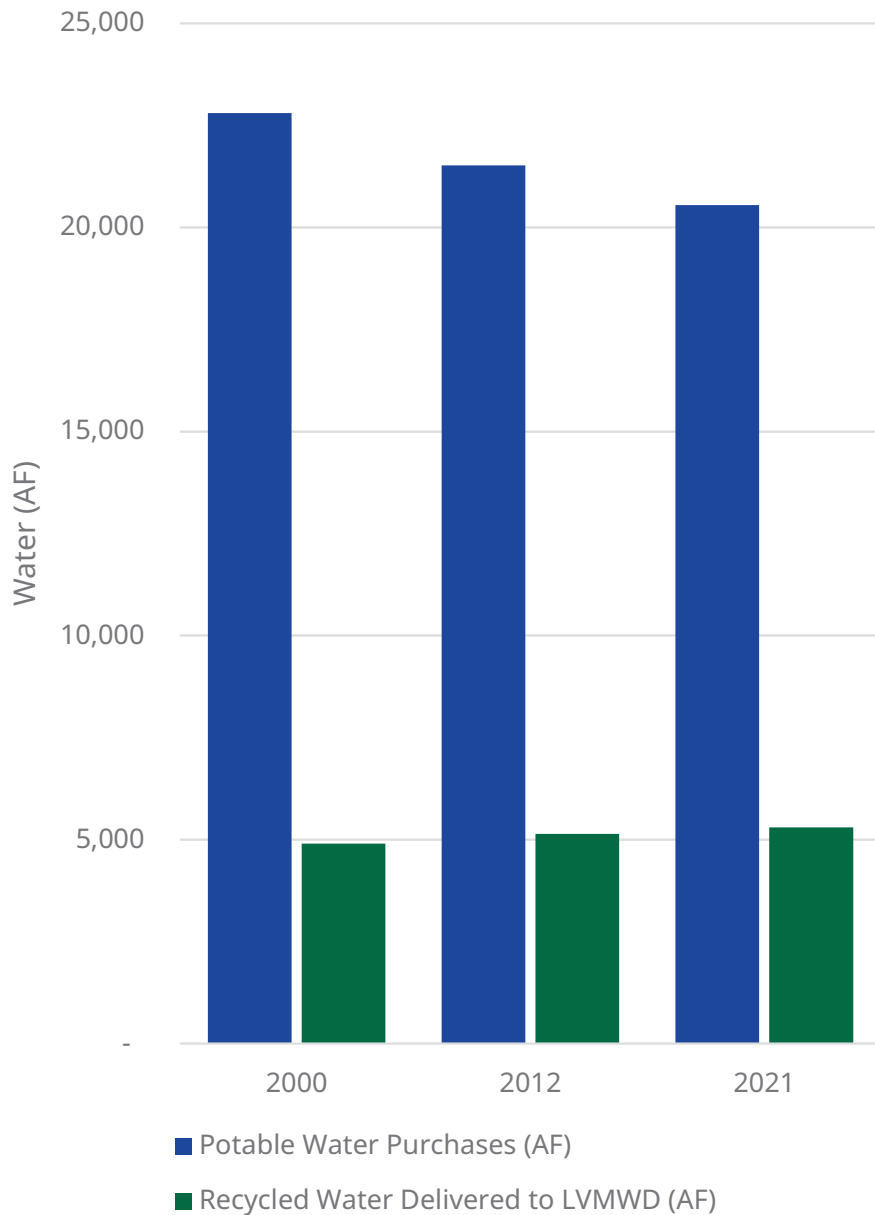
LVMWD/JPA System Overview

This CAAP covers LVMWD facilities and operations and JPA operations. LVMWD acts as Administering Agent for the Triunfo JPA, which is a long-term partnership between LVMWD and the Triunfo Water and Sanitation District (TWSD). The JPA co-owns, and LVMWD operates and maintains, several shared wastewater facilities, including the Tapia Wastewater Reclamation Facility, a backbone reclamation water main, the Rancho Las Virgenes Composting Facility, spray fields for seasonal disposal of excess recycled water, and a 5-megawatt solar farm. GHG emissions associated with the operation and maintenance of TWSD's infrastructure are not measured as part of the GHG inventory, as outlined in Chapter 4.

Collectively, the JPA provides wastewater treatment, recycled water, and bio-solids composting to more than 100,000 residents in the cities of Agoura Hills, Calabasas, Hidden Hills, Westlake Village, unincorporated areas of western Los Angeles County, and eastern Ventura County, including Oak Park. LVMWD provides potable water services to 70,000 of its residents. LVMWD's potable water distribution system includes 25 storage tanks, 24 pump stations, and almost 400 miles of pipelines. LVMWD's recycled water system consists of 62 miles of pipelines, 3 storage tanks, 3 open reservoirs, and 4 pump stations. The potable water system serves potable retail customers, primarily residential, and the recycled water system provides water resources to irrigate parks, golf courses, roadway landscapes, commercial properties, and multi-family landscapes. Water delivered per year, in acre-feet (AF), by LVMWD in 2000, 2012, and 2021 is shown in Figure 1-1. Water deliveries for these years are shown in alignment with years included in the multi-year GHG inventory, as seen in Chapter 4. Highlighting 1990, 2000, 2012, and 2021 illustrates shifts in water deliveries over two decades of service. The GHG emissions associated with these water deliveries are primarily from the purchase and consumption of electricity used for water treatment, conveyance, and delivery of water throughout the service area, as well as emissions associated with the Tapia Water Reclamation Facility.



Figure 1-1. Water Delivered for Select Years (AF) by LVMWD



Long-Range Planning

As an urban water supplier, LVMWD is required to prepare an Urban Water Management Plan (UWMP) every 5 years in response to the requirements of the UWMP Act, California Water Code Sections (CWC) 10610 through 10656. UWMPs are required to support the long-term resource planning to ensure that adequate water supplies are available to meet existing and future water needs over a 20-year planning horizon during different climate scenarios. In July 2021, LVMWD’s Board of Directors approved the most recent 2020 Urban Water Management Plan (UWMP 2021). LVMWD coordinated their planning efforts with several local water agencies to calculate demand projections, characterization of shared supplies, and planning for potential water shortages. This partnership included Calleguas Municipal Water District, Triunfo Water and Sanitation District, and The Metropolitan Water District of Southern California (MWD). To be consistent with anticipated growth in operations, water supply and demand projections are incorporated into the CAAP.

The 2014 Integrated Master Plan (IMP) for Las Virgenes Municipal Water District and Triunfo Sanitation District summarizes the findings of the Potable Water Master Plan, Sanitation Master Plan, and Recycled Water Master Plan, all adopted in 2014. The Potable Water Master Plan and Recycled Water Master Plan each evaluate historical and future water demands making several recommendations to secure water and avoid additional costs. The Sanitation Master Plan includes recommendations for specific sanitation projects for LVMWD to undertake such as refurbishment of existing assets, operation optimization, and sanitation system upgrades to allow LVMWD to plan for expansion and projected capacity needs in the future. The IMP recommends relieving demands from the potable system through specific recycled water construction projects and re-working the wastewater system to be more easily managed. Therefore, the CAAP aligns with and highlights opportunities within the IMP to reduce GHG emissions as a co-benefit.

Other long range planning documents such as the 2019 Las Virgenes Municipal Water District Hazard Mitigation Plan, have identified hazards that LVMWD is vulnerable to and recommend specific actions to minimize such vulnerabilities. This hazard mitigation plan developed by LVMWD explicitly sets a goal to increase the resiliency of LVMWD by “reducing risk from hazards by identifying resources, information, and strategies for risk reduction, while helping guide and coordinate mitigation activities.” Included in the plan is a series of hazard mitigation actions to be completed by LVMWD over the next few years to address hazards. The CAAP complements the strategies and hazard mitigation actions detailed in the Hazard Mitigation Plan.

HISTORY AND CURRENT OPERATIONS

This section provides an overview of the history and operations for LVMWD and the JPA, including its water supply sources, treatment requirements, and infrastructure.

LVMWD/JPA Formation and Service Area

LVMWD was formed in 1958 to supply imported water to western Los Angeles County. The Triunfo JPA was established in 1964 to treat wastewater within the Malibu Creek watershed. The respective service areas, shown in Figures 1-2 and 1-3, are located in the cities of Agoura Hills, Calabasas, Hidden Hills, Westlake Village, unincorporated areas of western Los Angeles County, and eastern Ventura County and are within the South Coast Hydrologic region, as defined by the Department of Water Resources. Figure 1-2 also shows LVMWD's water supply sources.

The climate of the service areas is characterized as semi-arid, with mild winters, warm summers, and moderate rainfall. The usually mild climate occasionally has periods of extremely hot weather, winter storms, or hot and dry Santa Ana winds.

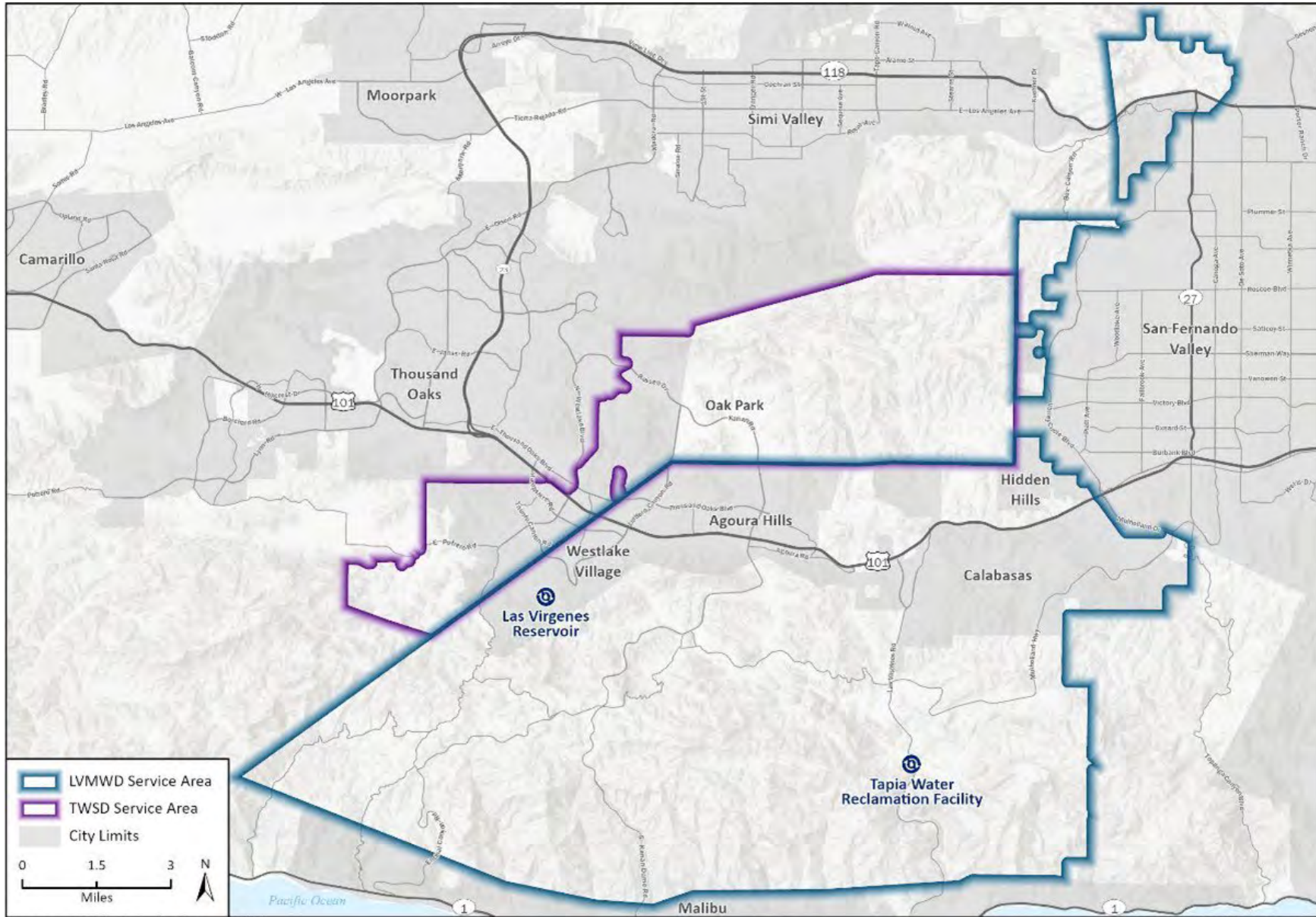
Water Sources and Supply

LVMWD and the JPA obtain water from various sources, including treated, drinkable water brought in from the MWD, recycled water derived from the TWRP, groundwater from the Russell Valley Basin in Westlake Village (used to complement the TWRP), and surface runoff collected into the Las Virgenes Reservoir. The imported water originates from the State Water Project (SWP). Water resources have been carefully managed to enhance water reliability, employing a strategy that emphasizes aggressive use of recycled water, minimal reliance on groundwater to supplement recycled water supplies, and storing water in Las Virgenes Reservoir during low-demand periods in the winter to meet peak demand periods during summer months.

Figure 1-2. LVMWD/JPA Vicinity Map



Figure 1-3. LVMWD and Triunfo JPA Service Areas



Basemap provided by Esri and its licensors © 2023.
Additional data provided by LVMWD, 2023.

22-19763 LVMWD Existing Conditions.aprx
Fig X LVMWD Service Areas

Domestic Water Delivery

LVMWD serves over 70,000 residents within a service area spanning 122 square miles, offering potable water, recycled water, and sanitation services. The water distribution system comprises 22 primary pressure zones, more than 400 miles of pipelines, 24 pumping stations, 25 storage tanks, and over 75 pressure regulating stations.

Wastewater and Recycled Water

Through the JPA, LVMWD operates the TWRP, which processes an average of 9.5 million gallons per day (MGD) of wastewater and has a total capacity of 16 MGD. The TWRP employs treatment methods to purify the wastewater to a high level, enabling its use for non-potable purposes like landscape irrigation and various commercial applications. Approximately 20 percent of all water supplied by LVMWD is recycled for irrigation purposes. The solid by-products generated during the treatment process are transported through a 4-mile-long buried pipeline to the Rancho Las Virgenes composting facility. At this facility, the solids undergo anaerobic digestion, dewatering, and composting, resulting in Class A Exceptional Quality compost that is made available for use by the public. Pictured to the right is the Rancho Las Virgenes Composting Facility.



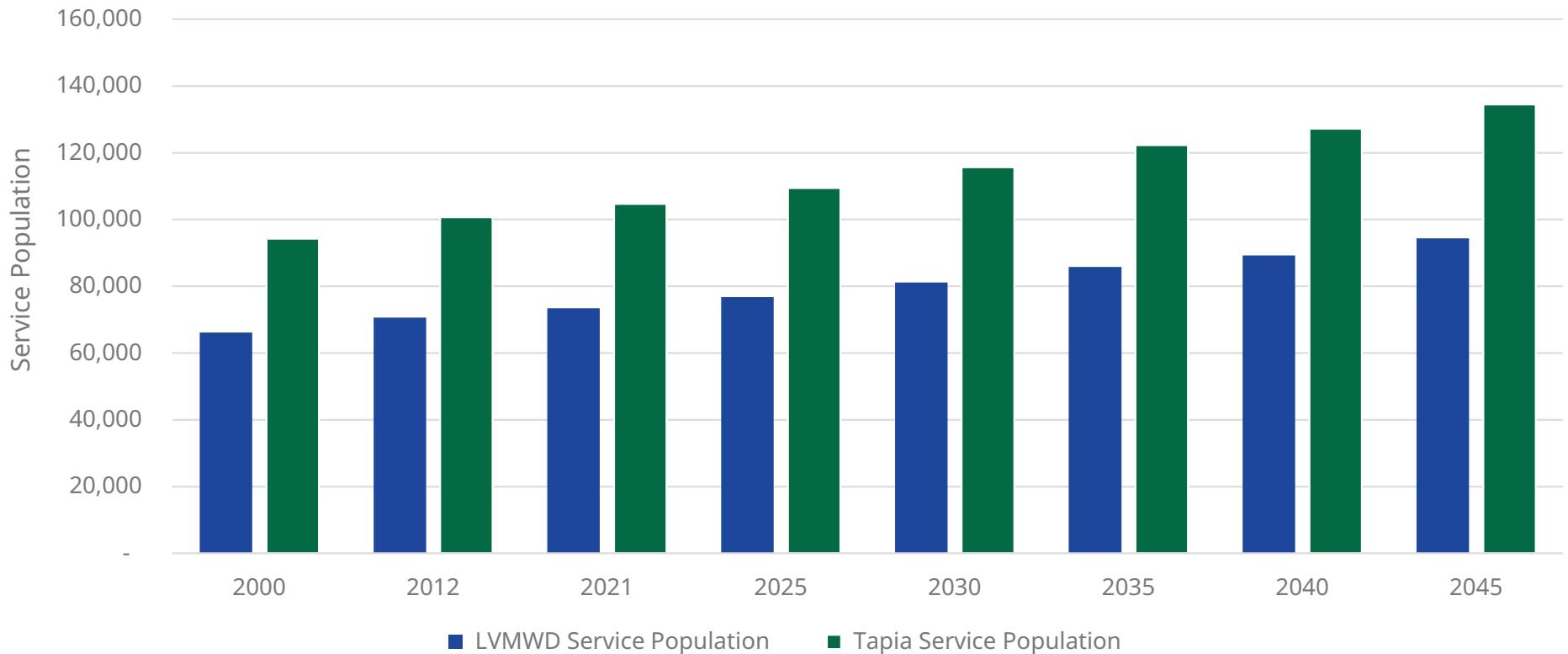
Environmental Commitment and Greenhouse Gas Reduction History

LVMWD and JPA GHG emissions are primarily related to the purchase and consumption of electricity used for operations and wastewater treatment throughout their service areas. Future GHG emissions are anticipated to increase due to planned service expansions and population increases, as estimated in the 2020 UWMP. As shown in Figure 1-4, service populations for LVMWD only (LVMWD Service Population) and for the areas served by the JPA that includes both LVMWD and Triunfo Water and Sanitation District services areas (Tapia Service Population) are estimated to grow from approximately 73,435 and 104,651 in 2021 to 94,392 and 134,516 in 2045, respectively. Chapter 4 describes LVMWD’s historic, current, and forecasted emissions in further detail.

Furthermore, impacts from the changing climate such as increased frequency and severity of drought conditions are projected to potentially impact the quantity and quality of local water supplies, as well as the availability of imported water from the SWP. Chapter 3 describes exposure to climate change and vulnerabilities in further detail.

Prior to development of this CAAP, LVMWD and the JPA substantially reduced their GHG emissions through the implementation of operational efficiencies, renewable energy projects, and water conservation programs into their services. Some of these efforts and the associated effects on reducing GHG emissions are summarized below.

Figure 1-4. Historical and Forecasted Service Population by LVMWD and TWRP



Infrastructure Energy Efficiency and Renewable Energy

LVMWD and the JPA have continually invested in projects and efforts to upgrade infrastructure and improve the energy efficiency of its operations. This has included installing a solar system to reduce reliance on fossil fuels and increase energy resilience. The solar energy has resulted in lower energy costs and reduced GHG emissions over time. A back-up battery storage system under construction at the Rancho Composting Facility will provide additional resiliency. Additionally, LED upgrades have been completed at District Headquarters and TWRF, leading to increased energy efficiency, decreased electricity consumption, and reduced GHG emissions.

LVMWD contracted to buy power from a Solar Power Generation Facility (operational in 2014), which is owned and operated by Solar City at a fixed cost over a 20-year period. This facility is designed to generate peak power of approximately 1 million watts or one megawatt, which is used to pump recycled water for regional use. Solar City has estimated that over its lifetime, the solar facility will prevent more than 82 million pounds of carbon from entering the atmosphere or the equivalent of removing 750 cars from the road.¹ Operational in 2021, LVMWD's Solar Generation Project Phase II was developed to provide an additional 4 megawatts of renewable energy. At the time of development, this solar facility was projected to reduce electrical costs by an estimated \$10.3 million over a 25-year period. The amount of power generated from the combined 5-megawatt solar facility is enough to operate the TWRF.²



1. LVMWD. N.d. Solar Power Generation Facility.

<https://www.lvmwd.com/our-services/wastewater-services/solar-power-generation-facility#:~:text=The%20solar%20power%20generation%20facility,recycled%20water%20for%20regional%20use.>

2. LVMWD. N.d. Solar Generation Project Phase II. <https://www.lvmwd.com/the-district/departments/engineering-and-external-affairs/technical-services-planning-engineering/master-plans-and-engineering-documents/solar-generation-project-phase-ii>

3. Comprehensive Water Conservation Plan. LVMWD. 2020. <https://www.lvmwd.com/home/showpublisheddocument/13413/637600622563770000>

Water Conservation and Reliability

LVMWD has developed strategies for water conservation through the Comprehensive Water Conservation Plan,³ which aligns their water conservation targets with State goals. The plan outlines several water conservation programs aimed at reducing water use, reducing water costs for customers, and meeting state water conservation goals. Current LVMWD water conservation efforts include:

- Weather based Irrigation Controller Giveaway/Rebate Program
- High Water Use Account Review and One-on-One Consultations
- Rain Barrel Giveaway/Rebate Program
- Development and Implementation of a Landscape Transformation Initiative
- Improved Education and Outreach Efforts
- Advanced Water Meter Project

These efforts have led to an estimated water reduction of 421 AF per year, since 2018. As of 2023, the Weather Based Irrigation Controller Giveaway/Rebate Program has provided over 2,000 smart controllers to customers. LVMWD is actively developing additional programs to further water conservation efforts. Specifically, the Landscape Transformation Program, launched in 2023, will further efforts to promote the transformation to water efficient landscaping.

LVMWD and the JPA are committed to ensuring that its customers have access to reliable drinking water resources. The Pure Water Project Las Virgenes - Triunfo will play a critical role in providing reliable water in the future. The project, a joint effort between LVMWD and TWSD, is currently in the development stages, and will take surplus recycled water from the TWRF and further purify the water to meet or exceed drinking water standards. This effort is critical to helping ensure long-term drinking water supply reliability as LVMWD is currently reliant on imported drinking water from the State Water Project. Pure Water operations are expected to come online by no later than 2030.

Vehicle Fleet

LVMWD'S Advanced Meter Project⁴ is minimizing fleet vehicle usage as customers with advanced meters will no longer need in-person monthly meter reads, leading to fewer LVMWD fleet vehicles on the road for meter reading. This significantly reduces fleet vehicle usage and reduces LVMWD's GHG emissions.

Wildfire Mitigation and Energy Resilience

The LVMWD and JPA service areas are in high wildfire risk zones. LVMWD and the JPA are committed to implementing measures to mitigate future wildfire risk, potential damage to facilities and infrastructure, power outages, and associated service disruptions. Completed and ongoing efforts to minimize wildfire risk and increase resilience to power outages include:

- Implementing vegetation and landscape management practices that reduce the amount of flammable materials,
- Clearing brush and trimming trees around critical infrastructure,
- Conducting structure hardening upgrades to improve resilience to wildfires, and
- Completing the installation of emergency power generation systems at several facilities.



4. LVMWD. Advanced Meter Project. 2023. <https://www.lvmwd.com/our-services/construction-projects/lvmwd-advanced-meter-program>

2.

SCIENTIFIC CONTEXT FOR CLIMATE CHANGE



CLIMATE CHANGE CAUSES

While the scientific understanding of climate change continues to evolve, the mechanisms driving climate change have been well understood for decades. These mechanisms include the release of GHG emissions associated with human activities into Earth's atmosphere and the effects on the global climate. This section provides an overview of the scientific context of climate change attributed to human activity.

GHG Effect and Emissions Sources

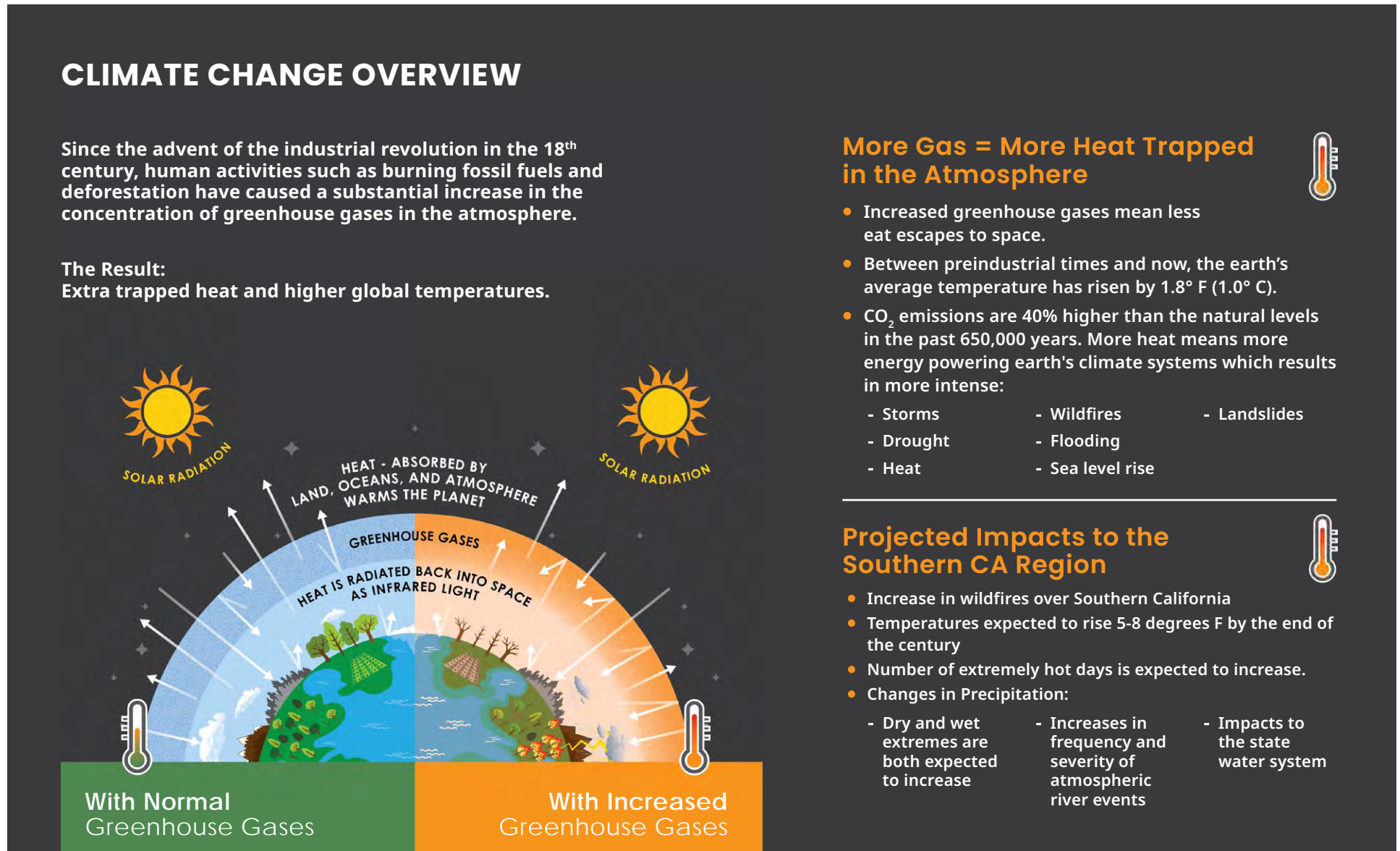
Below is a discussion of the effects of GHG emissions, impacts of global warming, as well as a discussion of GHG emission sources, including those specific to LVMWD's and JPA's operations.

GHG Effect

Most of the energy that affects the Earth's climate comes from the sun. When solar radiation reaches the Earth, some fraction is absorbed by the Earth's surface, and some is reflected back into space. Gases in the Earth's atmosphere act like a blanket reducing the amount of energy radiated back into space from Earth's surface resulting in heat being trapped within the atmosphere. This is known as the "greenhouse effect" because atmospheric gases function similar to the windows

in a greenhouse, which trap the Sun's rays and create a much warmer space inside the greenhouse than the outside air. The greenhouse effect regulates the Earth's climate, maintaining conditions suitable for life on Earth. However, a rapid increase of GHG emissions can cause excess heat to be trapped, affecting global temperatures and climate. More specifically, human activity, such as burning fossil fuels to generate electricity and heat, and the transportation of people and materials in vehicles has increased the amount of GHGs emitted into the atmosphere. The increase of emitted GHGs has led to an increased adsorption of infrared radiation by the Earth's atmosphere and increased temperatures near the surface. This process is depicted in Figure 2-1.

Figure 2-1. Greenhouse Gas Effect and Associated Climate Impacts⁵

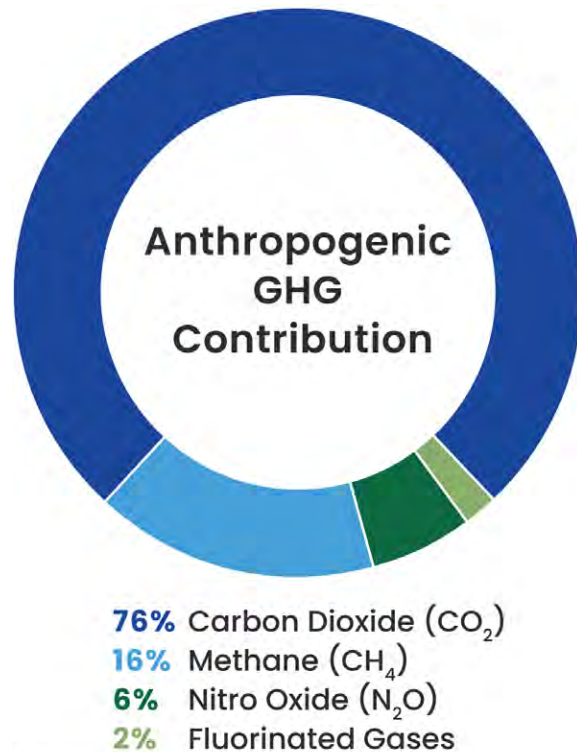


5. Information in Figure 2-1 regarding the GHG effect was obtained from <https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions>

Global Warming Potential

The primary GHGs that are most responsible for the radiative greenhouse effect on Earth include carbon dioxide (CO₂), methane (CH₄), and nitrous oxides (N₂O). CO₂ contributes approximately 76 percent of total GHG emissions, largely due to combustion of fossil fuel for energy generation and fuel use. As shown in Figure 2-2, CH₄ and N₂O from agriculture and industrial activities contribute approximately 16 percent and 6 percent, respectively, to total GHG emissions. Other GHGs that are used in products and processes include fluorinated gases, which are released in small quantities that contribute about two percent of overall emissions.

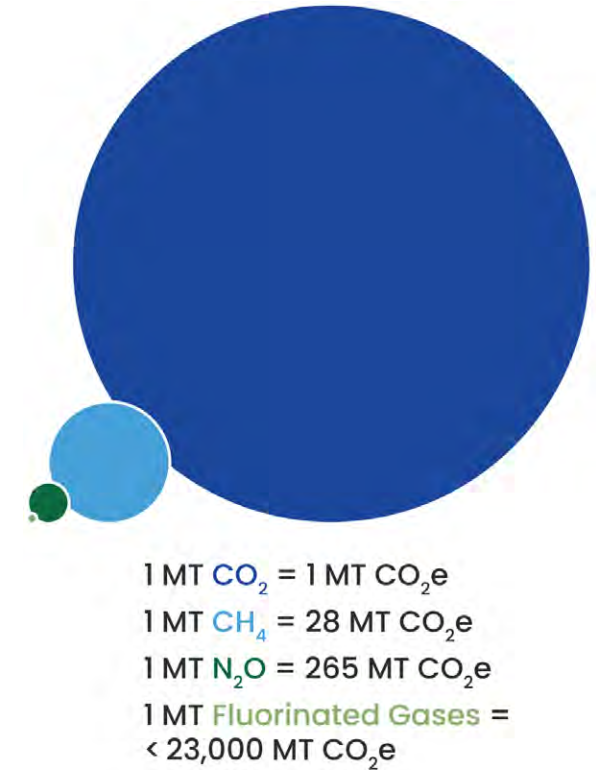
Figure 2-2. GHG Global Contribution



(Source is IPCC 2014 AR5)

Each GHG has its own global warming potential (GWP), which refers to the extent to which the GHG traps energy in the atmosphere.⁶ The determination of a GHG’s GWP utilizes CO₂ as a reference point and compares the potential impact of different GHGs where CO₂ has a GWP of 1. Using the latest 100-year GWP values published in the International Panel on Climate Change (IPCC) Fifth Assessment Report (IPCC 2014), CH₄ has a GWP of 28, meaning that each unit of CH₄ causes 28 times more global warming potential than 1 unit of CO₂, while N₂O has a GWP of 265.^{7,8} Other GHGs include the fluorinated gases, which can have a GWP of up to 23,500. IPCC publishes Assessment Reports to update GWPs of several GHGs following advances in scientific knowledge on the radiative efficiencies and atmospheric lifetimes of GHGs. The IPCC’s Fifth Assessment Report (2014) is among the most current and comprehensive peer-reviewed assessments of climate change. When individual GHGs are normalized based on their GWPs, we refer to them as carbon dioxide equivalents or CO₂e. Generally, GHG emissions are quantified in terms of metric tons (MT) CO₂e emitted per year. Figure 2-3 shows a comparison of the most common GHGs and their GWPs.

Figure 2-3. Comparison of GHG GWPs



6. According to the United States Environmental Protection Agency, the GWP was developed to allow comparisons of the global warming impacts of different gases. Specifically, it is a measure of how much energy the emissions of one ton of a gas will absorb over a given period of time, relative to the emissions of one ton of CO₂ (EPA 2017).

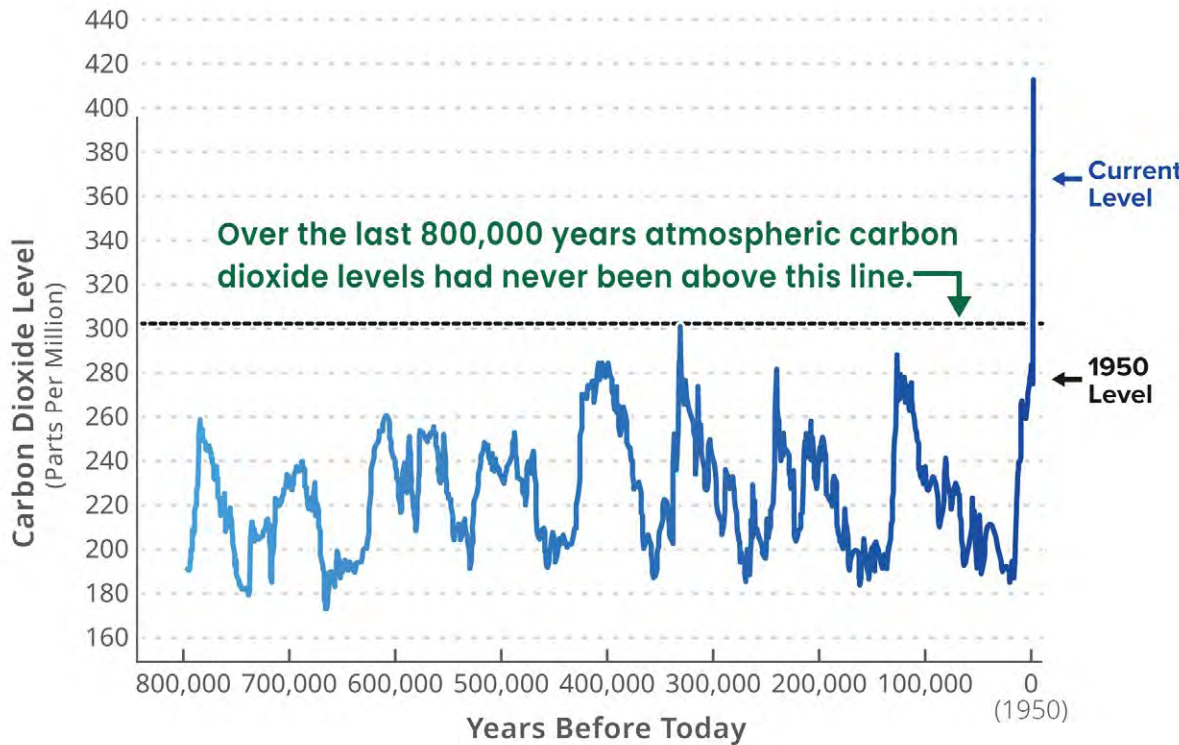
7. International Organization for Standardization (ISO) published ISO 14064-1 in 2006 (revised 2018) to provide an international standard for the quantification and reporting of GHG emissions.

8. Greenhouse Gas Protocol. 2016. https://www.ghgprotocol.org/sites/default/files/ghgp/Global-Warming-Potential-Values%20%28Feb%2016%202016%29_1.pdf

While CO₂ has the lowest GWP of the GHGs, it is by far the largest contributor to climate change effects due to the total mass of anthropogenic CO₂ emissions released annually; this is largely due to the combustion of fossil fuels. Since the start of the industrial revolution in the mid-nineteenth century, human activities have been emitting large quantities of GHGs into the atmosphere, enough to

nearly double the amount of CO₂ from 280 parts per million to over 400 parts per million, which is 100 parts per million higher than any time in the last 800,000 years. The atmospheric concentration of CO₂ over time has been calculated by measuring the composition of air trapped in ice cores from Antarctica,⁹ as shown in Figure 2-4.

Figure 2-4. Atmospheric Carbon Dioxide Levels



Source: <https://climate.nasa.gov/evidence/>

GHG Emission Sources

Anthropogenic processes that release GHGs include: the burning of fossil fuels for transportation, heating, and electricity generation; agricultural practices that release methane, such as livestock grazing and crop residue decomposition; and industrial processes that release smaller amounts of high-GWP gases. Deforestation and land cover conversion also contribute to global warming by reducing the Earth’s capacity to remove CO₂ from the air and altering the Earth’s albedo,¹⁰ or surface reflectance, allowing for absorption of additional solar radiation. According to the U.S. Environmental Protection Agency (USEPA), gross GHG emissions nationwide have increased by 1.3 percent since 1990. While the continued shift from coal to natural gas and increased use of renewables in the power sector helps to reduce GHG emissions, continued increases in population growth and industrialization can lead to further increases in GHG emissions unless technology and practices transition to low carbon alternatives.

9. Bereiter et. al. 2008. https://www.researchgate.net/publication/5370384_High-resolution_carbon_dioxide_concentration_record_650000-800000_years_before_present

10. Albedo refers to the amount of diffuse radiation of energy out of the total, ranging from 0 (a black body that absorbs all radiation) to 1 where no energy/radiation is absorbed.

Source: National Snow & Ice Data Center (NSIDC). 2020. <https://nsidc.org/cryosphere/seaice/processes/albedo.html>

LVMWD and JPA GHG Emission Sources

Sources of GHG emissions associated with LVMWD and the JPA include the following:

- Electricity usage to pump groundwater, conduct water quality sampling and treatment, provide water conveyance and distribution throughout the service area, and operate LVMWD/JPA facilities such as pump stations, lift stations, water reclamation plants, and water recycling
- Combustion of fuels (such as natural gas) in buildings and stationery equipment
- Combustion of fuels (such as gasoline and diesel) for transportation (fleet vehicle internal combustion of fuel and employee commutes)
- Emissions released from the processing and treatment of wastewater (e.g., combustion of digester gas, N_2O from nitrification or denitrification, and emissions in effluent discharge)
- Waste emissions including combustion of fuels in waste collection vehicles and landfill equipment as well as emissions from the decomposition of waste generated by LVMWD/JPA operations at the landfill

A complete description of operations and associated GHG emissions are located in Chapter 4. Pictured to the right is LVMWD's Headquarters.



3.

CLIMATE CHANGE VULNERABILITIES

CLIMATE CHANGE EXPOSURE

The addition of excess GHGs to the atmosphere is responsible for trapping heat near the earth's surface, increasing the average temperatures across the globe. This increase in average temperatures is the cause of climate change and affects local health, natural resources, infrastructure, emergency response, and many other aspects of society. According to the IPCC, GHGs are now higher than they have been in the past 400,000 years, raising carbon dioxide levels from 280 parts per million to 410 parts per million in the last 150 years (IPCC 2021). The dramatic increase in GHG's is attributed to human activities beginning with the industrial revolution in the 1800s, which represented a shift from an agrarian and handicraft-based economy to one dominated by industry and machine manufacturing (IPCC 2021).

To evaluate the impact of climate change on LVMWD and JPA operations and infrastructure, future conditions were modeled using the State of California's Cal-Adapt tool.¹¹ These models predict that the combined service area and state water supplies are expected to experience a wide variety of impacts by the end of the century. According to California's Fourth Climate Change Assessment, the service areas will be affected by projected changes that include changes in precipitation patterns,

wildfire risk, the prevalence of extreme heat events, and ocean temperatures and chemistry.

The Cal-Adapt tool provides climate data from global-scale models that have been localized (downscaled) to 3.7-mile by 3.7-mile grids (California Energy Commission [CEC] 2021). The data in Cal-Adapt specific to the combined service area is consistent with information provided by the California Fourth Climate Change Assessment, Los Angeles Regional Report (2018) to describe protected future changes for specific types of hazards. Other reports, including the California Department of Water Resource's Climate Change Vulnerability Assessment, provide information regarding climate change projections and impacts to the State Water Project and water supplies. Projections throughout this section are presented consistent with the Governor's Office of Planning and Research (OPR) using Representative Concentration Pathway (RCP) 8.5 as a conservative approach to assessing and adapting to climate change. RCP 8.5 is a high greenhouse emissions scenario in which global emissions continue to rise through the end of the twenty-first century. Additionally, projections are forecasted to mid-century (2035-2064) and end-of-century (2070-2099) as 30-year averages and are compared to a modeled historical baseline (1961-1990).

11. Cal-Adapt 2.0 is an online tool that presents historic and modeled projections based on 10 different global climate models. The tool was developed and is maintained by the University of California, Berkeley Geospatial Innovation Facility with funding and oversight by the CEC. This tool was used to present projection data related to minimum and maximum temperature, precipitation, extreme heat, warm nights, drought, and wildfire.

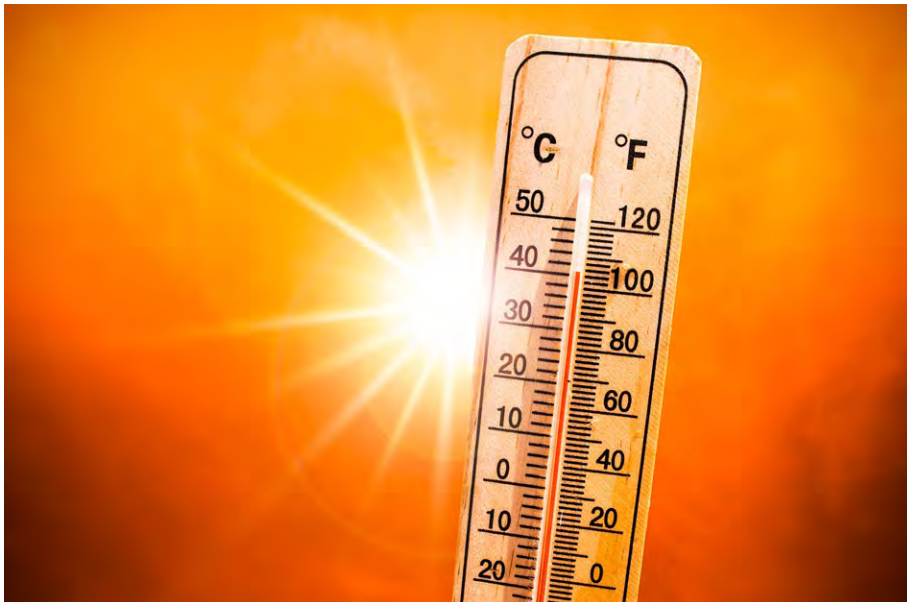


Climate Drivers

The climate drivers of concern include temperature and precipitation.

Temperature

Average maximum temperatures are expected to increase in the combined service area. Compared to the observed baseline (1961-1990), average maximum temperatures in Calabasas (District Headquarters) are expected to rise between 4.3 °F and 8.1 °F by the end of the century. According to “Our Climate Crisis: A Guide for SoCal Communities in the Wildland Urban Interface” prepared by the Malibu Foundation, the cities of Calabasas, Agoura Hills, and Hidden Hills, will face the highest temperature increases in the Santa Monica Mountains region. Temperature increases influence extreme heat, drought, and wildfire, as discussed further in this Chapter.



Precipitation and Drought

Precipitation in the combined service area is highly variable from year to year. According to California's Fourth Climate Change Assessment, Los Angeles Region Report (2018), typically about five storms each year generate approximately 50 percent of total precipitation in the Los Angeles region. Model projections are inconsistent, however, small changes in average annual precipitation compared to the region's historic baseline are expected.¹²

Increased intensity of precipitation events is expected for the greater Los Angeles Area, including the combined service area, through the end of the century. Both dry and wet extremes are expected to occur in the future. By the end of the century, the wettest day of the year is expected to increase across most of the Los Angeles region, with some locations experiencing 25-30 percent increases. Maximum 1-day precipitation is projected to increase between 0.3 and 0.4 inch by the end of the century. Extremely dry years are expected to increase in the Los Angeles region, potentially doubling or more in frequency by the end of the century. The maximum length of dry spell currently has a 158-day average in the combined service area and is projected to increase between 8 and 16 days by the end of the century.¹³



12. Hall et al. 2018. Los Angeles Region Report: California's Fourth Climate Change Assessment.

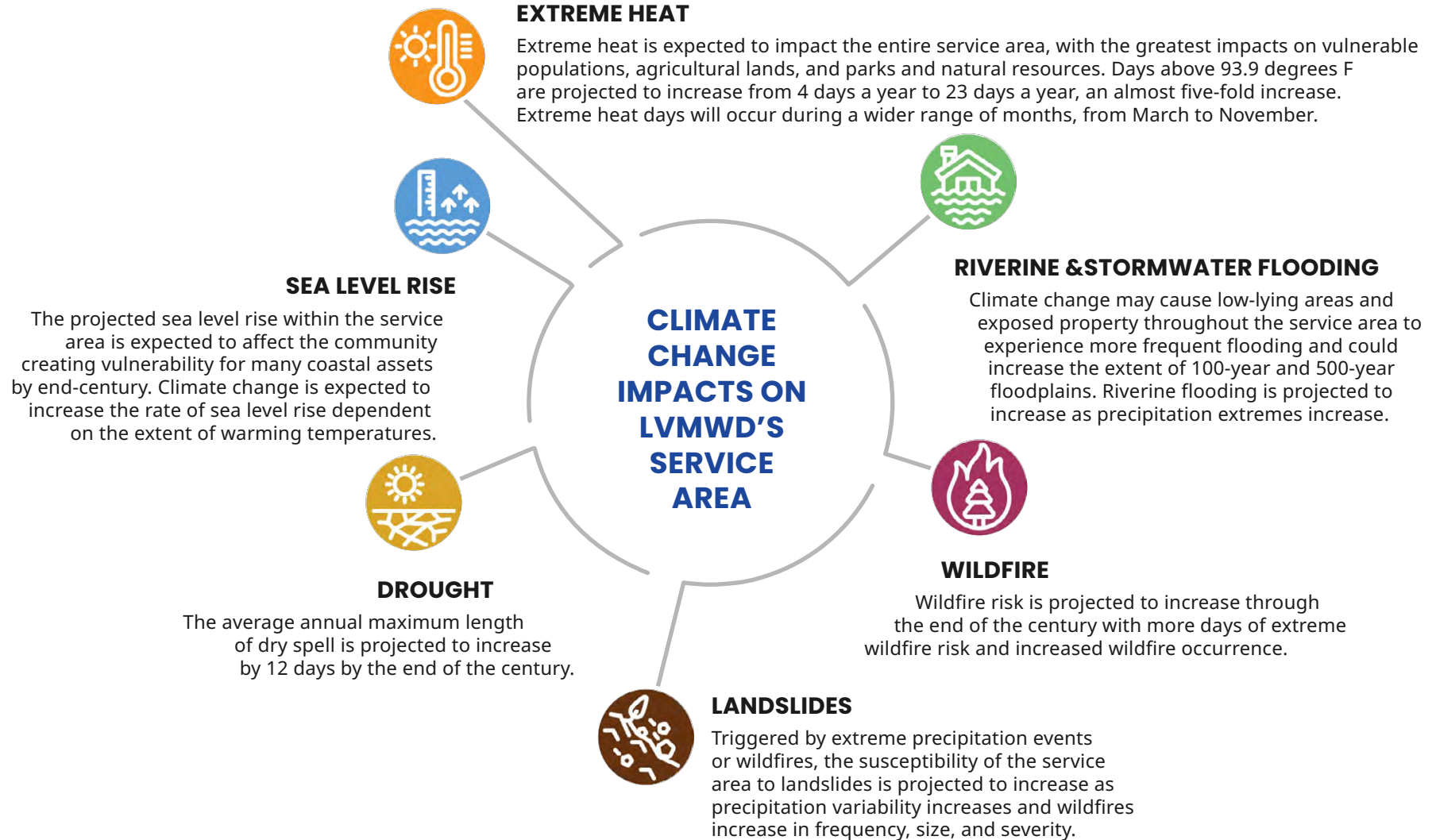
https://www.energy.ca.gov/sites/default/files/2019-11/Reg%20Report-%20SUM-CCCA4-2018-007%20LosAngeles_ADA.pdf. Accessed July 2023

13. California Energy Commission (CEC). 2023. Cal-Adapt. <https://cal-adapt.org/tools/local-climate-change-snapshot>. Accessed July 2023

Regional Climate Hazards

LVMWD and JPA infrastructure, facilities and water supplies are exposed to climate hazards including drought, wildfire, extreme heat, extreme storms/precipitation events, floods, and landslides. A summary of climate change impacts is shown in Figure 3-1.

Figure 3-1. Climate Change Impacts on the Combined (LVMWD and JPA) Service Area



Wildfire

Wildfires in California have occurred with increased frequency and intensity over the past two decades. There are many areas in the combined service area designated by CAL FIRE as High and Very High Fire Hazard Severity Zones, with the greatest risk in the Santa Monica Mountains and Simi Hills. Additionally, many of the critical facilities in the potable, recycled, and sanitary water systems, are in Fire Hazard Severity Zones, as seen in Figure 3-2. Critical potable water, recycled water, and sanitary sewer facilities located within a ¼ mile of a fire hazard severity zone are highlighted in the figure. The combined service area is projected to experience increasing wildfire risk through the end of the century due to a variety of factors including an increase in temperatures and prevalence of drought conditions. The decadal probability of wildfire is projected to increase from the historical baseline of 10 percent to 30 percent by the end of the century.¹⁴

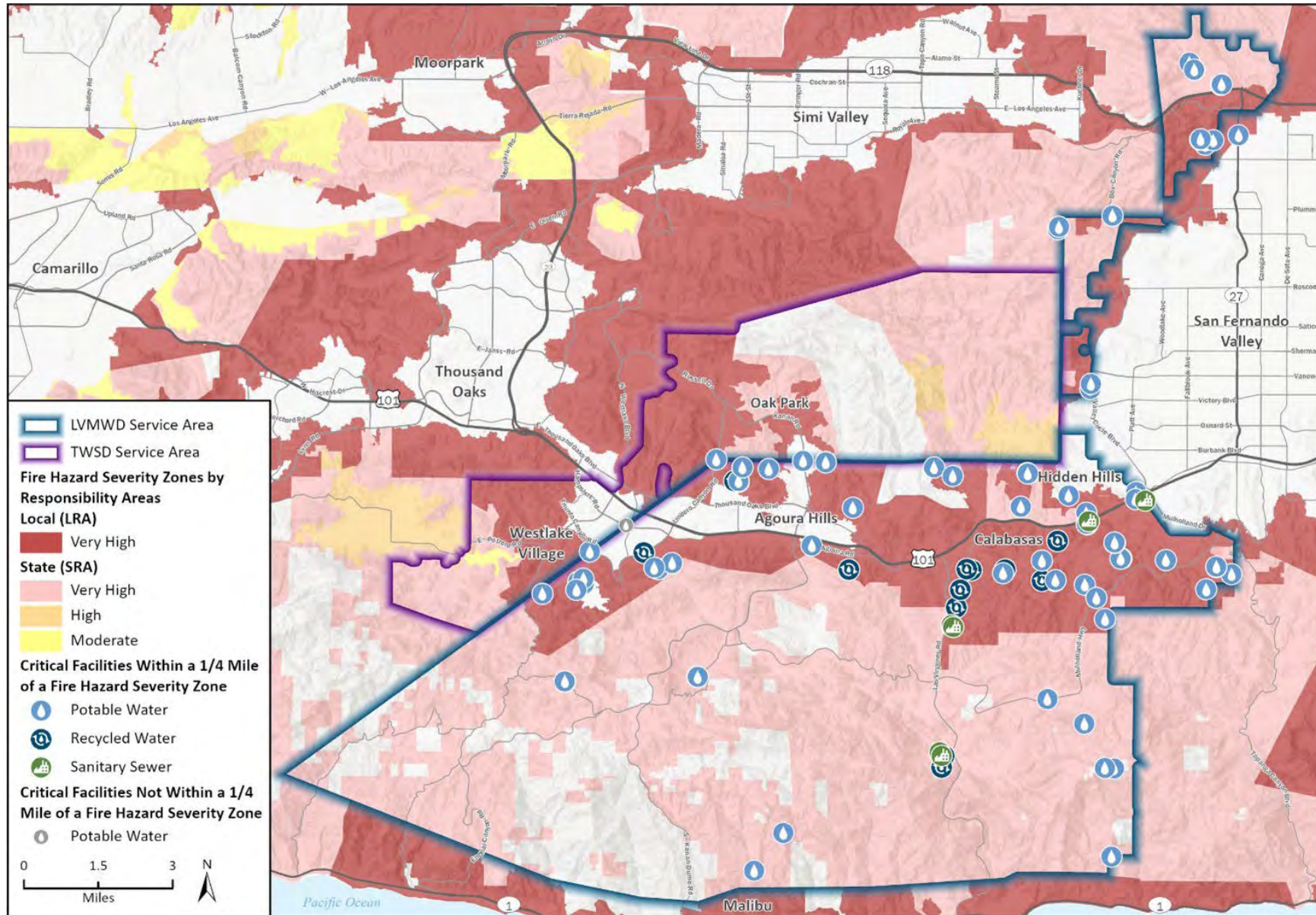
On November 8, 2018, the Woolsey Fire broke out in Ventura County and spread into combined service area, due to large amount of flammable vegetation and the influence of Santa Ana winds. On November 11, LVMWD's Board declared a state of emergency for the service area due to the significant impacts of the fire, authorizing response and recovery efforts and actions. LVMWD critical facilities and services were damaged and disrupted, including the Calabasas Headquarters. By November 9, LVMWD and the JPA lost power to nearly all of their critical facilities and backup generators were utilized to keep pump stations and other equipment operational. The Woolsey Fire footprint and location of LVMWD and JPA critical facilities are shown in Figure 3-3.



Photo credit: Peter Buschmann/U.S. Forest Service

14. California Energy Commission (CEC). 2023. Cal-Adapt. <https://cal-adapt.org/tools/local-climate-change-snapshot>. Accessed July 2023

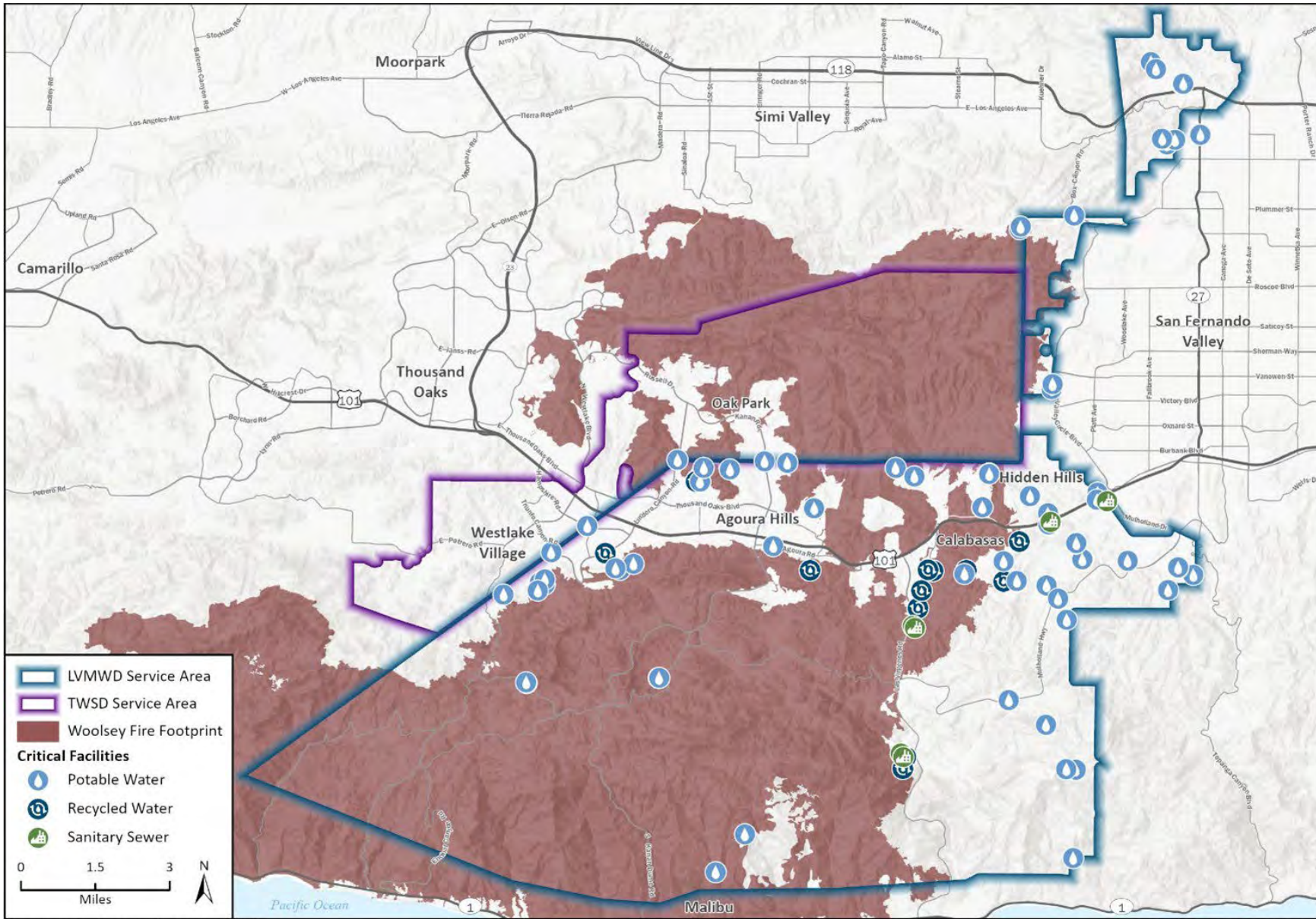
Figure 3-2. Fire Hazard Severity Zones and Critical Facilities



Basemap provided by Esri and its licensors © 2023.
 Additional data provided by LVMWD, 2023; CAL FIRE, SRA 2007, LRA 2010 & 2012.

22-13763 LVMWD Existing Conditions.aprx
 Fig. 1 Fire Hazard Severity Zones and Critical Facilities

Figure 3-3. Woolsey Fire and Critical Facilities



Basemap provided by Esri and its licensors © 2023.
 Additional data provided by LVMWD, 2023; CAL FIRE, FRAP, 2022.

22-13793 LVMWD Existing Conditions.aprx
 Fig. 2 Woolsey Fire and Critical Facilities

Flooding and Extreme Storms

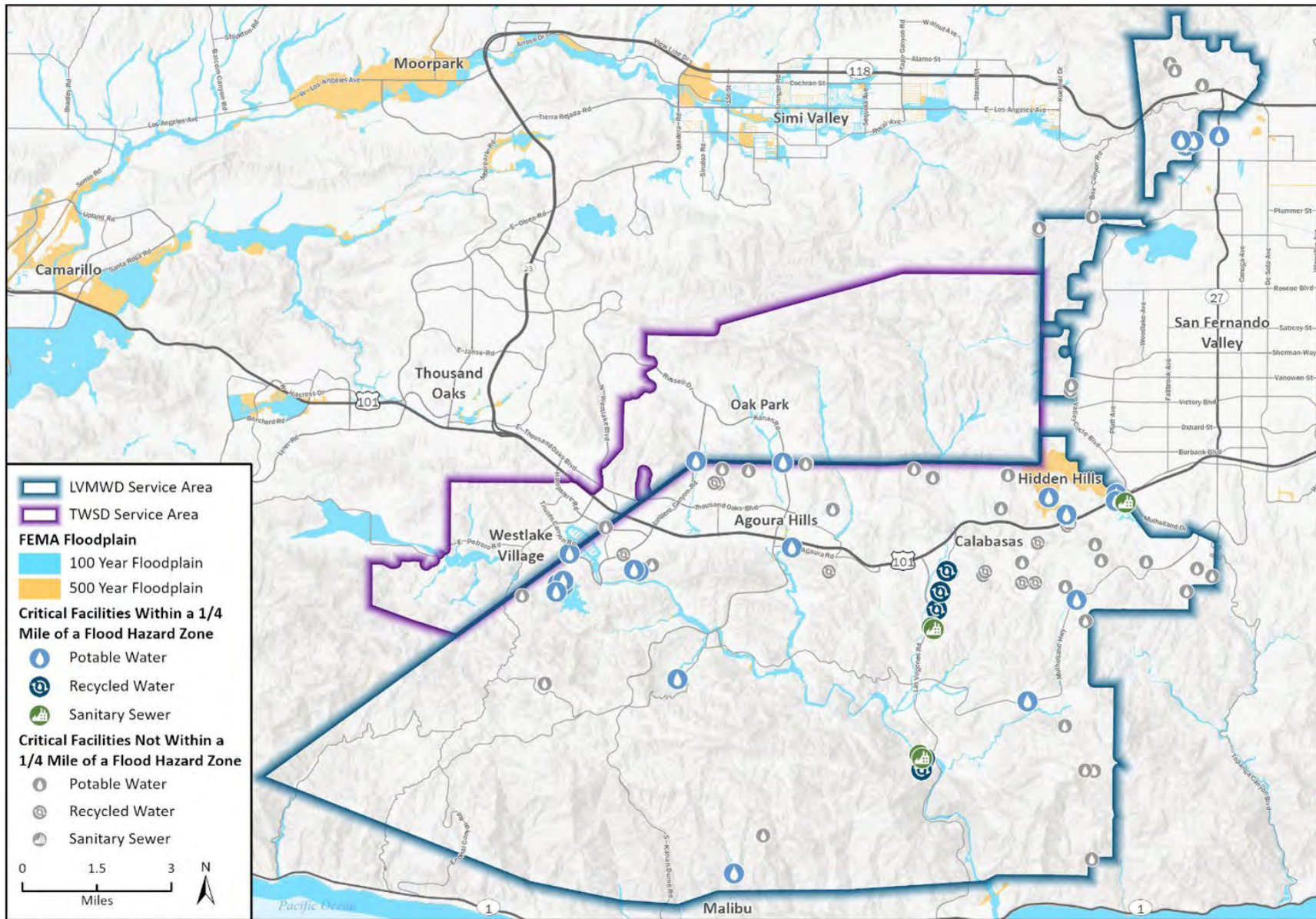
Low-lying areas in the combined service area are expected to experience more frequent flooding as a result of climate change. Riverine flooding is expected to increase as precipitation extremes increase. Waterways including the Malibu Creek are particularly susceptible to riverine flooding. Extreme precipitation events often produce large and high velocity flows, which may overwhelm stormwater systems, causing localized flooding. Climate models project that the frequency of atmospheric river/large storm events may increase in the future. Additionally, the peak season of atmospheric rivers is projected to lengthen, which may extend the flood-hazard season in Southern California.¹⁵ The combined service area contains both 100-year and 500-year FEMA floodplains, with several critical facilities located in or near those floodplains, as seen in Figure 3-4. Critical potable water, recycled water, and sanitary sewer facilities located within a ¼ mile of a flood hazard zone are highlighted in Figure 3-4.



15. Hall et al. 2018. Los Angeles Region Report: California's Fourth Climate Change Assessment.

https://www.energy.ca.gov/sites/default/files/2019-11/Reg%20Report-%20SUM-CCCA4-2018-007%20LosAngeles_ADA.pdf. Accessed July 2023

Figure 3-4. FEMA Flood Zones and Critical Facilities



Basemap provided by Esri and its licensors © 2023.
 Additional data provided by LVMWD, 2023; FEMA, 2021.

22-13763 LVMWD Existing Conditions.aprx
 Fig 3 Flood Zones and Critical Facilities

Landslides

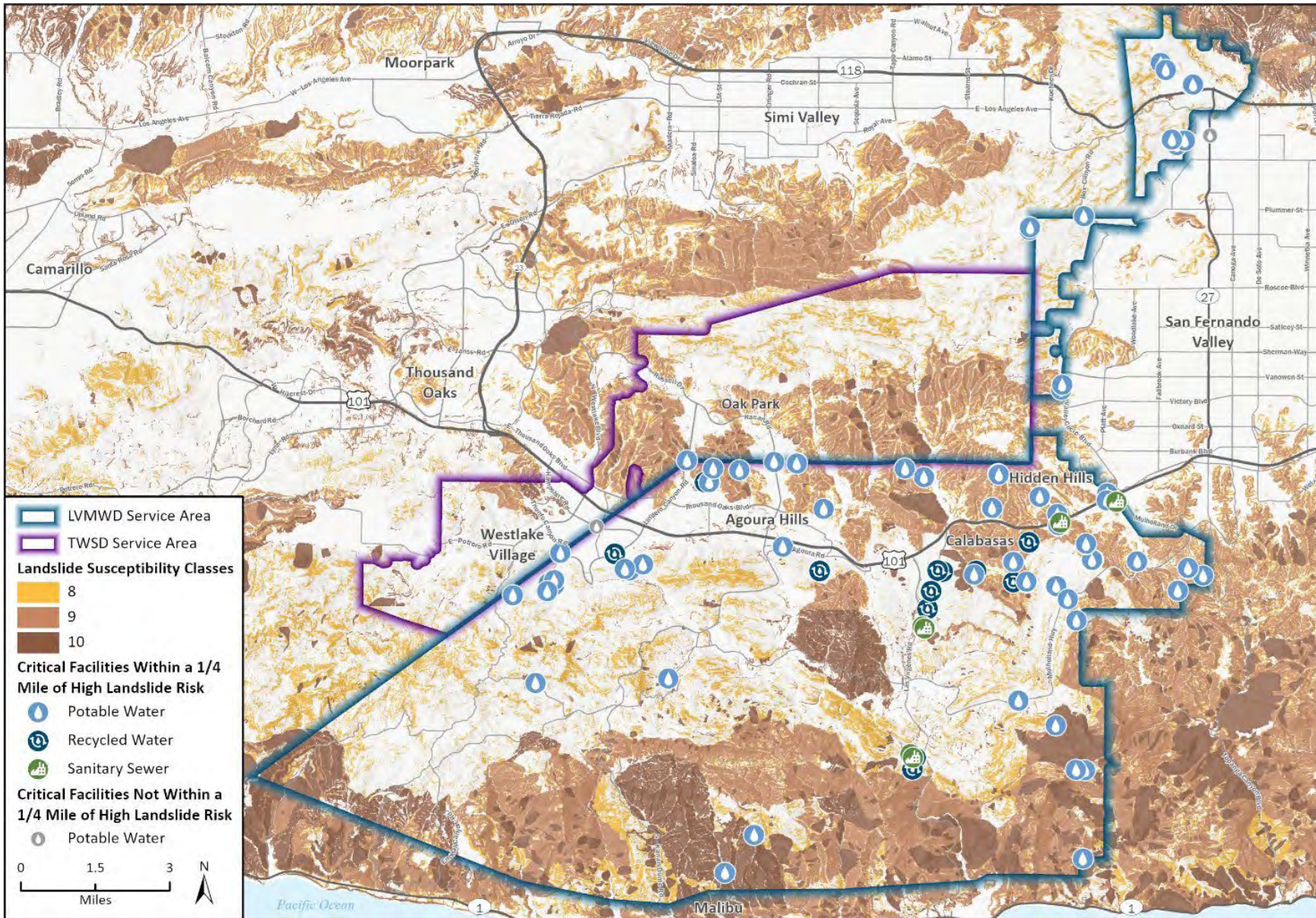
Increased frequency and intensity of extreme precipitation events and wildfires may contribute to increased landslide susceptibility in the combined service area. Landslide susceptibility is typically highest in areas with unstable soils, weak rocks, and steep slopes. Landslide susceptibility in the combined service area is based on a range from 1 to 10, with 10 being the highest susceptibility. As seen in Figure 3-5, susceptibility levels of 8 to 10, are common throughout the combined service area, particularly in the Santa Monica Mountains and Simi Hills. Critical potable water, recycled water, and sanitary sewer facilities located within a ¼ mile of a high landslide susceptibility area are highlighted in the figure. Areas impacted by recent fires, including the 2018 Woolsey Fire, are especially prone to debris flow. Debris flow events are particularly dangerous because they often have little warning during severe storm events and are fast moving. Post-wildfire debris flows are likely to occur in burn scar for between 2-5 years after a wildfire, during significant rainfall events.¹⁶



16. U.S. Geological Survey (USGS). 2018. *Emergency Assessment of Post-Fire Debris Flow Hazards*.

<https://www.usgs.gov/programs/landslide-hazards/science/emergency-assessment-post-fire-debris-flow-hazards>. Accessed July 2023

Figure 3-5. Landslide Susceptibility Areas and Critical Facilities



Basemap provided by Esri and its licensors © 2023.
 Additional data provided by LVMWD, 2023; CGS, Map Sheet 58, 2018.

22-13763 LVMWD Existing Conditions.aprx
 Fig 4 Landslide Susceptibility and Critical Facilities

Extreme Heat

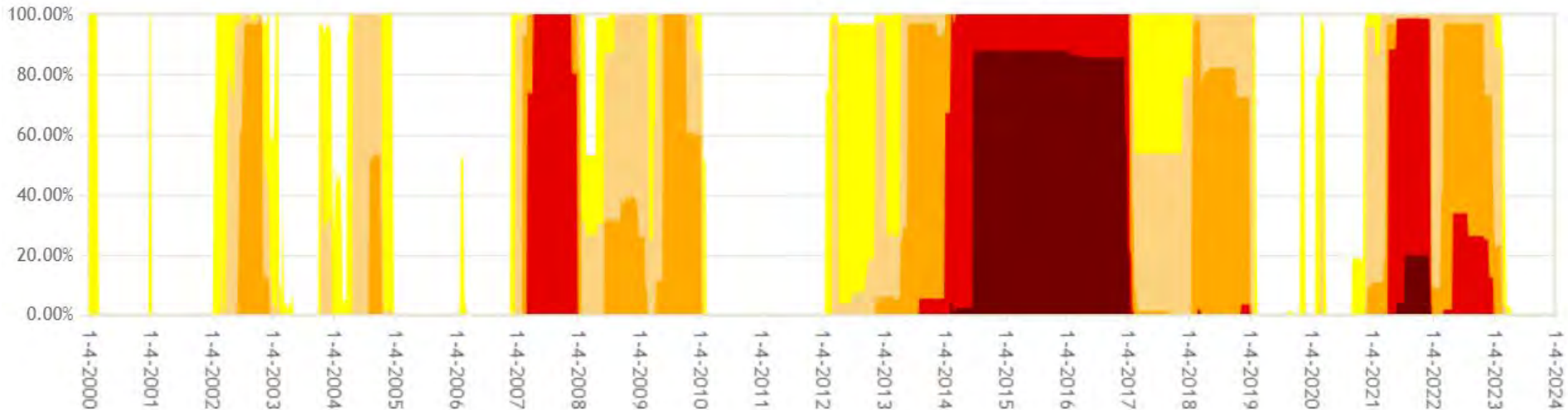
The number of extreme heat days per year is expected to increase in the combined service area. In this area, an extreme heat day occurs when the maximum temperature exceeds 97.4 °F. Historically, the area experiences three extreme heat days per year on average. By the end of the century, extreme heat days are expected to increase to between 16 and 34 days.¹⁷

Droughts

Climate change will increase the likelihood that low-precipitation years will coincide with above-average temperature years. Warming temperatures increase seasonal dryness and the likelihood of drought due to decreased supply of moisture and increased atmospheric demand for moisture as evaporation from bare soils and evapotranspiration from plants increases. Extremely dry years are projected to increase over Southern California, potentially doubling or more in frequency by the late-twenty-first century.¹⁸ The U.S. Drought Monitor

characterizes areas within LVMWD as Abnormally Dry (D0) and Moderate Drought (D1), as of May 2023. Drought intensity ranges from None to Exceptional Drought (D4).¹⁹ The drought status of Los Angeles County for the past 23 years is shown in Figure 3-6. The county experienced moderate to exceptional drought periods in 2002, 2004-2005, 2007-2010, 2011-2019, and 2021-2023. Drought exposure will have a more prominent impact on LVMWD and the JPA through the SWP, as described below, than on local water sources, as a majority of its water supply is imported.

Figure 3-6. A Recent History of Drought Conditions in Los Angeles County



Source: U.S. Drought Monitor Los Angeles County CA. 2023. https://droughtmonitor.unl.edu/CurrentMap/StateDroughtMonitor.aspx?fips_06037

17. California Energy Commission (CEC). 2023. Cal-Adapt. <https://cal-adapt.org/tools/local-climate-change-snapshot>. Accessed July 2023

18. Hall et al. 2018. Los Angeles Region Report: California's Fourth Climate Change Assessment.

https://www.energy.ca.gov/sites/default/files/2019-11/Reg%20Report-%20SUM-CCCA4-2018-007%20LosAngeles_ADA.pdf. Accessed July 2023

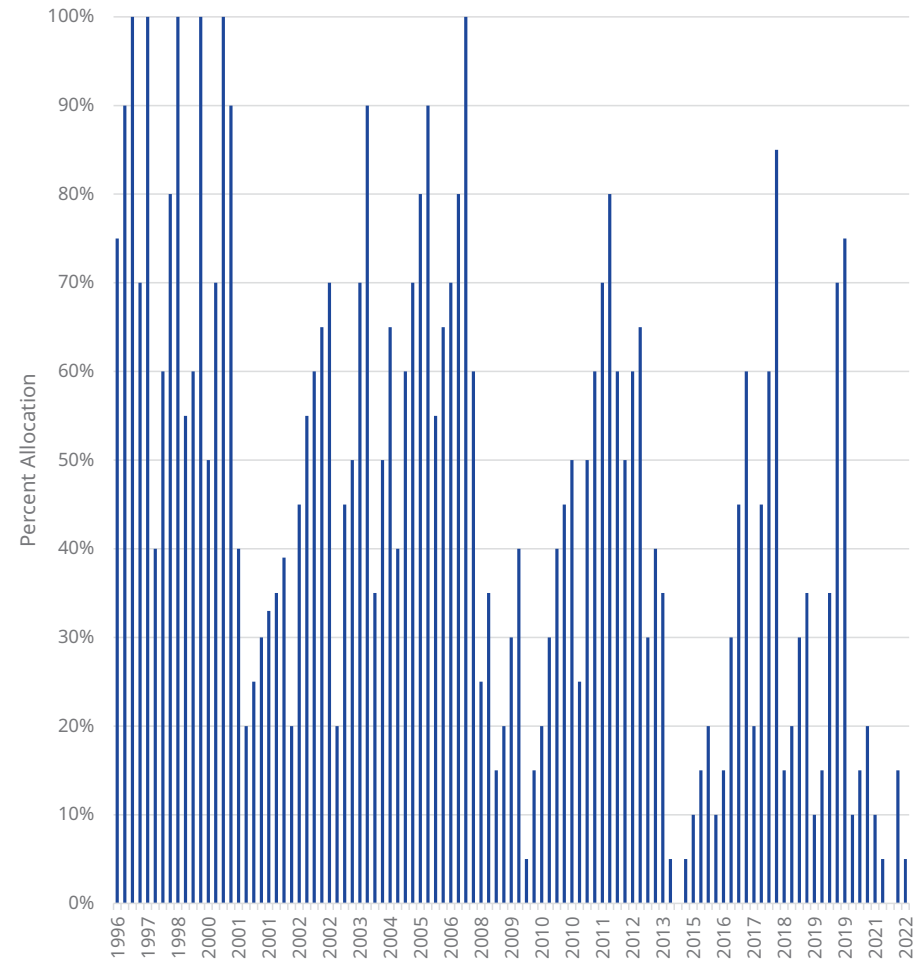
19. National Drought Mitigation Center at the University of Nebraska-Lincoln et al. 2023. U.S. Drought Monitor. <https://droughtmonitor.unl.edu/>. Accessed July 2023

State Water Project and California Department of Water Resources Climate Hazards

LVMWD primarily relies on potable water supplies provided by MWD. MWD receives water allocations from the SWP, a state water management project supervised by the California Department of Water Resources (DWR). As much as 10 percent of California's existing water supply could diminish by 2040 due to hotter and drier weather. Through the twenty-first century, there is expected to be increased evaporation, less snowfall, and increased consumption of water by soil, vegetation, and the atmosphere itself.²⁰ Over the past 40 years, there has been a clear downward trend in SWP (Table A) allocations (See Figure 3-7). In this context, imported water supply from the SWP is projected to be significantly impacted by climate change through the end of century. Several key reasons for SWP impacts include higher temperatures and shorter winters leading to reduction in Sierra Nevada and Colorado River Basin snowpack volume and increased evapotranspiration of watersheds from heightened temperatures. Smaller snowpack results in decreased flows in the Colorado River and greatly impacts SWP sourced water, which is designed to capture and store winter and spring runoff to prevent downstream flooding and deliver stored water during summer and fall months when it is needed. However, a diminished snowpack would result in larger volumes of runoff entering reservoirs during the winter and early spring and less runoff arriving in late spring and early summer, when it is needed. A reduced snowpack from increased temperatures also creates less retainable water and more surface water flowing to the ocean. This would lead to higher downstream flow during flood events and reduced late summer storage levels. Climate change is projected to bring about longer and more frequent periods of drought for the entire region. This prolonged drought occurrence may further impact LVMWD and the JPA as SWP allocations are likely to be reduced during such periods. These factors collectively pose significant challenges for water management and availability in the region.

California Department of Water Resources (DWR) analysis projects that there is a 22 percent probability that long-term average annual SWP deliveries will fall to approximately 50 percent of maximum allocations.²¹

Figure 3-7. State Water Project Table A Allocations



20. California Natural Resources Agency et al. 2022. California's Water Supply Strategy: Adapting to a Hotter, Drier Future. <https://resources.ca.gov/-/media/CNRA-Website/Files/Initiatives/Water-Resilience/CA-Water-Supply-Strategy.pdf>. Accessed July 2023

21. California Department of Water Resources (DWR). 2019. Climate Action Plan, Phase 3: Climate Change Vulnerability Assessment. <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/All-Programs/Climate-Change-Program/Climate-Action-Plan/Files/CAP-III-Vulnerability-Assessment.pdf>. Accessed July 2023

As DWR manages and oversees the SWP, LVMWD is reliant on its infrastructure and operations. DWR infrastructure are also exposed to various climate hazards that may have downstream impacts on LVMWD. With anticipated climate hazards, DWR faces an elevated exposure to increased short-term extreme hydrologic events. Several critical DWR facilities are particularly susceptible to flood hazards, potentially affecting SWP deliveries and overall operational continuity.

Furthermore, certain assets owned and managed by DWR are situated in wildfire hazard areas, making them vulnerable to damage or disruption. Additionally, all DWR locations are projected to experience more extreme heat days and higher average maximum temperatures due to climate change. Moreover, sea level rise is projected to increase the Sacramento-San Joaquin Delta's salinity, requiring extra Delta outflow to dilute the increasingly brackish Delta water to meet environmental standards. The extra Delta outflow comes at a cost of reducing Delta exports, meaning less water is available for distribution through the California Aqueduct to water suppliers and users located south of the Delta, including LVMWD. This scenario poses a challenge for water availability and management in the region, impacting various communities and water-related operations.²²



22. California Department of Water Resources. 2019. Climate Action Plan, Phase 3: Climate Change Vulnerability Assessment. <https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/All-Programs/Climate-Change-Program/Climate-Action-Plan/Files/CAP-III-Vulnerability-Assessment.pdf>. Accessed July 2023

CLIMATE CHANGE IMPACTS

Climate Change Impacts in the Combined Service Area

LVMWD and the JPA face significant risks associated with climate change impacts from the climate hazards described above. Their vulnerability increases when critical facilities, assets, and infrastructure are not designed, operated and/or maintained to function effectively under more extreme weather conditions or can be damaged by more extreme weather conditions. Critical facilities that are sensitive to climate hazards include pump stations, treatment facilities, LVMWD Headquarters, and other buildings and equipment associated with potable, recycled, and sanitary water systems.

LVMWD and JPA staff, with support from a consultant team, hosted a Climate Action and Adaptation Plan Strategy Workshop in March 2023 to assess climate risks to facilities, operations, and resources. As part of the workshop, a climate risk matrix was developed to assign a numerical risk score for each water sub-system based on each climate exposure. The matrix ranked each water sub-system from 1 to 9, with 1 indicating a system less impacted by a certain climate risk and 9 indicating a system most impacted by a certain climate risk. LVMWD's and JPA systems and sub-systems included in the matrix are seen below:

Potable Water

- MWD Imported Water
- Potable Distribution System
- Las Virgenes Reservoir
- Westlake Filtration Plant

Wastewater

- Sewer Collection System
- Tapia Wastewater Reclamation Plant
- Biosolids Composting (Rancho Las Virgenes Composting Facility)

Recycled/Pure Water

- Recycled Water Distribution
- Pure Water

Headquarters

- Central Operations and Administration



TWRF Aeration Basin

Wildfire

Table 3-1. Wildfire – Climate Risk Matrix Scoring

System	Sub-System	Climate Risk Score
Potable Water	MWD Imported Water	3
	Potable Water Distribution System	8
	Las Virgenes Reservoir	8
	Westlake Filtration Plant	9
Wastewater	Sewer Collection System	5
	Tapia Water Reclamation Plant	7
	Biosolids Composting	8
Recycled/ Pure Water	Recycled Water Distribution	6
	Pure Water	7
Headquarters	Operations, Administration & Finance	8

Staff ranked the potable water distribution system, Las Virgenes Reservoir, Westlake Filtration Plant, Rancho Las Virgenes Composting Facility, Tapia Water Reclamation Plant, Pure Water Las Virgenes-Triunfo, and District Headquarters at high risk to wildfire impacts, as seen in Table 3-1. All of these facilities are located in CAL FIRE Moderate, High, or Very High Fire Hazard Severity Zones and are susceptible to impacts from wildfire. During the Woolsey Fire, the Westlake Filtration Plant sustained damage to both the building itself and surrounding property. While the Plant still faces significant risk to future wildfire, the area around the building has been rehabilitated and now features a restored, water wise and more fire-resistant landscape.²³

Wildfire can create risk of injury or death, damage to properties, critical facilities, and infrastructure, and need for evacuation. It can also trigger cascading impacts of worsened air quality, power outages and other service disruptions. During a wildfire event, LVMWD’s water pipes, both underground and above-ground, may burn due to the heat from a wildfire. This may lead to contaminated drinking water which may threaten local public health and disrupt the District’s service continuity. Wildfire may threaten the safety of LVMWD and JPA employees and customers and impede access to assets in need of repair or maintenance. Water supply availability may be disturbed if LVMWD supplies water for fighting fires. Additionally, sedimentation rates may increase in the Las Virgenes Reservoir if there is a large and/or frequent fire in the area surrounding the reservoir. Recent research conducted by the United States Geological Survey, shows that an increase in magnitude and frequency of wildfires is expected to double the rates of sedimentation in one-third of the West’s large watersheds, reducing reservoir storage and affecting water supplies. Increased sedimentation can result in lost reservoir storage and decrease water quality. LVMWD may face additional challenges treating water from the reservoir if it is contaminated with ash, sediments, and contaminants created by active burning.²⁴

Utility providers may temporarily shut off power to the combined service areas when wildfire risk is particularly high; this is referred to as a Public Safety Power Shutoff (PSPS). If a PSPS event lasts several days and involves the entire grid serving the District’s water systems, service continuity may be disrupted, and staff may not be able to provide all its customers with water. Wildfire can also lead to smoke and associated air toxins which can lead to worsening air quality, creating or exacerbating respiratory issues for sensitive customers and employees and impact indoor areas without adequate air filtration systems.



23. LVMWD. 2020. Westlake Filtration Plant. <https://www.lvmwd.com/our-services/drinking-water/facilities-infrastructure/westlake-filtration-plan>. Accessed July 2023

24. Bland. 2017. The West’s Wildfires Are Taking a Toll on Reservoirs.

<https://static1.squarespace.com/static/55dc9bade4b05820bf02d414/t/5a149cfe53450a59dc531297/1511300351736/Watershed1%28NewsDeeply%29.pdf>. Accessed July 2023

Extreme Heat

Table 3-2. Extreme Heat – Climate Risk Matrix Scoring

System	Sub-System	Climate Risk Score
Potable Water	MWD Imported Water	7
	Potable Water Distribution System	4
	Las Virgenes Reservoir	7
	Westlake Filtration Plant	7
Wastewater	Sewer Collection System	3
	Tapia Water Reclamation Plant	4
	Biosolids Composting	5
Recycled/ Pure Water	Recycled Water Distribution	7
	Pure Water	5
Headquarters	Operations, Administration & Finance	4

Various infrastructure, equipment, and resources can be damaged, strained, or diminished during extreme heat events. Staff ranked MWD Imported Water, the Las Virgenes Reservoir, Westlake Filtration Plant, and Recycled Water Distribution at high risk to extreme heat, as seen in Table 3-2. As average maximum temperatures and extreme heat days, both in the combined service area and throughout California, are projected to increase through the century, evaporation of imported water and water in the Las Virgenes Reservoir is expected to increase. This may lead to or exacerbate future water scarcity issues.²⁵ Extreme heat and increased average maximum temperatures can lead to harmful algal blooms which can contaminate water supplies and require increased water treatment capacities.²⁶ Additionally, certain types of algal blooms produce dangerous toxins that can sicken people and wildlife. The overgrowth of algae consumes oxygen and blocks sunlight from underwater plants, potentially leading to the die off of aquatic life.²⁷

Additionally, the ambient operating temperature within which the equipment operates is a significant factor in the equipment’s lifespan. High ambient operating temperatures may lead to a reduction of the lifespan for motors and related equipment within LVMWD and JPA systems. LVMWD and the JPA may face increased costs associated with the additional cooling required for certain facilities and assets.²⁸ LVMWD has historically faced pump operating issues due to extreme heat impacts. During an extreme heat event, electricity utilities may turn off power in a PSPS in order to mitigate wildfire risk. If a PSPS event lasts several days and involves the entire grid serving LVMWD’s and the JPA’s systems, service continuity may be disrupted, and service disruptions may result to some or all customers. Future extreme heat events may pose significant health risk to LVMWD and JPA employees and customers who may suffer from heat stroke, heat exhaustion, or dehydration. Extreme heat may also lead to vegetation die-off, which can exacerbate wildfire risk in areas surrounding LVMWD and JPA facilities.



25. Friedrich et al. 2018. Reservoir Evaporation in the Western United States: Current Science, Challenges, and Future Needs.

<https://journals.ametsoc.org/view/journals/bams/99/1/bams-d-15-00224.1.xml>. Accessed July 2023

26. EPA. 2013. Impacts of Climate Change on the Occurrence of Harmful Algal Blooms. <https://www.epa.gov/sites/default/files/documents/climatehabs.pdf> Accessed July 2023

27. EPA. The Effects: Dead Zones and Harmful Algal Blooms. <https://www.epa.gov/nutrientpollution/effects-dead-zones-and-harmful-algal-blooms#:~:text=Dead%20zones%20are%20areas%20of,excess%20nutrients%20from%20upstream%20sources..> Accessed July 2023

28. Water Utility Climate Alliance and Association of Metropolitan Water Agencies. 2020. It’s Hot and Getting Hotter: Implications of Extreme Heat on Water Utility Staff and Infrastructure, and Ideas for Adapting. <https://www.amwa.net/system/files/linked-files/Heat%20Impacts%20copy.pdf> Accessed July 2023

Drought

Table 3-3. Drought – Climate Risk Matrix Scoring

System	Sub-System	Climate Risk Score
Potable Water	MWD Imported Water	9
	Potable Water Distribution System	3
	Las Virgenes Reservoir	9
	Westlake Filtration Plant	6
Wastewater	Sewer Collection System	4
	Tapia Water Reclamation Plant	8
	Biosolids Composting	6
Recycled/ Pure Water	Recycled Water Distribution	8
	Pure Water	9
Headquarters	Operations, Administration & Finance	9

LVMWD and JPA staff ranked MWD Imported Water, the Las Virgenes Reservoir, Pure Water, and District Headquarters at high risk to drought impacts, as seen in Table 3-3. Warming temperatures combined with more frequent dry years will exacerbate drought impacts. Drought can lead to vegetation stress and die-off, which may exacerbate wildfire risk in the combine service area. Extended drought conditions may lead to a loss of District revenue and increased water rates which may disproportionately impact under-resourced populations. Drought can also impact the reliability of local water resources. While LVWMD’s primary water supplies are imported from MWD, it also sources some groundwater supplies from the Russell Valley Basin, which is used to supplement recycled water system.²⁹ During periods of drought, local groundwater sources may run dry if there is not enough consistent reliable recharge from precipitation. Drought conditions may also have impacts to water stored in Las Virgenes Reservoir, which stores treated potable water from MWD. Specific drought impacts to imported water supplies is discussed below in the Climate Change Impacts to Imported Potable Water Supplies section.



29. LVMWD. 2020. Urban Water Management Plan. <https://www.lvmwd.com/home/showpublisheddocument/13459/637616788962730000> Accessed July 2023

Flood and Extreme Precipitation

Table 3-4. Flood and Extreme Precipitation – Climate Risk Matrix Scoring

System	Sub-System	Climate Risk Score
Potable Water	MWD Imported Water	5
	Potable Water Distribution System	5
	Las Virgenes Reservoir	3
	Westlake Filtration Plant	3
Wastewater	Sewer Collection System	7
	Tapia Water Reclamation Plant	5
	Biosolids Composting	3
Recycled/ Pure Water	Recycled Water Distribution	3
	Pure Water	2
Headquarters	Operations, Administration & Finance	5

LVMWD and JPA staff ranked the sewer collection system at high risk to flooding and extreme precipitation impacts, as seen in Table 3-4. During extreme precipitation events, power conveyance and distribution infrastructure can be damaged by wind and heavy rain which may cause service disruptions. Electrical equipment, operational, and administrative assets can be vulnerable if exposed to water damage. During heavy precipitation events, localized flooding may occur if storm-drain infrastructure or Malibu Creek in the combined service area becomes overwhelmed. Localized flooding may damage or inundate properties, structures, infrastructure, and other assets. It may also close streets and inhibit mobility of certain locations. Heavy rainfall may increase pollutant runoff and sedimentation into Las Virgenes Reservoir and other potable water sources. Contaminated runoff and sedimentation may require extra treatment capacities which may increase costs to LVMWD and the JPA.³⁰ Severe flooding may cause erosion issues near sewer lines and may lead to increased risks of flooding impacts to the sewer collection system. As of 2014, only two of the four pumps in the sewer collection system are equipped with variable pumping capacity (variable frequency drives) and have limited abilities for handling peak storm flows. Flooding and increased precipitation may lead to greater flows into Malibu Creek which may increase turbidity, contamination, and erosion. Extreme precipitation events may also oversaturate spray fields, overwhelming them and potentially impacting operations of water disposal.³¹



Photo credit: USFWS Pacific Southwest Region

30. EPA. 2023. *Climate Adaptation and Source Water Impacts*. <https://www.epa.gov/arc-x/climate-adaptation-and-source-water-impacts>

31. LVMWD and Triunfo Sanitation District. 2014. *Sanitation Master Plan*. <https://www.lvmwd.com/home/showpublisheddocument/4321/635392121338370000> Accessed July 2023

Landslide

Table 3-5. Landslide – Climate Risk Matrix Scoring

System	Sub-System	Climate Risk Score
Potable Water	MWD Imported Water	2
	Potable Water Distribution System	6
	Las Virgenes Reservoir	4
	Westlake Filtration Plant	3
Wastewater	Sewer Collection System	6
	Tapia Water Reclamation Plant	2
	Biosolids Composting	2
Recycled/ Pure Water	Recycled Water Distribution	2
	Pure Water	6
Headquarters	Operations, Administration & Finance	3

LVMWD and JPA staff ranked the potable water distribution system, sewer collection system, and Pure Water at risk to landslides, as seen in Table 3-5. Landslides may damage critical facilities, structures, and infrastructure. This can cause service disruptions, impact community members, and isolate certain areas if roadways are compromised. Landslides can directly damage buildings and facilities by disrupting structural foundations either by deforming the ground on which an asset is located or by physically impacting an asset.³² Facilities and infrastructure in and adjacent to the Woolsey Fire footprint are particularly susceptible to debris flows. Debris flows and landslides can negatively impact the sewage conveyance system and Tapia Wastewater Reclamation Facility by sending more sediment and debris into the system than the plant can take out. Landslides may also increase sedimentation in potable water sources and the Virgenes Reservoir, which may lead to lost reservoir storage and water quality impacts.



32. USGS. 2008. *The Landslide Handbook – A Guide to Understanding Landslides*. https://pubs.usgs.gov/circ/1325/pdf/C1325_508.pdf. Accessed July 2023

Climate Change Impacts to Imported Potable Water Supply

Long-term persistent hydrologic changes in California, including increases in the frequency, duration, and severity of dry periods and earlier Sierra Nevada snowmelt-based runoff, may significantly impact the operations of the SWP. Hydrologic changes can affect water quantity and quality, and therefore the ecosystems supported by the Sierra Nevada watersheds SWP relies on. Recent DWR analysis predicts that SWP delivery performance is at risk of climate change and will most likely fall short in the future. As outlined above in the SWP Climate Hazards section, there is a 22 percent probability that long-term average annual SWP deliveries will fall to approximately 50 percent maximum allocations. As imported water from the SWP is LVMWD's primary water source and supplies virtually all potable water demands, decreases in future allocations may lead to water shortages and loss of revenue to LVMWD. LVMWD and the JPA are moving

forward with the construction and implementation of the Pure Water Project Las Virgenes-Triunfo, which will take recycled water from the Tapia Water Reclamation Facility and treat it to provide up to 30 percent of LVMWD's future potable water needs, locally. As future imported water supply becomes more volatile and unpredictable, the Pure Water Project will mitigate imported water reliability concerns by providing a long-term local potable water supply.³³ Wildfire, flooding, and landslides in the Sierra Nevada's or in other areas adjacent to SWP infrastructure and supplies, may lead to water quality impacts (i.e. from ash, contaminants, or sediments), which may have downstream impacts to imported water supplies. Severe flooding, extreme storms, and wildfire events may physically damage infrastructure, potentially disrupting SWP services statewide, including those to LVMWD.³⁴ Pictured below is the 5 million gallon tank at Las Virgenes Reservoir.



33. LVMWD. 2022. Pure Water Project Achieves Major Milestone. <https://www.lvmwd.com/Home/Components/News/News/5988/22>. Accessed July 2023

34. California Department of Water Resources (DWR). 2019. Climate Action Plan, Phase 3: Climate Change Vulnerability Assessment.

<https://water.ca.gov/-/media/DWR-Website/Web-Pages/Programs/All-Programs/Climate-Change-Program/Climate-Action-Plan/Files/CAP-III-Vulnerability-Assessment.pdf>. Accessed July 2023

4.

GHG EMISSIONS INVENTORY AND FORECAST

LVMWD AND JPA OPERATIONAL BOUNDARY AND GHG EMISSIONS SOURCES

As part of the LVMWD and JPA CAAP development process, a multi-year inventory of operational GHG emissions was prepared for 2000, 2012 and 2021. The inventory provides a measurement of GHG emissions associated with the operation and maintenance of LVMWD and JPA infrastructure, including buildings, facilities, fleet, equipment, as well as emissions from wastewater, waste streams, and employee commutes.³⁵

Conducting a GHG inventory is an important component of the CAAP development process, as it allows LVMWD, the JPA, and their stakeholders to understand which activities contribute substantially to their GHG emissions footprint. The inventory also provides the groundwork for forecasting future GHG emissions and developing GHG emissions reduction targets.

35. LVMWD acts as Administering Agent for the JPA, a long-term partnership between LVMWD and the Triunfo Water and Sanitation District (TWSD). The JPA co-owns, and LVMWD operates and maintains, several shared wastewater facilities, including the Tapia Wastewater Reclamation Facility, a backbone reclamation water main, the Rancho Las Virgenes Composting Facility, spray fields for seasonal disposal of excess recycled water, and a 5-megawatt solar farm. GHG emissions associated with the operation and maintenance of TWSD's infrastructure are not measured as part of this inventory.



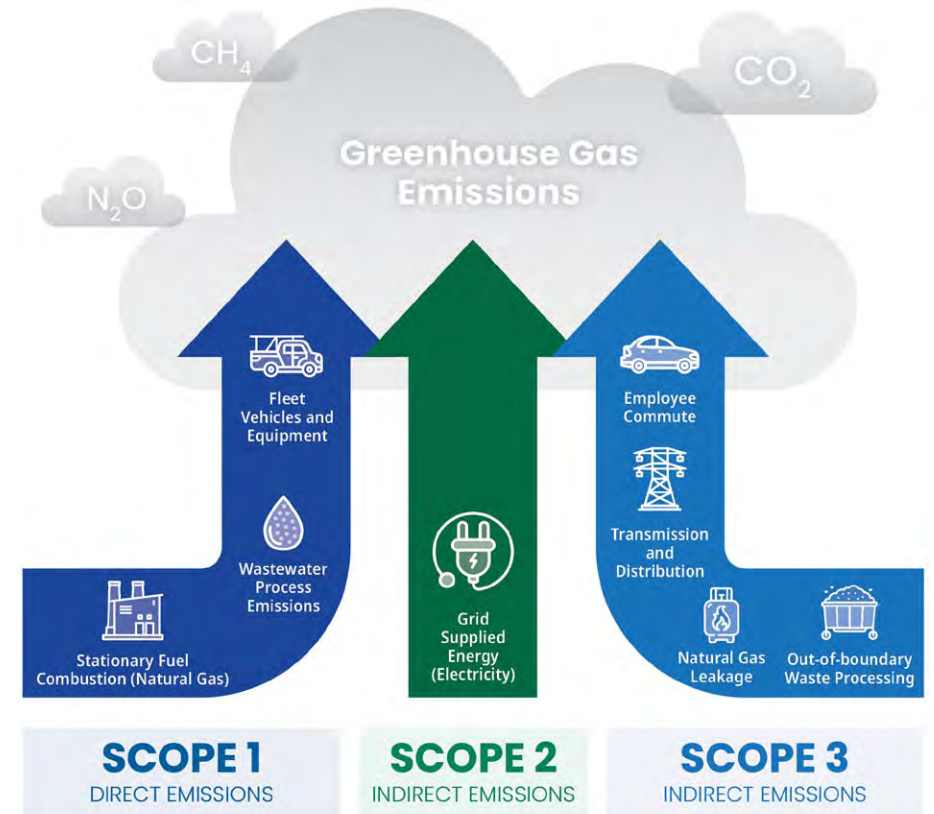
The LVMWD and JPA GHG emissions inventory is consistent with standard reporting protocols from the World Resources Institute (WRI), World Business Council for Sustainable Development (WBCSD), and the International Council for Local Environmental Initiatives (ICLEI).^{36,37} The WBCSD and WRI's Corporate Standard GHG Protocol requires that an inventory quantify emissions from all GHG-generating activities that fall under some level of the entity's operational control.³⁸ GHG-generating activities are categorized into three "scopes" which separate GHG emissions under an organization's operational control into direct and indirect GHG emissions.

- **Scope 1** consists of all direct GHG emissions that occur from sources that are controlled by the organization. For LVMWD and the JPA, these sources include natural gas consumption, vehicle fleet and equipment usage, and wastewater processing.
- **Scope 2** consists of indirect GHG emissions associated with the consumption of purchased or acquired electricity, steam, heat, or cooling. For LVMWD and the JPA, these emissions sources include the consumption of purchased of electricity.
- **Scope 3** consists of all other indirect GHG emissions not covered under Scope 2, such as emissions resulting from the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, outsourced activities, and waste disposal. For LVMWD and the JPA, these emissions sources include natural gas leakage,³⁹ transmission and distribution losses,⁴⁰ employee commute, and solid waste disposal.⁴¹

GHG-generating activities that were included in the inventory are categorized by scope as shown in Figure 4-1. These activities include natural gas combustion, wastewater process emissions, vehicle fleet and equipment usage, electricity usage, out-of-boundary waste processing, electricity transmission and

distribution, natural gas leakage, and employee commute. Activities include both LVMWD-only and JPA facilities and operations.

Figure 4-1. LVMWD and JPA GHG Emissions by Scope



36. WRI and WBCSD. *The Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (GHG Protocol)*. Revised Edition. Accessed at <https://ghgprotocol.org/corporate-standard>.

37. ICLEI - Local Governments for Sustainability. *Local Government Operations Protocol (May 2010)*. Version 1.1. Accessed at https://s3.amazonaws.com/icleiusaresources/lgo_protocol_v1_1_2010-05-03.pdf.

38. An organization has operational control over an operation when they have the full authority to introduce and implement its operating policies at the operation. Operational control can be established by wholly owning an operation or having full authority to introduce and implement GHG or non-GHG related policies.

39. Natural gas consumption is associated with some amount of leakage as a result of moving natural gas from the location where it was generated to the facility where it is used. These are GHG emissions that occur upstream and outside of LVMWD's operational control.

40. Electricity usage is associated with some amount of transmission and distribution losses as a result of moving electricity from the location where it was generated to the facility where it is used. These are GHG emissions that occur upstream and outside of LVMWD's operational control.

41. GHG emissions associated with solid waste disposal include those GHG emissions associated with, fuel combustion for landfill equipment, and waste decomposition emissions once landfilled.

Conducting the multi-year inventory for LVMWD and JPA operations consisted of collecting summary data on each GHG-generating activity shown in Figure 4-1 for each year (2000, 2012, 2021), then converting the activity data to GHG emissions using GHG emissions factors such as those from the U.S. Environmental Protection Agency (EPA), ICLEI, and local utilities (e.g., Southern California Edison). Water districts can produce fluctuating GHG emissions year to year depending on the source of water delivered and the extent of water deliveries and wastewater treatment services provided, as well as environmental conditions. To address this variability, LVMWD and the JPA elected to conduct a multi-year inventory over two decades, rather than a single-year inventory. This multi-year inventory captures some of variability and provides an understanding of LVMWD and the JPA GHG emissions over a broader time period. Developing historic and current GHG inventories also allows LVMWD and the JPA to memorialize all the projects it has completed over the last 10 years that have reduced GHG emissions but have not been individually tracked. The following sections detail the progress LVMWD and the JPA have made on reducing GHG emissions through projects including energy efficiency improvements and solar panel installations.

The 2000 GHG inventory reflects conditions before recent GHG-reduction projects were implemented and serves as a baseline. The 2012 GHG inventory reflects conditions during the implementation of GHG-reduction projects. The 2021 GHG inventory is based on the most recent year in which data is completely available and reflects conditions after recent GHG-reduction projects have been completed.



HISTORIC AND CURRENT GHG EMISSIONS

In 2000, major sources of emissions associated with LVMWD and the JPA were electricity usage (79 percent of total emissions) and natural gas usage (7 percent of total emissions). All other sources were less than 5 percent of total emissions. In 2000, 22,804 AF of potable water and 4,904 AF of recycled water were delivered. The results of the 2000 GHG emissions inventory for LVMWD and the JPA are shown in Table 4-1.

In 2012, major sources of emissions associated with LVMWD and the JPA were electricity usage (82 percent of total emissions) and natural gas usage (5 percent of total emissions). All other sources were 5 percent or less of total emissions. These results show GHG emissions remained relatively constant between 2000 and 2012. While most emissions sources did not experience significant changes, GHG emissions from natural gas and natural gas leakage decreased by about 38 percent. This was primarily due to decreased natural gas usage, as staff had previously been procuring additional natural gas for an on-site fuel cell that was discontinued in the early 2000s. In 2012, 21,519 AF of potable water and 5,136 AF of recycled water were delivered. The results of the 2012 GHG emissions inventory for LVMWD and the JPA are shown in Table 4-2.

Table 4-1. LVMWD and JPA 2000 GHG Emissions Inventory

GHG-Generating Activity	Scope	2000	Average % Contribution to Total
Vehicle Fleet & Equipment	Scope 1	330	2%
Natural Gas	Scope 1	1,088	7%
Wastewater	Scope 1	253	2%
Electricity	Scope 2	11,643	79%
Electricity T&D Losses	Scope 3	563	4%
Natural Gas Leakage	Scope 3	305	2%
Employee Commute	Scope 3	322	2%
Waste	Scope 3	143	1%
Total in Metric Tons CO₂e		14,647	100%

Table 4-2. LVMWD and JPA 2012 GHG Emissions Inventory

GHG-Generating Activity	Scope	2012	Average % Contribution to Total
Vehicle Fleet & Equipment	Scope 1	323	2%
Natural Gas	Scope 1	679	5%
Wastewater	Scope 2	221	2%
Electricity	Scope 3	12,028	82%
Electricity T&D Losses	Scope 3	693	5%
Natural Gas Leakage	Scope 3	190	1%
Employee Commute	Scope 3	444	3%
Waste	Scope 3	143	1%
Total in Metric Tons CO₂e		14,721	100%

In 2021, major sources of emissions associated with LVMWD and the JPA were electricity usage (78 percent of total emissions) and employee commute (5 percent of total emissions). All other sources were less than 5 percent of total emissions. These results show a trend of decreasing GHG emissions since 2012, primarily due to decreasing GHG emissions from electricity. Emissions reductions from electricity were driven by an increase in carbon free electricity procured by LVMWD and the JPA's electricity provider in response to California's Renewable Portfolio Standard (RPS), which has reduced emissions in the electricity sector since 2012.⁴² LVMWD and the JPA have brought online two solar fields since 2012, one megawatt in February 2014 and a 4-megawatt expansion in January 2021. These solar fields generated over 9,000 megawatt hours of solar in 2021, offsetting the electricity use of the Tapia Water Reclamation Facility. LVMWD and the JPA have also made energy efficiency improvements from 2012 to 2021, that have contributed to the decrease in electricity emissions. Improvements included the conversion of lights at several facilities including Headquarters to LEDs and upgrading aging air blowers and an air diffusion system at the Tapia Water Reclamation Facility. The 2021 GHG emissions inventory also showed nearly a 60 percent decrease in natural gas emissions compared to 2012. In 2021, 20,546 AF of potable water and 5,300 AF of recycled water were delivered. Water supply and service population were not significantly variable between 2000 and 2021. LVMWD and JPA service population grew by 11 percent and total water deliveries decreased by 7 percent. LVMWD's operational personnel nearly tripled from 2000 to 2021 to accommodate growing services and operations. The results of the 2021 GHG emissions inventory for LVMWD and the JPA are shown in Table 4-3.

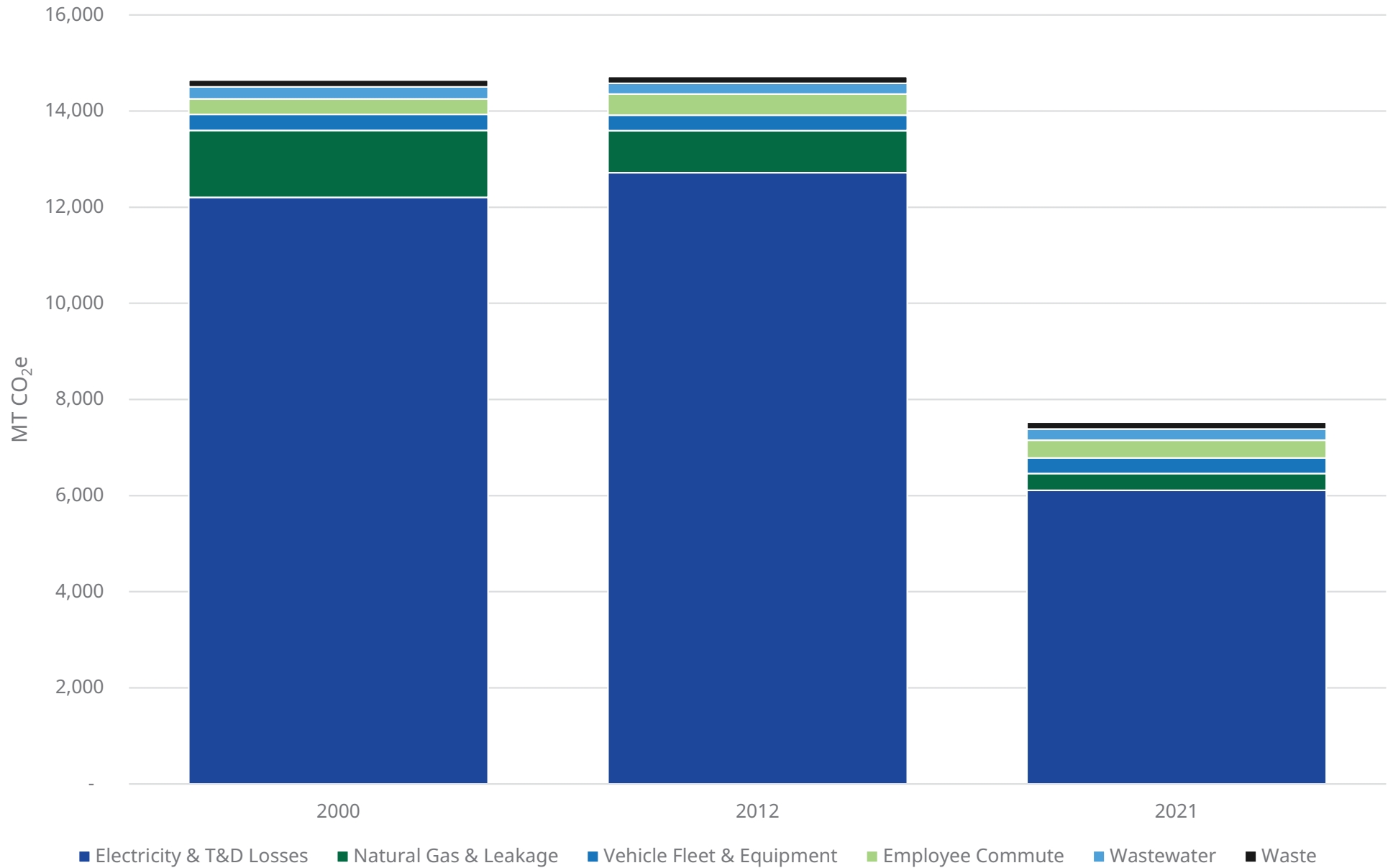
Table 4-3. LVMWD and JPA 2021 GHG Emissions Inventory

GHG-Generating Activity	Scope	2021	Average % Contribution to Total
Vehicle Fleet & Equipment	Scope 1	323	4%
Natural Gas	Scope 1	273	4%
Wastewater	Scope 2	232	3%
Electricity	Scope 3	5,853	78%
Electricity T&D Losses	Scope 3	258	3%
Natural Gas Leakage	Scope 1	76	1%
Employee Commute	Scope 3	371	5%
Waste	Scope 3	143	2%
Total in Metric Tons CO₂e		7,528	100%

GHG emissions have decreased by nearly 49 percent from 2012 to 2021, primarily due to significant decreases in natural gas and electricity consumption due mainly to utilizing carbon-free electricity from development of the 5 MW solar project. GHG emissions from 2000, 2012, and 2021 inventories are shown by sector in Figure 4-2.

42. California's RPS requires all retail electricity providers in California to procure 50 percent of their electricity supply from carbon-free resources by 2026, 60 percent by 2030, 90 percent by 2035, 95 percent by 2040 and 100 percent by 2045. This will effectively reduce the GHG emissions intensity of electricity across the state, including the electricity LVMWD purchases from Southern California Edison.

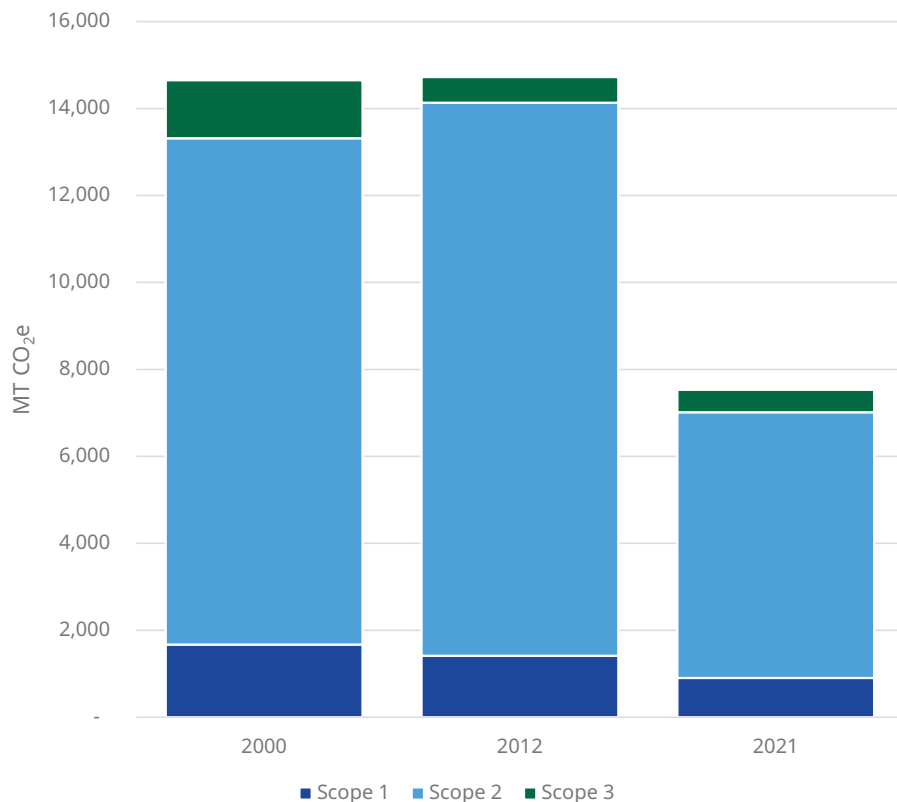
Figure 4-2. LVMWD and JPA GHG Emissions Inventory by Sector



GHG Emissions by Scope

In 2021, the majority of GHG emissions occur under Scope 2 (78 percent of total emissions), followed by Scope 1 (11 percent of total emissions) and Scope 3 (11 percent of total emissions). As such, the largest portion of GHG emissions generated by LVMWD and the JPA (i.e., Scope 1 and Scope 2 emissions) are under their operational control. The largest source of emissions – Scope 2 emissions associated with electricity usage – will continue to decrease over time as electricity sources become carbon free due to the California’s RPS.4 GHG emissions by scope (1- direct emissions, 2- indirect emissions, and 3- indirect emissions) are shown in Figure 4-3 for 2000, 2012, and 2021.

Figure 4-3. LVMWD and JPA GHG Emissions Inventory by Scope



Scope 1 – Direct Emissions

Scope 1 GHG emissions associated with LVMWD and the JPA include emissions from vehicle fleet, combustion of natural gas in their facilities, and from the treatment of wastewater. Natural gas usage is the largest contributor to Scope 1 in 2000, 2012, and 2021.

Scope 1 emissions remained relatively steady between 2000 and 2012. However, Scope 1 emissions decreased between 2012 and 2021 due to decreased natural gas usage, as noted above. Vehicle fleet and equipment emissions and wastewater emissions remained relatively similar between 2000, 2012, and 2021, as operations did not change significantly over these time periods.

Scope 2 – Indirect Emissions

Scope 2 GHG emissions are 100 percent attributable to electricity purchased from Southern California Edison (SCE) and used by LVMWD and the JPA for their buildings and facilities. LVMWD and the JPA use electricity primarily for water pumping and wastewater treatment. In 2021, the Tapia Water Reclamation Facility’s electricity consumption accounted for 44 percent of all electricity used at LVMWD and JPA facilities, although this was offset by renewable energy generated by the on-site solar power facility and other improvements such as replacement of Tapia Water Reclamation Facility’s aging and inefficient air blowers and diffusion system. Scope 2 emissions have decreased between 2000 and 2021 due to the increased requirements for carbon free electricity procurement on SCE from California’s RPS and energy efficiency improvements made by LVMWD and the JPA.

Scope 3 – Indirect Emissions

Scope 3 GHG emissions include employee commuting, electricity transmission and distribution, natural gas leakage, and waste disposal. Electricity transmissions and distribution and natural gas leakage decreased from 2000 to 2021, as reducing electricity and natural gas consumption lead to proportionate decreases in leakage of natural gas and electricity transmission and distribution losses. Employee commute emissions and waste emissions remained relatively similar between 2000, 2012, and 2021, as operations and staffing did not change significantly over these time periods. However, a per capita decrease in employee commute emissions was experienced in 2021, as less staff worked in person due to the COVID-19 pandemic.

HISTORICAL GHG EMISSIONS

The GHG emissions inventory helps LVMWD, the JPA, and other interested parties understand the relative magnitude of GHG emissions arising from each GHG-generating activity associated with current operations. This inventory also aided in the development of GHG emissions targets consistent with State goals. As described in Chapter 1 the State goals included in SB 32 and AB 1279, are based on reductions from the 1990 level of emissions. Because LVMWD and the JPA do not have a GHG emissions inventory for 1990, 1990 emission levels associated with their operations were estimated by back casting from the 2012 inventory. The methods used to develop a back-cast to their 1990 emissions level is described in the following section. LVMWD and JPA adopted emissions targets are based on 1990 levels and are discussed in more detail in Chapter 5.

Back-Cast to 1990

To aid in determining LVMWD’s 2030 GHG emissions target, a back-cast of GHG emissions to 1990 was developed based on the 2012 inventory results. The 2012 GHG emission inventory was selected for the back-cast because the 2012 operations are like present day operations, and this is prior to the current GHG emissions reduction projects that came online. The 2012 GHG inventory also has the latest and most complete dataset. The 1990 back-cast assumes that LVMWD’s emissions have followed approximately the same trajectory as the state’s emissions such that for a given year, emissions for LVMWD and the state have increased or decreased approximately the same percentage relative to 1990. For example, the State experienced a four percent decrease in GHG emissions between 1990 and 2012; therefore, LVMWD’s 1990 emissions were assumed to be about four percent higher than the 2012 emissions levels quantified in the 2012 GHG emissions inventory. Table 4-4 shows this calculation in more detail.

Table 4-4. LVMWD’s 1990 GHG Emissions Back-Cast

Emissions	Total
State of CA 1990 Emissions (MMT CO ₂ e)	303
State of CA 2012 Emissions (MMT CO ₂ e)	291
1990 Change Factor (%)	(4.03%)
2012 Emissions (MT CO ₂ e)	14,721
1990 LVMWD Emissions (MT CO ₂ e)	15,314

Notes: State-level GHG emissions values used for the 1990 back-cast were sourced from CARB,⁴³ and exclude emissions from the industrial, agricultural, and high-GWP emissions sectors, for better comparison to LVMWD’s 2012 emissions inventory, which also excludes these sectors. Parathesis indicate a negative number.



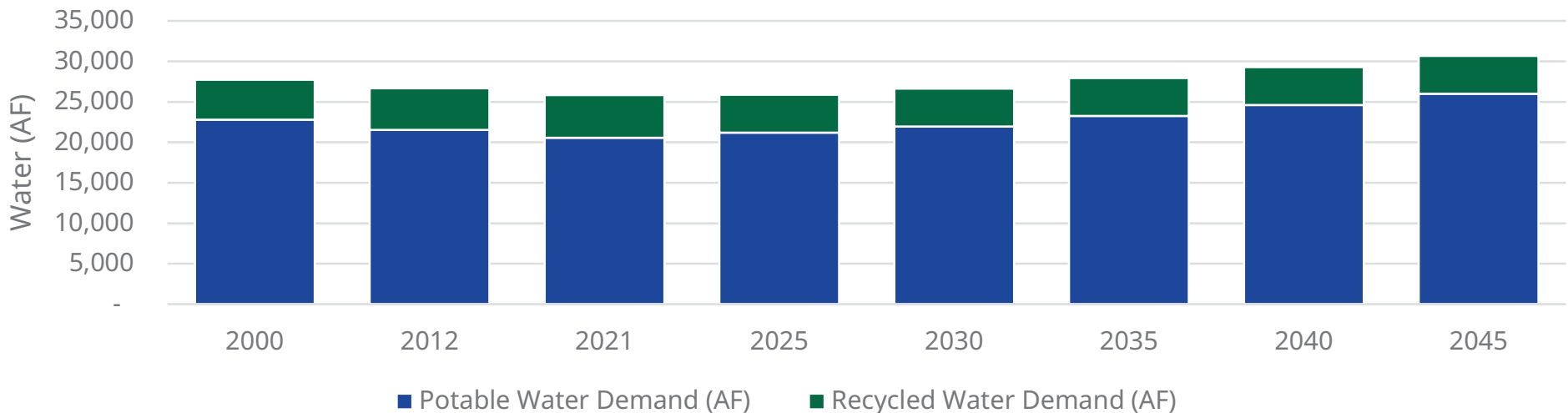
43. California Air Resources Board (2022). California Greenhouse Gas Emission Inventory - 2022 <https://ww3.arb.ca.gov/cc/inventory/data/data.htm>. Accessed July 2023

LVMWD AND JPA GHG EMISSIONS FORECAST

Using the 2021 inventory, future operational GHG emissions were forecasted for LVMWD and the JPA. The forecast provides an estimate for how GHG emissions will look in the future, based primarily on projected services over time. These projections were derived from LVMWD's UWMP. Electricity usage by LVMWD and the JPA is expected to increase in future years consistent with increased recycled water operations via the Pure Water Project, which is expected to come online in 2030. Projections used to forecast GHG emissions are based on the UWMP's 5-consecutive-year drought scenario which provides a conservative estimate of future water deliveries as a reflection of the driest 5-year historical sequence. This scenario is considered conservative as it included the largest water demand through 2045, compared to the other scenarios in the UWMP. Pure Water operations emissions are forecasted based on the CEQA documentation outlining expected future GHG emissions associated with amortized construction emissions, emergency engines, electricity use, fleet vehicles, and employee commute.⁴⁴ This forecast allows LVMWD and the JPA to estimate how GHG emissions

will change based on expected water demand, and how much LVMWD and the JPA will need to reduce emissions in order to meet GHG reduction targets for 2030 and 2045. Historical and projected water demand⁴⁵ is shown in Figure 4-4. Potable water demand is expected to increase by up to 27 percent between 2021 and 2045, in accordance with the 2020 UWMP projected population growth in the combined service area. The actual increase in potable water demand may be less due to more recent efforts to reduce water demands in the wake of the 2020-2022 drought along with implementing new conservation regulations. With conservation efforts, recycled water demand is expected to decrease by approximately 12 percent between 2021 and 2045, as recycled water used for landscape irrigation and golf course irrigation is projected to decrease through 2045. Recycled water consumption may be reduced by as much as 20 percent if conservation efforts are prioritized. Limited opportunities for developing substantial new recycled water demands and LVMWD encouraging conservation are expected to influence future decreases in recycled water demand.⁴⁶

Figure 4-4. Historical and Projected Water Demand



44. LVMWD. Appendix A Emissions Calculations. <https://www.lvmwd.com/home/showdocument?id=14540>

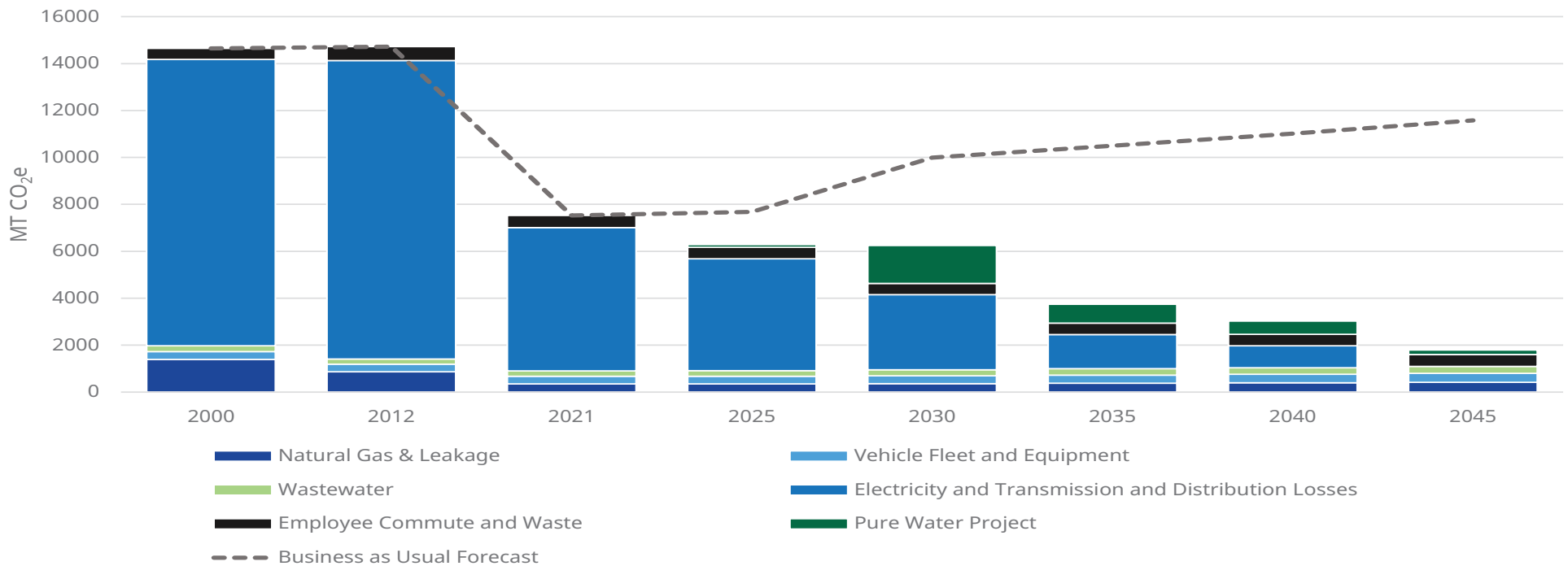
45. Projected water deliveries were used as a proxy for all LVMWD's future services, with the assumption that LVMWD operations scale approximately with water delivery to customers. Accessed July 2023

46. LVMWD. 2020 Urban Water Management Plan. <https://www.lvmwd.com/home/showpublisheddocument/13459/637616788962730000>. Accessed July 2023

To clearly demonstrate how LVMWD and JPA emissions will look in the future, two forecasts were developed – a business-as-usual (BAU) forecast, and an adjusted forecast. The BAU forecast shows what LVMWD’s emissions would look like based on water delivery projections alone. The adjusted forecast adjusts the BAU forecast to account for State-level implementation of policies and programs that will help California reduce its emissions through 2045. The adjusted forecast includes the California RPS,⁴⁷ which will significantly reduce LVMWD and JPA GHG emissions from electricity through 2045 due to the requirements on utility providers to be entirely renewable and carbon-free by 2045. Based on review of other State legislation intended to reduce GHG emissions, such as Title 24 and the Advanced Clean Cars program, they were found to have limited impact on LVMWD and JPA operations and therefore were not included in the adjusted forecast.

Incorporating State-level policies and programs in the adjusted forecast creates a more realistic picture of what LVMWD and JPA emissions will look like in the future. The BAU forecast is useful for comparison with the adjusted forecast, to show the extent to which State-level policies and programs will help to reduce GHG emissions at LVMWD (Figure 4-5). Under the BAU forecast, overall emissions are projected to increase steadily through 2045, as service population and water services continue to grow, and as the Pure Water Project comes online in 2030. However, in the adjusted forecast, electricity emissions will significantly decrease through 2045, decreasing total emissions over time. The numerical results of the forecast are included in Table 4-5.

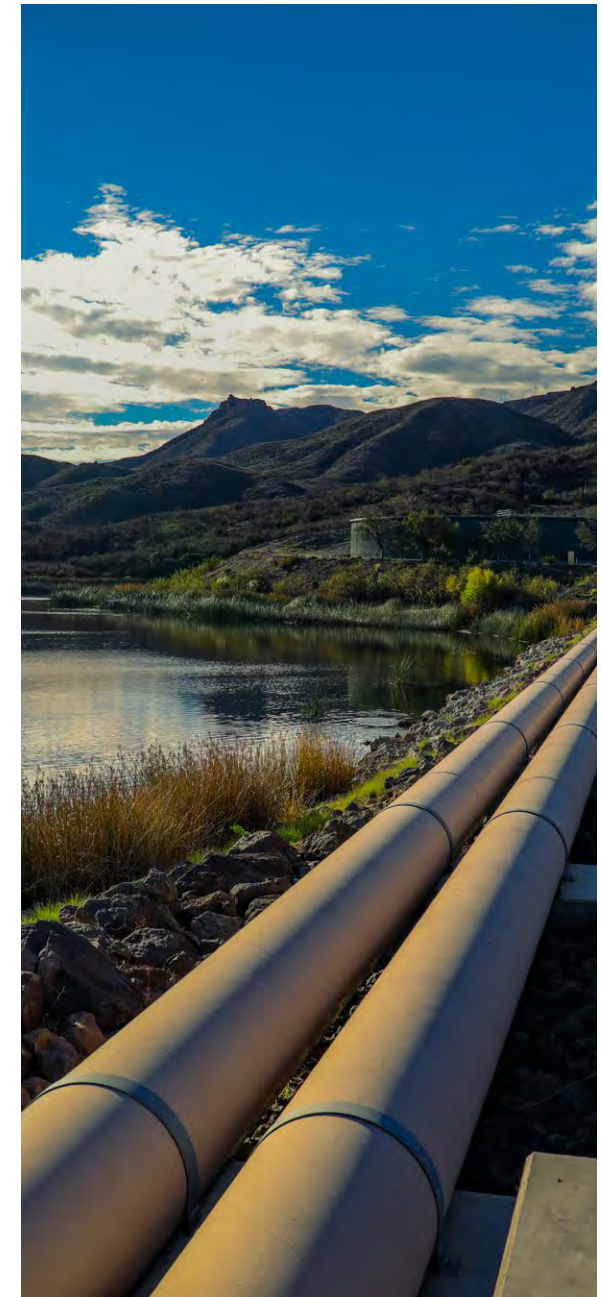
Figure 4-5. LVMWD and JPA GHG Emissions Forecast



47. Adopted in September 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State’s RPS Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

Table 4-5. LVMWD and JPA GHG Emissions Forecast

Emissions Source	2025	2030	2035	2040	2045
Forecast Summary (MT CO₂e)					
BAU Forecast	7,681	9,996	10,499	11,018	11,579
Adjusted Forecast	6,287	6,249	3,740	3,028	2,260
Legislative Reductions	1,395	3,747	6,758	7,989	9,319
Adjusted Forecast Detail (MT CO₂e)					
Vehicle Fleet & Equipment	323	332	348	365	383
Natural Gas	273	281	295	309	324
Natural Gas Leakage	76	79	82	86	91
Wastewater	242	256	271	281	298
Electricity	4,564	3,069	1,400	898	0
T&D Losses	201	135	62	40	0
Employee Commute	347	330	324	324	336
Waste	143	147	154	162	170
Pure Water	117	1,619	805	563	197



5.

CLIMATE ACTION TARGETS

INTERNATIONAL CONTEXT

Climate change is a global phenomenon and a major driver for GHG reduction activities which have continued to evolve on the international level. The United Nations Framework Convention on Climate Change (UNFCCC) is an international environmental treaty, signed by 154 states at the United Nations Earth Summit in June 1992. The Framework established responsibilities for participating countries to reduce their anthropogenic emissions and return to 1990 emissions levels. The treaty was superseded in 2016 by the Paris Agreement, which established a goal to keep the rise in global average temperatures below 2 °C with efforts to limit increases to 1.5 °C by reducing global GHG emissions to carbon neutrality by mid-century.⁴⁸ The Paris Agreement has been ratified by 191 members of the UNFCCC.⁴⁹

To assist in achieving these ambitious goals, the United Nations developed Sustainable Development Goals (SDG) intended to be achieved by the year 2030. The SDGs are a collection of 17 interlinked global goals designed to guide sustainable development. These international frameworks have become the drivers for many of California's own climate related legislation.

48. IPCC. *Special Report*. <https://www.ipcc.ch/sr15/>. Accessed July 2023

49. UN Climate Change. *Paris Agreement*. <https://unfccc.int/process/the-paris-agreement/status-of-ratification>. Accessed July 2023



CLIMATE ACTION AT THE STATE LEVEL

California has become a global leader in climate change action, having established extensive legislation, policies, and programs to reduce GHG emissions within the state over the last decade. The primary drivers of climate action at the state level are Assembly Bill (AB) 32, Senate Bill (SB) 32, and AB 1279. These regulations chart a path towards a carbon neutral California by 2045, as explained below.

Assembly Bill 32 – Codified the statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires the California Air Resources Board (CARB) to prepare a Scoping Plan that outlines the main strategies the State will employ to meet the 2020 target. The AB 32 Scoping Plan was adopted in 2014.

Senate Bill 32 – The successor to AB 32 and requires the State of California to achieve a statewide reduction in GHG emissions of 40 percent below 1990 levels by 2030. The SB 32 Scoping Plan was adopted in 2017.

Assembly Bill – AB 1279, adopted in 2022, codifies the statewide carbon neutrality goal into a legally binding requirement for California to achieve carbon neutrality no later than 2045 and ensure 85 percent GHG emissions reduction under that goal. AB 1279 builds upon Executive Order B-55-18 which originally established California's 2045 goal of carbon neutrality.

Programs and policies that support the goals established in the above bills and which will impact GHG emissions for LVMWD and the JPA include the California Renewable Portfolio Standard (RPS), which, through SB 1020 and SB 100, requires electricity providers to procure 100 percent of electricity from renewable and carbon-free sources by 2045.⁵⁰ The Advanced Clean Fleets rule will also support the goals by requiring LVMWD to transition to a 100 percent zero-emission capable utility fleet by 2045. LVMWD and the JPA may choose to purchase only ZEVs beginning in 2024 and remove internal combustion engine vehicles at the end of their useful life or elect to meet the State's ZEV milestone targets as a percentage of the total fleet starting with vehicle types that are most suitable for electrification.⁵¹



50. As part of California's RPS program SB 100 signed in 2018 mandated that electricity providers increase GHG-free sources to 100 percent of total procurement by 2045. Furthering RPS requirements, SB 1020 established additional requirements that procurement from eligible renewable energy resources increase to 90 percent of total procurement by 2035 and 95 percent of total procurement by 2040.

51. CARB. Advanced Clean Fleets. <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets>. Accessed July 2023

LVMWD AND JPA CLIMATE ACTION TARGETS

While LVMWD and the JPA are not beholden to AB 32, SB 32, or AB 1279, and currently faces no legislative requirements to reduce their GHG emissions, the State recognizes water agencies as one of the largest contributors to energy emissions in California, primarily due to the large quantities of electricity used to pump water. It is also anticipated that as California works towards the 2045 carbon neutrality goal, additional legislation and regulations will be established in the future that may require LVMWD and the JPA to adopt low-carbon practices and operations. As part of the process of developing a CAAP, LVMWD and the JPA have elected to establish climate action targets that align with the State’s goals to serve as targets for their facilities and operations going forward and provide a framework for achieving voluntary GHG emissions reductions in future years. LVMWD and the JPA have already taken numerous steps to reduce emissions, conserving resources, and reduce energy use; the CAAP builds on those existing efforts.

The CAAP establishes a 2030 GHG emissions target in alignment with the annual reduction rate needed to eventually meet the State’s 2045 carbon neutrality goal, as set forth by AB 1279. By setting a straight line from 2021 emissions levels to the AB 1279 target, the 2030 target will surpass the SB 32 goal of a 40 percent reduction in GHG emissions from 1990 level by 2030 and will put LVMWD on a pathway to achieving carbon neutrality by 2045.52 LVMWD and JPA climate action targets are shown in Table 5-1, along with the 1990 back-cast emissions level from the 2012 inventory,⁵³ adjusted forecast emissions, percent reduction from 1990 levels and the emissions gap (the difference between the AB 1279 absolute target pathway and adjusted forecast emissions). The target emissions trajectory in absolute emissions is shown in Figure 5-1. Figure 5-1 also shows the BAU forecast, adjusted forecast, and the 1990 baseline inventory back-cast.

Table 5-1. LVMWD and JPA Climate Action Targets

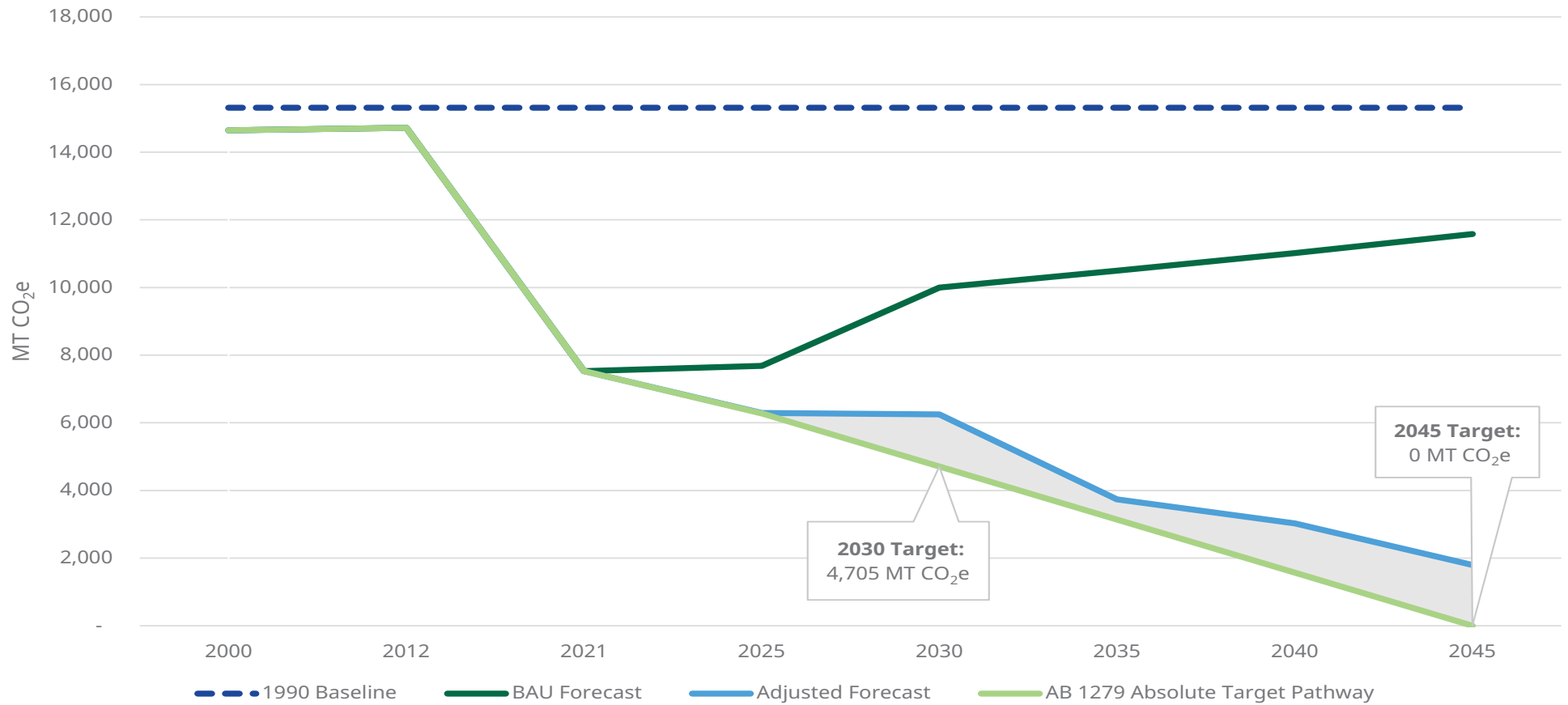
	2025	2030	2035	2040	2045
1990 Baseline	15,314	15,314	15,314	15,314	15,314
Adjusted Forecast	6,287	6,249	3,740	3,028	2,260
Target Pathway developed from 1990 Levels					
AB 1279 Absolute Target Pathway	6,273	4,705	3,136	1,568	0
Percent Reduction from 1990 Levels	59%	69%	80%	90%	100%
Emissions Gap	14	1,544	604	1,460	2,260



52. Carbon neutrality refers to achieving net-zero CO₂e emissions, such that any GHG emissions created are offset by GHG emissions sequestering activities.

53. A back-cast of GHG emissions to 1990 was developed based on the 2012 inventory results, as the 2012 GHG emission levels are before current GHG emissions reduction projects came online and 2012 operations were closer to the current operations than 2000 operations.

Figure 5-1. LVMWD and JPA Forecast and Climate Action Targets




GHG Emissions Gap

As shown in Figure 5-1, a gap remains between the projected emissions (blue line) and the target emissions (green line), even after accounting for reductions that will result from state legislation. This gap is equal to 1,544 MT CO₂e in 2030 and 2,260 MT CO₂e in 2045. This gap is how much LVMWD and the JPA will need to reduce their GHG emissions to meet the target of carbon neutrality by 2045.

LVMWD and the JPA aim to close this gap by implementing the GHG measures presented in Chapter 6. Several of these measures, along with the climate adaptation specific measures, will also increase their resilience to climate change in the coming years.

6.

GHG EMISSIONS REDUCTION AND ADAPTATION MEASURES



LVMWD and the JPA have developed GHG emissions mitigation and adaptation measures that support the reduction of GHG emissions to levels that align with the State's GHG emissions reduction goals and reduce climate risks to their operations, infrastructure, and natural resources. Collectively, these measures will reduce the gap between LVMWD and JPA forecasted GHG emissions and their reduction targets. While the measures do not fully achieve the 2045 GHG emissions reduction target identified in Chapter 5, they provide for substantial progress towards LVMWD's and the JPA's carbon neutrality target, with the expectation that additional legislation, technology, and measures shall be identified in the future to achieve further reductions. As discussed in Chapter 1, a primary benefit of adopting proactive plans with quantifiable progress towards CAAP goals is the identification of clear measures that with funding shall reduce GHG emissions and reduce climate risks. This Plan aligns with many of the goals and requirements of State and federal grant funding.

Table 6-1 summarizes each GHG reduction and adaptation measure and details the potential GHG emission reductions that can be achieved through full implementation of quantifiable measures. As shown in Table 6-1, implementation of these measures can significantly reduce GHG emissions and improve the operational resilience of LVMWD and JPA facilities. Through implementation of GHG quantifiable measures and actions, LVMWD and the JPA can achieve the 2030 GHG emissions reduction target, as seen in Table 6-1.

Unless otherwise mandated by the State or federal government, cost analysis and feasibility studies will be conducted, and individual reduction and adaptation measures will be implemented only if authorized by the Board of Directors for LVMWD and the JPA. Services provided by LVMWD and the JPA will need to remain affordable to customers. The Board of Directors for LVMWD and the JPA will have discretion in deeming the feasibility of implementing individual measures.



Table 6-1. GHG Reduction and Adaptation Measures by Sector

Measure Code	Mitigation/ Resilience	GHG Reduction Measure	2030 GHG Reduction Potential (MT CO ₂ e)	2045 GHG Reduction Potential (MT CO ₂ e)
Infrastructure				
I-1	Mitigation	Utilize carbon-free electricity for 100% of electricity needs by 2030.	453	0
I-2	Mitigation	Electrify new and existing stationary equipment to reduce natural gas consumption 75% by 2030 and 100% by 2045.	219	415
I-3	Mitigation	Utilize renewable diesel and alternative fuels to bridge the technology gap and decarbonize stationary equipment to reduce diesel consumption by stationary equipment 100% by 2030.	36	41
I-4	Mitigation, Resilience	Increase energy storage at facilities and buildings.	GHG Emissions Not Quantified	GHG Emissions Not Quantified
I-5	Mitigation	Improve energy efficiency at facilities and buildings.	GHG Emissions Not Quantified	GHG Emissions Not Quantified
I-6	Mitigation	Reduce process and fugitive GHG emissions associated with wastewater treatment.	5	6
I-7	Resilience	Maximize backup power facilities for all critical assets, in alignment with Measure I-4.	GHG Emissions Not Quantified	GHG Emissions Not Quantified
I-8	Resilience	Support the regional development of dry and wet weather stormwater diversions as a supplementary source for recycled potable water.	GHG Emissions Not Quantified	GHG Emissions Not Quantified
I-9	Resilience	Improve the Supervisory Control and Data Acquisition system.	GHG Emissions Not Quantified	GHG Emissions Not Quantified
I-10	Mitigation, Resilience	Require the incorporation and identification of mitigation and adaptation features into new capital projects.	GHG Emissions Not Quantified	GHG Emissions Not Quantified
I-11	Mitigation, Resilience	Implement the Pure Water Project Las Virgenes Triunfo.	GHG Emissions Not Quantified	GHG Emissions Not Quantified

Measure Code	Mitigation/Resilience	GHG Reduction Measure	2030 GHG Reduction Potential (MT CO ₂ e)	2045 GHG Reduction Potential (MT CO ₂ e)
Operations				
O-1	Mitigation	Electrify or otherwise decarbonize the vehicle fleet such that 75% of the vehicle fleet are ZEV by 2030 and 100% of the vehicle fleet are ZEV by 2045.	102	342
O-2	Mitigation	Increase employee commute ZEV adoption to 25% by 2030 and 50% by 2045.	48	136
O-3	Mitigation	Reduce employee commute VMT by 15% by 2030 and 30% by 2045.	GHG Emissions Not Quantified	GHG Emissions Not Quantified
O-4	Mitigation	Develop a net zero waste program such that waste sent to the landfill is reduced by 90% by 2030 and maintain through 2045.	133	153
O-5	Mitigation, Resilience	Increase water conservation by reducing demands by at least 20% by 2030 and maintain through 2045.	855	0
O-6	Resilience	Develop resource programs and protocols to protect staff from climate extremes.	GHG Emissions Not Quantified	GHG Emissions Not Quantified
O-7	Resilience	Maximize operational flexibility and redundancies, including water transfer agreements, interties, flexible exchanges, additional system interconnections, and points of delivery.	GHG Emissions Not Quantified	GHG Emissions Not Quantified

Measure Code	Mitigation/Resilience	GHG Reduction Measure	2030 GHG Reduction Potential (MT CO ₂ e)	2045 GHG Reduction Potential (MT CO ₂ e)
Natural Resources				
NR-1	2,3	Investigate and implement carbon capture and sequestration opportunities to offset all Water Reclamation Facility fugitive emissions by 2045.	6	48
NR-2	2	Catalog and improve the stability of hillside monitoring and stabilization efforts after heavy rain events in areas at risk of landslides and debris flows to minimize impacts to District infrastructure and equipment.	GHG Not Quantified	GHG Emissions Not Quantified
NR-3	2	Protect the Las Virgenes Reservoir from sedimentation associated with extreme climate events.	GHG Emissions Not Quantified	GHG Emissions Not Quantified
NR-4	2,4,5	Develop and implement a wildfire abatement and response policy.	GHG Emissions Not Quantified	GHG Emissions Not Quantified
GHG Emissions Reduction Summary				
Total GHG reduction potential with full implementation of all measures			1,857	1,140
Total GHG reductions needed to meet LVMWD’s Reduction Goals³			1,544	1,797
GHG reductions remaining			-313	657

GHG = greenhouse gas; LVMWD = Las Virgenes Municipal Water District; MT CO₂e = metric tons of carbon dioxide equivalent; VMT = vehicle miles traveled; ZEV/EV = zero emission vehicle/electric vehicle
 I = Infrastructure; O = Operations; NR = Natural Resources

¹ As described in Chapter 5, LVMWD established GHG reduction goals in alignment with AB 1279 Absolute Target pathway.

MEASURE ORGANIZATION

CAAP measures include specific goals that LVMWD and the JPA will work towards to reduce GHG emissions and improve resilience to climate change. As vital service providers to their customers, LVMWD and the JPA expect to balance the implementation of climate action and adaptation measures with the cost of water and wastewater services to ratepayers. Increased rates could have equity and other impacts if not thoughtfully considered, thus, each measure can only be implemented once it is deemed financially feasible or when funding/financing has been identified. However, LVMWD and the JPA also understand that failing to prepare for climate change could substantially increase costs in the future, so care must be taken to strike the right balance. Therefore, consistent with LVMWD's and the JPA's overall mission, measures that could result in a significant increase in costs were removed from consideration. Measures are organized by asset, and consist of a suite of actions that support each measure:

1. **ASSET:** Measures are categorized into three asset categories:

a. **Infrastructure**

Infrastructure includes various components of its water and wastewater system that pump, transport, divert, store, treat and deliver water.

b. **Operations**

Operations include the staff, equipment, and systems that keep day-to-day operations and services running.

c. **Natural Resources**

Natural resources include materials and natural substances such as water, soil, vegetation, and wildlife.

2. **MEASURES:** Measures define quantitative and qualitative goals within each asset category that will contribute to reducing GHG emissions and/or increase resilience.

3. **ACTIONS:** Actions consist of the specific activities that will be completed in support of each measure, which together accomplish each measure's goal.

Some CAAP measures and their actions include quantifiable GHG emissions (i.e., with clearly defined GHG emissions reduction potential). Other actions are not quantifiable, and either contribute to the realization of GHG emissions reduction potential of other measures or actions or increase the resilience of LVMWD and the JPA to climate change. An example of a quantifiable action is purchasing a specific amount of carbon-free electricity, while a supportive (not quantifiable) action is conducting an annual return on investment analysis of carbon-free electricity packages. Measures and actions that seek to increase resilience to climate change are not considered quantifiable in this CAAP, as the quantified metric being considered is GHG emissions. Together, the CAAP measures and their actions establish a foundational pathway to make substantial progress towards achieving 2030 and 2045 GHG reduction goals and increasing resilience to climate change. Measures and actions will be tracked and re-evaluated on a regular basis to help ensure achievement of the projected reductions.

OBJECTIVES

The CAAP measures and actions were developed in alignment with LVMWD's strategic objectives, as outlined in the 2022 LVMWD Strategic Plan. LVMWD's strategic objectives are:

1. Develop a strategy to maintain a highly effective workforce,
2. Improve LVMWD's water supply reliability,
3. Support customers to meet water-use efficiency standards,
4. Eliminate the discharge of pollutants to Malibu Creek and preserve the natural beauty of the Watershed,
5. Achieve a high credit rating for LVMWD's three enterprises,
6. Reduce LVMWD's carbon footprint,
7. Keep customers, city officials and other stakeholders well-informed and provide new/improved customer tools to enhance service delivery,
8. Develop a process to act on efficiency improvement suggestions, and
9. Enhance LVMWD's asset management programs.

The strategic objectives were assessed and used to guide the development of a set of five CAAP objectives that connect the CAAPs goals of reducing GHG emissions and increase resilience to climate change and the overall strategic goals of LVMWD. The CAAP's objectives are outlined and described below.

OBJECTIVE 1: Enhanced Water Supply Diversification

Investments in a diverse water supply portfolio will allow LVMWD and the JPA to manage the associated projected climate risks and uncertainties. Efforts to increase dry (sanitary sewer) and wet weather (stormwater) diversions, minimize reliance on imported water, and develop reliable local water sources will strengthen and increase the resilience of the water supply portfolio.

OBJECTIVE 2: Better Protected Water Resources

Implementing natural resources, land, and ecosystem management efforts will protect water resources from climate risks. CAAP measures that align with this objective reduce the pressure on local natural resources by allowing more space for trees and native habitats, preserving natural water supplies and increasing resilience of water resources.

OBJECTIVE 3: Increased Operational Efficiency and Resource Management

Implementing programs that manage resource demand will allow LVMWD and the JPA to continue to provide high-quality water sustainably. Increasing operational efficiencies often contributes to reductions in resource consumption and cost savings.

To maintain a long-range, transparent, stable, and well-planned financial condition, resulting in current and future water users receiving fair and equitable rates, it will be important to implement projects and programs that reduce financial risk through resource management and increased operational efficiencies.

OBJECTIVE 4: Improved Operational Flexibility and Reliability

Retaining a reliable water supply and operations is at the heart of LVMWD's mission. Developing climate solutions and planning for issues such as energy shortages, power safety shutoffs, and drought allows LVMWD to make its operations more resilient and continue to provide water reliably and affordably to the community.

OBJECTIVE 5: Better Connected People and Water

Prioritizing projects that engage LVMWD's and the JPA's customers, community, and partners will facilitate increased community support and involvement in climate action and adaptation efforts. LVMWD and the JPA will continue to support programming that enhances existing relationships and better connects the community with efforts to conserve water and mitigate climate change impacts on LVMWD's and the JPA's service area, employees, and customers.

INFRASTRUCTURE MEASURES

MEASURE I-1: Utilize carbon-free electricity for 100% of electricity needs by 2030.

Electricity consumption is the single largest emission source for LVMWD and the JPA. While SB 100 drives the conversion of retail electricity to 100% renewable by 2045, procuring carbon-free electricity now expedites this timeline and will provide significant reductions in GHG emissions. By opting into a renewable electricity tier through the electricity provider, LVMWD and the JPA have the opportunity to achieve most of its GHG emissions reduction's goal. Furthermore, switching to low-carbon or carbon-free electricity will make other measures more impactful by further reducing GHG emissions. For example, electrification of buildings, equipment and vehicles will achieve a greater GHG emission reduction if the electricity sourced is low-carbon or carbon neutral. LVMWD and the JPA currently receive electricity from Southern California Edison (SCE). SCE offers a 50 percent green rate option and 100 percent green rate option to its customers. LVMWD and the JPA can also procure electricity from Clean Power Alliance (CPA), a community choice aggregation (CCA) entity providing customers in Los Angeles and Ventura counties carbon-free electricity. CPA provides options of 40 percent, 50 percent, and 100 percent carbon-free electricity. In addition to changing its electricity procurement strategy, developing additional on-site solar and pairing with battery storage (Measures I-4 and I-7), will both reduce GHG emissions and increase resilience to disturbances such as power outages.

Actions

- **Action I-1.1:** Install 1 MW of solar PV at Rancho Sprayfield by 2025.
- **Action I-1.2:** Conduct a feasibility study to understand the potential for installing up to 15 megawatt (MW) of floating solar photovoltaics at Las Virgenes Reservoir, including potential costs, payback periods, and resilience impacts.
- **Action I-1.3:** Conduct an assessment to identify the solar capacity needed to support the additional electricity demand for vehicle fleet and employee commuter fleet EV adoption.
- **Action I-1.4:** Identify partners to assess and pursue floating solar photovoltaics, such as firms that specialize in power purchase agreements (PPA) and SCE. Work with partners to pursue funding opportunities and tax credits for the installation of floating solar photovoltaics such as opportunities through the Department of Energy (DOE) Solar Energy Technologies Office (SETO) and the federal Investment Tax Credit and Production Tax Credit.
- **Action I-1.5:** Based on the results of the studies and if deemed feasible, install up to 15 MW of floating solar photovoltaics at Las Virgenes Reservoir and additional on-site solar generation.
- **Action I-1.6:** Incorporate design elements into the Pure Water Project Las Virgenes – Triunfo to minimize GHG emissions to the greatest extent feasible. This should include energy efficient processes, identification of alternative fuels or technologies for processes that cannot be electrified, developing the project to be electricity ready where feasible, opportunities to directly link to on-site renewables and battery storage, and identification of the energy source to offset indirect electricity emissions, such as using the Renewable Energy Self-Generation Bill Credit Transfer (RES-BCT) tariff for renewable energy generation from other District sites where on-site renewables will not offset the emissions.
- **Action I-1.7:** Identify if the JPA/LVMWD can source electricity from Clean Power Alliance (CPA) and conduct an annual return on investment (ROI) analysis of carbon-free electricity packages available from SCE and CPA to determine which would be more cost-effective. Analysis should include a cost evaluation of switching all electricity accounts to 100 percent carbon-free electricity to ensure electricity consumption not covered by on-site solar will be 100 percent carbon-free.
- **Action I-1.8:** Depending on the results of the ROI analysis and if deemed feasible, switch some or all electricity accounts to 100 percent carbon-free electricity from with SCE “Green Rate” or to a CPA “100% Green Power”.
- **Action I-1.9:** Conduct a study to identify what amount of pumping that can be scheduled utilizing a high level of renewable energy and offset the remaining amount with battery stored solar energy.

Target Metrics

- 100 percent carbon-free electricity by 2030
- Install additional on-site solar fields

GHG Emissions Reductions

- 453 MT CO₂e in 2030

Objectives

- Increased Operational Efficiency & Resource Management
- Improved Operational Flexibility & Reliability

MEASURE I-2: Electrify new and existing stationary equipment to reduce natural gas consumption 75% by 2030 and 100% by 2045.

Infrastructure electrification is promoted by several State-level programs, including SB 350⁵⁴ and AB 3232,⁵⁵ which require reductions in energy usage in buildings and a transition to a low-carbon building stock. SB 350 requires that the State double the energy efficiency savings in natural gas usage by 2030. AB 3232 requires the California Energy Commission (CEC) evaluate strategies to reduce the State's building stock GHG emissions by 40 percent below 1990 levels by 2030. The CEC's Building Energy Efficiency Standards (Title 24 Parts 6 and 11) includes building standards and codes that support decarbonization efforts through requiring improvements in energy efficiency of building equipment to occur at time of new construction and upgrades.

By phasing out natural gas equipment for electric equipment, while using carbon-free electricity, LVMWD's and the JPA's GHG emissions associated with this equipment will fall to zero. Replacing natural gas equipment should be completed over time as existing natural gas infrastructure needs to be replaced. When replacing items like hot water heaters and Heating, Ventilation, and Air Conditioning (HVACs) units, LVMWD and the JPA will look to replace natural gas combustion units with heat pumps that can operate at nearly 400 percent increased efficiency.⁵⁶ Replacing fossil fuel combustion equipment with electric alternatives will align with the State policies and Title 24 requirements. Phasing out natural gas backup generators is a lower priority in the near term, as they provide critical resilience benefits.

Actions

- **Action I-2.1:** Conduct a survey of existing natural gas operated equipment and identify operationally and financially viable electric alternatives. By 2025, establish a schedule to replace existing natural gas-consuming equipment with electric or carbon neutral alternatives (i.e., e-fuels).
- **Action I-2.2:** Develop and implement a policy requiring new equipment to be electric or carbon neutral. Require an infeasibility waiver to be submitted and approved when new equipment cannot be electrified. The infeasibility waiver process shall identify other opportunities to decarbonize the new stationary equipment (e.g., use of renewable diesel/e-fuel).

- **Action I-2.3:** Explore rebate, grant, or partnership opportunities to fund the replacement of natural gas-consuming equipment like HVAC and hot water heaters with electric-powered equivalents like heat pumps.
- **Action I-2.4:** Educate staff of the electrification requirement and implement the schedule to replace non-emergency use natural gas-consuming equipment with electric-powered equivalents to reduce natural gas consumption.

Target Metrics

- 75 percent reduction in natural gas by 2030
- 100 percent reduction in natural gas by 2045

GHG Emissions Reductions

- 219 MT CO₂e in 2030
- 415 MT CO₂e in 2045

Objectives

- Increased Operational Efficiency & Resource Management
- Improved Operational Flexibility & Reliability

54. CEC. Clean Energy and Pollution Reduction Act – SB 350. <https://www.energy.ca.gov/rules-and-regulations/energy-suppliers-reporting/clean-energy-and-pollution-reduction-act-sb-350>. Accessed July 2023

55. CEC. Assembly Bill 3232 and the California Building Decarbonization Assessment. https://www.energy.ca.gov/sites/default/files/2021-08/AB3232_Building_Decarbonization_Assessment_Factsheet_ADA.pdf

56. Tri-State. 2021. Advantages of Energy Efficient Heat Pumps. <https://tristate.coop/advantages-heat-pumps-energy-efficiency#:~:text=What's%20the%20efficiency%20performance%20of,coefficient%20of%20performance%2C%20or%20COP>. Accessed July 2023.

MEASURE I-3: Utilize renewable diesel and alternative fuels to bridge the technology gap and decarbonize stationary equipment to reduce diesel consumption by stationary equipment 100% by 2030.

LVMWD and the JPA currently use a combination of gasoline and diesel to fuel its fleet vehicles and stationary equipment, including backup emergency power generators. While zero-emission heavy-duty vehicles are not currently market-ready, using low-carbon intensity fuels like renewable diesel in existing vehicles and equipment does not require substantive equipment alterations and helps reduce GHG emissions over the short term. The use of alternative fuels allows for additional time to fully vet and/or pilot the new zero-emission technology before infrastructure investments are made, which could help improve the return on investment. The State's Low Carbon Fuel Standard (LCFS) regulation is driving the market to increase the availability and decrease the cost of alternative fuels that may offer a return-on-investment benefit to switch to alternative fuels now in equipment and fleet vehicles that do not need technology changes. Using renewable diesel in existing vehicles can decrease the costs of maintaining equipment over traditional diesel due to a decreased need for diesel particulate filter services, as renewable diesel has less impurities such as sulfur, oxygen, and other aromatic compounds.⁵⁷

Actions

- **Action I-3.1:** Conduct a feasibility study to assess opportunities to decarbonize LVMWD's and the JPA's existing back-up generators using drop-in renewable diesel. As part of the assessment, determine a timeline for the renewable diesel transition, the quantity of renewable diesel needed, and any additional costs incurred from the transition. Include potential impacts of new renewable diesel equipment.
- **Action I-3.2:** Identify partners for a reliable source of renewable diesel and fuel (e.g., Diamond Green Diesel).

- **Action I-3.3:** Based on the feasibility study, develop a policy to transition all generators to renewable fuels.
- **Action I-3.4:** Develop and distribute educational materials to relevant staff members on the renewable diesel policy requirement and associated air quality and health benefits of the transition outlines in Action I-3.3.
- **Action I-3.5:** Pursue and monetize LCFS credits associated with renewable fuel conversions in vehicles.

Target Metrics

- 100 percent replacement of diesel with renewable diesel by 2030

GHG Emissions Reductions

- 36 MT CO₂e in 2030
- 41 MT CO₂e in 2045⁵⁸

Objectives

- Increased Operational Efficiency & Resource Management
- Improved Operational Flexibility & Reliability

57. Neste. *Fueling Renewed Trust in Public Fleets*. <https://www.neste.us/neste-my-renewable-diesel/industries/public-fleets>. Accessed July 2023.

58. GHG emissions reductions are projected to increase by 2045 as forecasted fleet and equipment GHG emissions are projected to increase.

MEASURE I-4: Increase energy storage at LVWMD and JPA facilities and buildings.

Energy storage systems are a proven strategy to maximize use of renewable energy by storing the energy produced during peak renewable generation periods. By storing renewable energy, LVMWD and the JPA will increase their energy resilience and reduce GHG emissions by charging the battery system during times of low grid emissions and discharging them during periods of high emission electricity. The batteries can also be used to conduct rate arbitrage, by charging during times when electricity is cheapest and offsetting the peak (most expensive) power periods through use of stored energy. Power loss can lead to operational failure as key facilities and systems, including pumps and the water reclamation facility, may not be able to operate. Battery storage systems will also add increased operational resilience by allowing facilities to operate for periods of time without power from the grid.

Actions

- **Action I-4.1:** Conduct an assessment to identify existing battery storage capacity and priority locations for battery storage installation.
- **Action I-4.2:** Conduct a feasibility study to evaluate the opportunities for charging on-site batteries with on-site solar. Based on the study, require the design of the Pure Water Project Las Virgenes – Triunfo to identify battery storage solutions to mitigate impacts from power outages in addition to back-up generators powered by renewable fuel.

- **Action I-4.3:** Explore funding opportunities to obtain and install a combined total of 5 MW battery storage at critical facilities. Identify opportunities through the Inflation Reduction Act of 2022 incentives including Energy Infrastructure Reinvestment Financing and the Solar Investment Tax Credit.
- **Action I-4.4:** Continue time of use program that identifies and establishes permanent shifts of high-electricity use to times when renewable energy is plentiful through educational programs on energy and thermal storage, load timing/controls, pre-cooling/pre-heating, and other time-energy demand measures.

Target Metrics

- Energy storage solutions implemented
- Assessments completed
- Funding obtained
- 5 MW battery storage installed

GHG Emissions Reductions

- GHG Emissions Not Quantified⁵⁹

Objectives

- Increased Operational Efficiency & Resource Management
- Improved Operational Flexibility & Reliability

⁵⁹ GHG emissions were not quantified for Measure I-4 as energy storage systems in themselves do not lead to reductions in GHG emissions, however they do support GHG reductions associated with on-site renewable energy sources.

MEASURE I-5: Improve energy efficiency at LVMWD and JPA facilities and buildings.

Improving pump efficiency, installing LED lighting, and installing energy recovery systems will all reduce the total demand for electricity from LVMWD's and the JPA's systems, saving money and reducing GHG emissions. Improving equipment efficiency also aligns with the California Building Energy Efficiency Standards (Title 24).

Actions

- **Action I-5.1:** Identify aging equipment due for replacement throughout JPA and LVMWD facilities and identify energy efficient alternatives to use for the replacement (e.g., EnergyStar certifications). Prioritize energy efficient electric equipment over natural gas and diesel equipment, where feasible. Include a return on an investment analysis as part of the replacement process that evaluates the capital investment for an energy efficient alternative piece of equipment, cost savings associated with improved energy efficiency, and identifies any grants or rebates associated with such equipment replacement. For equipment identified in Action I-2.2 that received the infeasibility waiver, ensure energy efficiency alternatives are selected.
- **Action I-5.2:** Develop and implement a policy requiring new equipment to achieve EnergyStar Certification, where feasible.
- **Action I-5.3:** Conduct energy audits every 5 years and implement top energy recommendations. As part of CAAP monitoring, track energy improvements due to implementation of energy audit recommendations annually.

- **Action I-5.4:** Expand the utilization of automated lighting controls for indoor/outdoor lighting for JPA and LVMWD facilities pursuant to the current CEC Building Energy Efficiency Standards (Title 24, Part 6 and 11).
- **Action I-5.5:** Pursuant to the CEC 2022 Building Energy Efficiency Standards (Title 24, Part 6 and 11), require all new construction and building upgrades utilize light emitting diode (LED) lighting technology only.
- **Action I-5.6:** Continue to explore opportunities to employ artificial intelligence (AI) and machine learning (ML) to better optimize treatment processes and to increase energy efficiency.
- **Action I-5.7:** Require the implementation of cool roofs in the construction of all new and upgraded JPA and LVMWD facilities, to minimize absorption of solar energy and reduce building energy use.

Target Metrics

- Energy conserved
- Energy efficiency systems and upgrades implemented

GHG Emissions Reductions

- GHG Emissions Not Quantified

Objectives

- Increased Operational Efficiency & Resource Management
- Improved Operational Flexibility & Reliability

MEASURE I-6: Reduce process and fugitive GHG emissions associated with wastewater treatment.

Because technology for reducing methane emissions from wastewater treatment plants can be expensive and requires advanced planning, this measure is focused on preliminary feasibility analysis and investigating funding opportunities for future implementation. Technology is advancing and programs such as LCFS may provide cost-effective opportunities to convert captured methane to biofuel for electricity generation or vehicle fleet use. It is anticipated that wastewater emissions will become a major focus of California for reducing GHG emissions in the future, at which point additional incentives for this work are expected to become available. Additionally, implementation of the Pure Water Project Las Virgenes-Triunfo, will divert and treat effluent from the Tapia Water Reclamation Facility for potable reuse. The project will eliminate the need to discharge unused recycled water to Malibu Creek, minimizing associated fugitive GHG emissions to nearly zero.⁶⁰

Actions

- **Action I-6.1:** Conduct a feasibility and cost analysis on the pathways to eliminate emissions associated with the biogas generated at Tapia Water Reclamation Facility through either biogas utilization, disposal or sale. The study should include an assessment evaluating the cost for upgrading the anaerobic digesters, opportunities for upgrading the biogas to pipeline quality biomethane, and opportunities for partnerships with other nearby biogas producers to sell the biogas to entities such as SCG looking to meet SB 1440.

- **Action I-6.2:** Investigate potential partnerships with entities looking to obtain biogas for fuel production for which LVMWD and the JPA could be a source.
- **Action I-6.3:** In alignment with the implementation of the Pure Water Project Las Virgenes - Triunfo, evaluate and track reductions in total Nitrogen to identify the amount of reduced fugitive emissions.

Target Metrics

- 97 percent reduction in fugitive emissions by 2030
- 97 percent reduction in fugitive emissions by 2045

GHG Emissions Reductions

- 5 MT CO₂e in 2030
- 6 MT CO₂e in 2045

Objectives

- Increased Operational Efficiency & Resource Management
- Improved Operational Flexibility & Reliability

60. EPA. Pure Water Project Las Virgenes-Triunfo. <https://www.epa.gov/wifa/pure-water-project-las-virgenes-triunfo>. Accessed July 2023

MEASURE I-7: Maximize backup power facilities for all critical assets.

As outlined for Measure I-4, procuring energy storage solutions to support LVMWD's and the JPA's facilities and buildings can support GHG emission reductions and mitigate impacts from power outages. Water utilities are one of the major electricity consumers in California. With future electricity demand forecasted to grow, water utilities are particularly at risk of localized energy shortages. Backup power facilities can provide resilience and redundancy to mitigate service disruptions during power outages.⁶¹ This measure will reduce the potential impact of future power disruptions on key facilities and operations to provide future continuity of services across a wider range of conditions. New backup power facilities should be located outside of hazard areas or provided with adequate protection to mitigate potential damage and disruption.

Actions

- **Action I-7.1:** Catalogue fixed and mobile backup power requirements for all LVMWD and JPA facilities and develop design criteria/minimum requirements.
- **Action I-7.2:** Establish backup power policy/requirements that cover fixed and mobile solutions, staging, and procurement.

- **Action I-7.3:** Secure Hazard Mitigation Grant Program, California Governor's Office of Emergency Services (CAL OES), and other grant funding for battery energy storage solutions and renewable diesel.
- **Action I-7.4:** If deemed feasible, secure battery energy storage systems and new generators that use renewable fuel (e.g., renewable diesel, biodiesel, etc.) for Tapia Reclamation Facility, the Westlake Filtration Plant, Rancho Composting Facility, and future facilities such as the Advanced Water Purification Facility.

Target Metrics

- Assessments developed
- Battery storage solutions installed

GHG Emissions Reductions

- GHG Emissions Not Quantified

Objectives

- Improved Operational Flexibility & Reliability

MEASURE I-8: Support the regional development of dry and wet weather stormwater diversions as a supplementary source for recycled potable water.

Climate change exposures, such as an increase in prolonged periods of multi-year drought, are projected to increase the risk of reduced SWP and Colorado River deliveries. There is also an indication that more rain will fall from extreme weather events, which would increase the potential value of stormwater capture. LVMWD and the JPA will focus on developing and enhancing regional capabilities to increase dry and wet weather (stormwater) diversions as a supplementary source for recycled potable water.

Actions

- **Action I-8.1:** Partner with neighboring jurisdictions to identify opportunities to develop dry and wet weather diversions to reduce imported water.
- **Action I-8.2:** Position for funding programs, such as LA County Measure W, to fund design work to increase dry and wet weather diversions.

- **Action I-8.3:** Conduct an assessment to identify developing regulatory compliance issues associated with wet weather diversions and outline potential solutions.

Target Metrics

- Acre-feet of diversions
- Funding identified and obtained
- Assessment conducted

GHG Emissions Reductions

- GHG Emissions Not Quantified

Objectives

- Enhanced Water Supply Diversification

61. EPA. *Climate Impacts on Water Utilities*. <https://www.epa.gov/arc-x/climate-impacts-water-utilities#tab-3>. July 2023

MEASURE I-9: Improve the Supervisory Control and Data Acquisition (SCADA) System.

A projected increase in the frequency and severity of climate hazards, such as extreme heat and extreme precipitation, will stress the ability of staff to react and respond. A more capable SCADA system will enable more efficient reactions and responses to changing conditions and potentially reduce GHG emissions associated with water loss. A SCADA system provides LVMWD and the JPA with automation and redundant control capabilities. An improved SCADA system can connect employees to monitoring equipment that can provide information on flooding hazards, water quality, drainage levels, and much more, in real time. The SCADA system can report on maintenance issues and alert employees of critical issues that may be impacting water and wastewater operations.⁶²

Actions

- **Action I-9.1:** Conduct an assessment to identify opportunities to upgrade or add field instrumentation hardware including sensors, actuators, relays, control units, and samplers such as for automatic leak detection throughout the distribution system. Utilize artificial intelligence (AI) and machine learning (ML) to automate SCADA data collection and analysis to provide additional operational improvements and achieve energy efficiency.
- **Action I-9.2:** Based on the assessment, procure field instrumentation hardware to adequately monitor and control all water system processes.
- **Action I-9.3:** Explore potential funding opportunities to finance SCADA system upgrades and improvements.
- **Action I-9.4:** Establish procedures to regularly conduct maintenance of SCADA systems to identify potential improvements and operational inefficiencies.
- **Action I-9.5:** Implement setpoint optimization techniques using AI and ML at Tapia Water Reclamation Facility, Lift Stations 1 and 2, and Rancho Las Virgenes Composting Facility.

Target Metrics

- Field instrumentation hardware procured
- Funding obtained
- Procedures established
- Setpoint optimization techniques implemented

GHG Emissions Reductions

- GHG Emissions Not Quantified

Objectives

- Increased Operational Efficiency & Resource Management
- Improved Operational Flexibility & Reliability
- Better Connected People and Water

62. LVMWD. Phase 2 White Paper: Tapping into Available Capacity in Existing Infrastructure to Create Water Supply and Water Quality Solutions. https://www.mwdh2o.com/media/3uy3rvk/las-virgenes_phase-2_final-report.pdf

MEASURE I-10: Require the incorporation and identification of mitigation and adaptation features into new capital projects.

Climate change is projected to increase the variability of precipitation, the extent of wildfire risk, the frequency and amount of extreme precipitation, the susceptibility of landslides, the frequency and duration of extreme heat events, and the length and frequency of power outages. The Infrastructure Investment Plan and other master planning documents should consider the vulnerability of facilities, infrastructure, and water resources to relevant climate change impacts.⁶³ This measure will guide future capital development to be designed with these future climate conditions and risks in consideration.

Actions

- **Action I-10.1:** Develop a process to prioritize when to apply and implement climate change-informed design criteria for flooding, extreme heat, landslides, wildfire and liquefaction.
- **Action I-10.2:** Integrate and regularly update best available climate science and projections into relevant planning documents and programs including the Urban Water Management Plan, Infrastructure Investment Plan, Hazard Mitigation Plan, Potable Water Master Plan, Recycled Water Mast Plan, Integrated Master Plan, and Sanitation Master Plan.
- **Action I-10.3:** Develop protocols to improve monitoring capabilities to ensure ongoing identification of vulnerable critical District assets in need of upgrades or retrofits.

Target Metrics

- Design criteria development and implemented
- Planning documents and programs updated

GHG Emissions Reductions

- GHG Emissions Not Quantified

Objectives

- Better Protected Water Resources
- Increased Operational Efficiency & Resource Management
- Improved Operational Flexibility & Reliability

63. EPA. *Climate Impacts on Water Utilities*. <https://www.epa.gov/arc-x/climate-impacts-water-utilities#tab-3>. Accessed July 2023

MEASURE I-11: Implement the Pure Water Project Las Virgenes-Triunfo.

Implementing the Pure Water Project Las Virgenes – Triunfo is key to providing reliable potable water and reducing dependence on imported water in the future. The project will eliminate discharges to Malibu Creek, minimizing contaminants into the creek and fugitive GHG emissions. In 2022, the JPA Board of Directors approved the Programmatic Environmental Impact Reports for the Pure Water Project, providing a path forward for construction of the Advanced Water Purification Facility.⁶⁴ To guide the development of this facility in a climate resilient manner that minimizes GHG emissions, LVMWD and the JPA will work with developers and a consultant team to incorporate climate projections and potential impacts into the design process. Energy efficient equipment and fixtures at Pure Water Project facilities will also be installed and opportunities will be explored to implement additional on-site renewable and battery storage to increase operational resilience and mitigate GHG emissions.

Actions

- **Action I-11.1:** Continue with efforts to partner with a design/build team to design, construct, test, commission, and obtain governmental approval for the Advanced Water Purification Facility.
- **Action I-11.2:** Require the consultant team to review and integrate future climate projections and potential impacts into the design of the Advanced Water Purification Facility.
- **Action I-11.3:** Obtain funding for additional advising services to study and mitigate climate risks and GHG emissions specifically to the Pure Water Project Las Virgenes - Triunfo, through the EPA's Water Infrastructure Finance and Innovation Act, State of California's Clean Water and Drinking Water State Revolving Fund (SRF) programs, and Metropolitan's Local Resources Program (LRP).

- **Action I-11.4:** In alignment with Action I-36, conduct a feasibility study to identify the future energy needs of the Pure Water Project Las Virgenes – Triunfo and identify opportunities to minimize GHG emissions through energy efficiency, on-site renewables, and low-carbon and carbon-free electricity procurement.

Target Metrics

- Climate projection and potential impacts integrated into design
- Feasibility study completed
- Funding obtained

GHG Emissions Reductions

- GHG Emissions Not Quantified

Objectives

- Enhanced Water Supply Diversification
- Increased Operational Efficiency & Resource Management
- Improved Operational Flexibility & Reliability

64. LVMWD. Pure Water Project Achieves Major Milestone. 2022. <https://www.lvmwd.com/Home/Components/News/News/5988/22>. Accessed July 2023

OPERATIONS MEASURES

MEASURE O-1: Electrify or otherwise decarbonize the vehicle fleet such that 75% of the vehicle fleet are zero-emission vehicles (ZEV) by 2030 and 100% of the vehicle fleet are ZEV by 2045.

California has developed a robust set of clean transportation policies and goals to decarbonize the transportation sector through implementation of ZEV technology, where feasible, and the use of low-carbon intensity fuels everywhere else. The Advanced Clean Cars II regulation requires that by 2035 all new passenger cars, trucks, and SUVs sold in California be zero emissions.⁶⁵ The Advanced Clean Fleets rule requires that fleets, businesses, and public entities that own or direct the operation of medium- and heavy-duty vehicles in California must transition to 100 percent zero-emission capable utility fleets by 2045. Under the regulation, LVMWD and the JPA may choose to purchase only ZEVs beginning in 2024 and remove internal combustion engine vehicles at the end of their useful life or elect to meet the State's ZEV milestone targets as a percentage of the total fleet starting with vehicle types that are most suitable for electrification.⁶⁶

Transitioning fleet vehicles to either EVs powered by carbon-free electricity or other zero-emission technology has the potential to bring this source to zero over time. The State also has several incentive and funding programs to support vehicle replacement and to promote infrastructure development. By beginning to implement the Advanced Clean Fleet Rule, LVMWD and the JPA can access early action incentives. Transitioning to ZEV heavy-duty vehicles will be prioritized closer to 2045, as options become technologically and financially feasible.

Actions

- **Action O-1.1:** Conduct a study of the existing vehicle fleet to develop a schedule and policy to replace existing vehicles with EV/ZEV alternatives such that 75 percent of vehicles are replaced with EV/ZEVs by 2030 and 100 percent by 2045. Consider vehicle function, associated costs, available incentives, and ROI from potential fuel and maintenance savings when identifying vehicles for replacement and their EV/ZEV alternatives.
- **Action O-1.2:** For vehicles not identified for replacement by 2030 and/or vehicles that do not have EV/ZEV options available:
 - Evaluate options to reduce the weight of vehicles and integrate technology that monitors vehicle idleness, integrating efficient, smaller

diesel engines before they can be electrified or otherwise decarbonized.

- Consider partnering with heavy-duty EV companies to conduct pilots and facilitate advancements in technology for such vehicles.
- Continue monitoring EV/ZEV availability and updating the vehicle replacement schedule to transition such vehicles by 2045.
- **Action O-1.3:** Complete an EV infrastructure plan to analyze charging needs through 2045 and beyond. As part of plan, create a prioritized list of EV charging/fueling infrastructure at specific locations.
- **Action O-1.4:** Partner with SCE's Charge Ready Program to plan and fund electric vehicle charger installations and panel upgrades at JPA and LVMWD facilities in alignment with the EV infrastructure plan.

Target Metrics

- 75 percent fleet conversion to ZEV by 2030
- 100 percent fleet conversion to ZEV by 2045

GHG Emissions Reductions

- 102 MT CO₂e in 2030
- 342 MT CO₂e in 2045

Objectives

- Increased Operational Efficiency & Resource Management
- Improved Operational Flexibility & Reliability

65. CARB. *Advanced Clean Cars II*. <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii>. Accessed July 2023

66. CARB. *Advanced Clean Fleets*. <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-fleets>. Accessed July 2023

MEASURE O-2: Increase employee commute ZEV adoption to 25% by 2030 and 50% by 2045.

Providing educational information on available Zero Emission Vehicle (ZEV) incentives/rebates and preferential parking for ZEVs in support of California's ZEV goals will further lower LVMWD's carbon footprint associated with employee commutes. The increase of Electric Vehicles (EVs) and ZEV use by employees for commuting is inevitable with the establishment of Zero-Emission Vehicle Regulation, which requires auto manufacturers to provide more ZEVs for sale in California to achieve the State's goal of 100 percent of sales of new passenger vehicles to be ZEV by 2035.⁶⁷ Programs like LCFS and the Clean Transportation Program (AB 118) provide credits or funding, for developing ZEV fueling infrastructure to incentivize the development of necessary ZEV infrastructure to support the new ZEVs on the road. Furthermore, CARB established a rebate program for individuals to replace their vehicles with a ZEV. As such, it is anticipated that California's goals and incentives will lead to an increased use of ZEVs by LVMWD employees.

Current estimates indicate that approximately 40 percent of EV owners charge at work.⁶⁸ Given this fact, LVMWD and the JPA will install EV charging stations at its facilities for employees. Implementing this measure will encourage LVMWD employees to invest in personal EVs by reducing range anxiety, one of the leading reasons individuals opt to not switch to an EVs. This measure will also allow employees who live further away to commute via EV without worrying about making to work and back on a single charge.

Actions

- **Action O-2.1:** Install 30 additional EV chargers to support at least a 25 percent transition of employee-owned commuter vehicles to EV's or ZEV's (i.e., hydrogen fuel cell) by 2030. Locations should best serve commuters that report to different JPA and LVMWD facilities and optimize use of on-site solar generation.
- **Action O-2.2:** Identify partnerships and funding opportunities such as enrollment in the LCFS program for credit generation, federal tax credit under 30C Alternative Fuel Infrastructure Tax Credit, and SCE rebates and partnerships to offset the costs to install EV charging infrastructure for commuters.
- **Action O-2.3:** When feasible, incentivize employee conversion to ZEVs by offering discounted vehicle charging or fueling for commuters (charge for electricity only and not capital recovery for charging stations).
- **Action O-2.4:** Promote employee use of EV's or ZEVs by providing educational materials on the benefits of EV's and ZEVs, available federal and state tax credits, and ROI for employees given free workplace charging.

Target Metrics

- 25 percent transition to ZEV among employees by 2030 and 50 percent transition by 2045.

GHG Emissions Reductions

- 48 MT CO₂e in 2030
- 136 MT CO₂e in 2045

Objectives

- Increased Operational Efficiency & Resource Management

67. CARB. Zero-Emission Vehicle Regulation. <https://ww2.arb.ca.gov/our-work/programs/zero-emission-vehicle-program/about>. Accessed July 2023

68. Idaho National Laboratory. <https://avt.inl.gov/sites/default/files/pdf/arra/PluggedInSummaryReport.pdf>. Accessed July 2023

MEASURE O-3: Reduce employee commute Vehicle Miles Traveled (VMT) by 15% by 2030 and 30% by 2045.

While LVMWD and the JPA do not have direct control over the manner in which its employees travel to and from their jobs, they can facilitate alternative commute strategies, including use of active and shared/subsidized transit and continuing with implementation of a telework program. Working remotely during the COVID-19 pandemic has reduced commuter vehicle miles traveled at LVMWD and the JPA. Currently office workers, one third of staff, telework up to 2 days a week. LVMWD and the JPA have implemented a policy allowing for continued remote work in perpetuity, which will both prevent an increase in GHG emissions and reduce commuter vehicle miles travelled (VMT) for employees. LVMWD and the JPA will expand and provide benefits to employees who utilize alternative forms of transportation for their commute. Rideshare incentives, pre-tax benefits, and other solutions like commuter competitions can be implemented over time in support of the goal of achieving a reduction in employee commutes.

Actions

- **Action O-3.1:** Allow for continued benefits of a full or partial work-from-home policy where employees telecommute or utilize flexible schedule to reduce transit time, VMT, and GHG emissions.
- **Action O-3.2:** Identify opportunities to fund rideshare incentives to employees who carpool. Offer other incentives to employees to use an alternative mode of transportation to commute (e.g., public transportation, bikes).
- **Action O-3.3:** Provide preferred parking for carpooling vehicles to incentivize carpooling by employees. Evaluate opportunities for other incentives to offer to employees for carpooling or lower VMT.
- **Action O-3.4:** Promote employee use of carbon-free and low carbon transportation by providing educational materials on the benefits of commute options including public transportation, EV/ZEV options, and vanpools.

Target Metrics

- 15 percent reduction of VMT by 2030
- 30 percent reduction of VMT by 2045

GHG Emissions Reductions

- GHG Emissions Not Quantified

Objectives

- Increased Operational Efficiency & Resource Management

MEASURE O-4: Develop a net zero waste program such that waste sent to the landfill is reduced by 90% by 2030 and maintain through 2045.

Waste generation contributes a small amount to the overall GHG emissions from LVMWD and JPA operations. Except when there are equipment outages at the Rancho Composting Facility, biosolids are already diverted by being converted into compost for reuse on landscapes. A majority of the GHG emissions resulting from waste sent to the landfill are caused by decomposition of organic material under anaerobic conditions.⁶⁹ The remainder of the emissions come from inorganic wastes, such as plastic, which have both upstream and downstream emissions. Therefore, increasing the diversion of organic and inorganic waste streams is a primary measure to reduce waste related GHG emissions. In alignment with SB 1383⁷⁰ and AB 341⁷¹, LVMWD and the JPA will develop and implement a waste diversion plan to reduce organic waste sent to the landfill by 75 percent using 2014 levels as a baseline and strive to achieve zero-waste sent to landfills by 2045. This would include but not be limited to organic waste from employee break rooms. Additionally, LVMWD and the JPA will report biosolid quantity and destination to CalRecycle in compliance with AB 901.⁷²

Actions

- **Action O-4.1:** Implement a program to separate organic waste from other materials. Contract with local waste disposal companies to route organic waste to food recovery centers, anaerobic digestion, or composting facilities such that 75 percent of organics generated from JPA and LVMWD operations is collected and diverted from the landfill by 2025.
- **Action O-4.2:** Conduct a waste assessment, including records examinations, facility walk-throughs, and waste sorting, across all facilities to identify waste sources generated, identify purchasing and management practices, examine current waste reduction practices and their effectiveness, and prioritize the most effective waste reduction efforts on an area and materials-focused basis.

- **Action O-4.3:** Investigate funding opportunities to develop an organics program and deploy organic waste bins at all JPA and LVMWD facilities.
- **Action O-4.4:** Pursuant to AB 901, report the quantity and destination of disposed biosolids from wastewater treatment plants to CalRecycle quarterly.
- **Action O-4.5:** Host staff training sessions to provide educational information on waste reduction practices to increase waste diversion at JPA and LVMWD facilities.

Target Metrics

- 75 percent organic waste reduction by 2025 compared with 2014 baseline⁷³

GHG Emissions Reductions

- 133 MT CO₂e in 2030
- 153 MT CO₂e in 2045

Objectives

- Increased Operational Efficiency & Resource Management

69. According to the Local Governments for Sustainability (ICLEI) U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions, Appendix E – Solid Waste Emission Activities and Sources, GHG emissions are generated by non-biologic wastes only if they are combusted.

70. CalRecycle. California's Short-Lived Climate Pollutants Reduction Strategy. <https://calrecycle.ca.gov/organics/slcp/>. Accessed July 2023

71. CalRecycle. Mandatory Commercial Recycling. <https://calrecycle.ca.gov/recycle/commercial/>. Accessed July 2023

72. "Grit" that is collected at the TWRP and hauled to the landfill is not included in the GHG inventory since little to no GHG emissions are associated with this component.

73. SB 1383, effective 2022, sets statewide emissions reduction targets to 40 percent below 2013 levels by 2030 for methane, 75 percent reduction in organic material disposed in landfills from 2014 levels by 2025 and required jurisdictions to adopt ordinances or other enforceable mechanisms to impose penalties for non-compliance. LVMWD will be required to comply with local jurisdictions ordinances established to meet SB 1383 requirements.

MEASURE O-5: Increase water conservation by reducing demands by at least 20% by 2030 and maintain through 2045.

LVMWD has a long history of promoting water conservation, which has resulted in measurable reduction in retail water usage and indirectly reduces GHG emissions. LVMWD has had a number of successful water conservation programs such as providing indoor rebates for water efficient appliances, landscape rebate programs, practicing and promoting water-efficient irrigation and low water usage planting, and developing education programs for customers. LVMWD achieved a 20 percent reduction in per capita water use as required by the Water Conservation Act of 2009 as a direct result of these programs. LVMWD will expand these water conservation efforts to achieve further reductions in per capita water use that will align with new state regulations. Reduced per capita water consumption allows LVMWD to meet the water demands of a growing population, reduce operational emissions, and increase resilience to future drought impacts. A 20 percent reduction by 2030 will be based on 2020 consumption levels.

Actions

- **Action O-5.1:** Continue water conservation and recycling efforts and programs by implementing the Potable Master Plan, Integrated Regional Water Management Plan, Recycled Water Master Plan, Urban Water Management Plan, Water Shortage Contingency Plan, and Flow Restrictor Program.
- **Action O-5.2:** Implement the Pure Water Project Las Virgenes – Triunfo (Measure I-11) to reduce dependence on imported water and help ensure long-term water supply reliability.
- **Action O-5.3:** Continue to reduce recycled water use for irrigation by 25 percent and potable water by 20 percent by 2030 compared to 2020 consumption levels.
- **Action O-5.4:** Continue outreach and engagement efforts to increase registration to 80 percent and use of the WaterSmart Portal to aid customers in managing usage and identifying leaks.
- **Action O-5.5:** Expand programs which educate customers on water conservation initiatives through workshops and speaking engagements. Continue to host and expand participation in the LVMWD Landscape Workshop Series providing information on drought-tolerant landscaping, available rebates for water retrofits, and water efficiency strategies in new and existing single-family residences and commercial/multi-family accounts.
- **Action O-5.6:** Continue with efforts to implement a landscape management plan for the JPA and LVMWD that consolidates and expands upon the goals and policies for landscaping at JPA and LVMWD properties. Identify whether and where there are additional resource-consumptive landscapes on property that can be changed out to more water-conserving, slower growth plants that require less maintenance. Continue to implement potable water conservation strategies in landscape design and maintenance (such as replacing water intensive areas with drought-resilient native plants, using low-flow water fixtures, installing sophisticated irrigation software to control water, investing in systems to monitor pipe leakage, and limiting turf development).
- **Action O-5.7:** Require new and redeveloped LVMWD/JPA owned properties to be low water use through landscaping with climate appropriate plants, permeable paving, green infrastructure, and incorporating other low-impact development design features to allow for increased infiltration, even in heavy rains.
- **Action O-5.8:** Continue to implement and expand on successful water conservation rebate programs (e.g., high efficiency toilets and clothes washers, weather-based irrigation controller, etc.) with a focus on providing opportunities for outdoor water efficiency improvements such as rotating sprinkler heads, in alignment with the current Statewide water conservation goals.
- **Action O-5.9:** Develop and adopt a schedule for installation of water meters in existing buildings and irrigation zones to establish a water consumption baseline at JPA and LVMWD owned properties with the Facilities Division. Reduce JPA and LVMWD water consumption per capita at facilities in alignment with the current statewide goals.
- **Action O-5.10:** Explore methods such as the deployment of a floating solar array to reduce the rate of evaporation from water storage facilities (e.g., Las Virgenes Reservoir).

- **Action O-5.11:** Investigate new advanced technology systems to maximize the ground-water recovery wells in Westlake Village to maintain local water supply. Invest in such technology as it becomes feasible and cost-effective. Consider other innovative ideas such as maximizing the storage potential of the Russel Valley Basin by installing injection wells to store excess water for later extraction.
- **Action O-5.12:** Update rates and modify fixed fees as needed so that the majority of fixed costs for water and wastewater services continue to be captured regardless of the amount of water consumption and wastewater collection and treatment.

Target Metrics

- Reduced water consumption by 20 percent by 2030 and maintain through 2045

GHG Emissions Reductions

- 855 MT CO₂e in 2030
- 0 MT CO₂e in 2045⁷⁴

Objectives

- Increased Operational Efficiency & Resource Management
- Improved Operational Flexibility & Reliability

⁷⁴ Senate Bill 100 requires all electricity providers in the state to provide 100 percent carbon free electricity by 2045; therefore, no GHG emissions reductions can be gained from water conservation measures in 2045, since the emissions factor for electricity will be zero.

MEASURE O-6: Develop resource programs and protocols to protect staff from climate extremes.

Climate change is projected to increase regional wildfire risk which is expected to contribute to worsened air quality from wildfire smoke and associated toxins. LVMWD and the JPA are expected to experience an increase in the number of extreme heat days per year and an increase in overall average maximum temperature. Extreme heat events and wildfire smoke events can create or exacerbate health conditions of vulnerable District staff members. This measure seeks to reduce the potential health impacts to District staff. The first step for LVMWD and the JPA is to educate employees of the health and safety risks associated with climate extremes and to conduct outreach to understand employee concerns. Development and implementation of specific protocols that align with California's Division of Occupational Safety and Health's (Cal/OSHA) standards and protocols will help protect LVMWD employees.⁷⁵

Actions

- **Action O-6.1:** Develop and distribute a survey to staff to identify climate change impacts that pose health and safety risks to employees. As part of the survey, ask employees which existing policies and programs adequately provide them with resources to mitigate impacts and ask what potential programs and policies may provide additional resources to limit health and safety concerns associated with climate hazards.
- **Action O-6.2:** Develop internal protocols for employees working under extreme heat conditions and air quality emergencies, in alignment with Cal/OSHA heat illness and prevention guidance.
- **Action O-6.3:** Develop protocols for wildfire emergencies and host annual practice/drills to ensure service continuity and employee safety.
- **Action O-6.4:** Provide employees with educational materials on relevant climate hazards and associated health and safety impacts (i.e., extreme heat induced health impacts) to increase awareness of risks and share best practices to increase adaptive capacity.

Target Metrics

- Develop and distribute survey to staff
- Develop protocols
- Develop and share education materials

GHG Emissions Reductions

- GHG Emissions Not Quantified

Objectives

- Better Connected People and Water

⁷⁵ State of California Department of Industrial Relations. Heat Illness Prevention. <https://www.dir.ca.gov/dosh/heatillnessinfo.html>. Accessed July 2023

MEASURE O-7: Maximize operational flexibility and redundancies, including water transfer agreements, interties, flexible exchanges, additional system interconnections, and points of delivery.

Climate change is projected to increase the intensity, duration, and frequency of extreme heat and extreme weather events, which will increase the probability of power and water service disruptions. Additionally, LVMWD's potable water system is largely dependent on imported water supplies that may be subject to scheduled and unscheduled water delivery interruption that may impact the ability to deliver potable water. This measure seeks to increase redundancies and operational flexibilities to protect service continuity during emergency/hazard scenarios and potable water disruptions. LVMWD and the JPA have a history of fostering strong partnerships with local and regional entities including Calleguas Municipal Water District, Los Angeles Department of Water and Power (LADWP), and neighboring jurisdictions.⁷⁶ Developing interties, water transfer agreements, and other redundancies will improve future reliability.

Actions

- **Action O-7.1:** Partner with neighboring water providers, starting with District 29, to develop additional emergency water system interties to ensure water service continuity and reliability.
- **Action O-7.2:** Continue partnering with Calleguas Municipal Water District and LAWDP to improve connectivity with Metropolitan Water District's Colorado River Aqueduct (CRA) system via the East-West Feeder, Sepulveda Pass and other opportunities.

- **Action O-7.3:** Continue to coordinate with neighboring jurisdictions to ensure adequate water availability and peak load water supply for fire suppression efforts in alignment with CAL FIRE's recommendations.
- **Action O-7.4:** As necessary, increase storage capacity where feasible at water system facilities to prepare for wildfire and drought periods.

Target Metrics

- Agreements, interties, system interconnections and other redundancies developed

GHG Emissions Reductions

- GHG Emissions Not Quantified

Objectives

- Enhanced Water Supply Diversification
- Improved Operational Flexibility & Reliability
- Better Connected People and Water

76. LVMWD. *Las Virgenes-Calleguas Interconnection Project*. <https://www.lvmwd.com/our-services/construction-projects/construction-projects-completed/las-virgenes-calleguas-interconnection-project>. Accessed July 2023

NATURAL RESOURCES MEASURES

MEASURE NR-1: Investigate and implement carbon sequestration opportunities to offset all Water Reclamation Facility fugitive emissions by 2045.

This measure provides opportunities for negative emissions through carbon sequestration on natural and working lands (e.g., rangeland, forests, woodlands, wetlands and coastal areas, grasslands, shrubland, farmland, riparian areas, and urban green space). Carbon sequestration programs will be an important tool to mitigate some of LVMWD's and the JPA's emissions. While carbon sequestration programs can require a large investment up-front, this cost could be mitigated through credit generation opportunities based on CARB's "Carbon Capture and Sequestration protocol" adopted in 2018 as well as through other voluntary and Federal carbon markets.⁷⁷

Actions

- **Action NR-1.1:** Conduct an assessment to identify the potential capacity for planting new trees, identify a timeframe for implementation, outline a management plan for existing trees, and establish a tracking system to assess progress towards an annual benchmark.
- **Action NR-1.2:** Partner with TreePeople or other organizations to develop and host an annual employee tree planting day.
- **Action NR-1.3:** Increase carbon sequestration by planting and supporting 25 new trees annually through 2030 to sequester carbon and create shade to reduce heat island effect.
- **Action NR-1.4:** Explore grant funding opportunities for tree planting. Identify and apply for applicable federal (e.g., USDA) and state (e.g., California ReLeaf, Affordable Housing and Sustainable Communities Program [AHSC], Urban and Community Forestry Program) available grants for Tree Planting projects.
- **Action NR-1.5:** As part of the Landscape Transformation Initiative, develop landscape guidance materials that include information regarding flora CO₂ sequestration potential to promote the incorporation of landscape plants that are both climate resilient and CO₂ sequestering. Climate resilient species have characteristics of drought tolerance, low water use, pest and disease resistance, fire-retardant or fire-resistance, and salinity tolerance. Consider vegetative options with higher CO₂ sequestration potential for JPA and LVMWD facilities landscaping.

Target Metrics

- 25 new trees planted annually through 2030

GHG Emissions Reductions

- 6 MT CO₂e in 2030
- 48 MT CO₂e in 2045

Objectives

- Better Protected Water Resources
- Increased Operational Efficiency & Resource Management

77. CARB. 2023. Carbon Capture and Sequestration Protocol. [https://ww2.arb.ca.gov/resources/documents/carbon-capture-and-sequestration-protocol-under-low-carbon-fuel-standard#:~:text=California%20Air%20Resources%20Board,-Main%20navigation&text=The%20Carbon%20Capture%20and%20Sequestration,\(CO%2D%20EOR\)](https://ww2.arb.ca.gov/resources/documents/carbon-capture-and-sequestration-protocol-under-low-carbon-fuel-standard#:~:text=California%20Air%20Resources%20Board,-Main%20navigation&text=The%20Carbon%20Capture%20and%20Sequestration,(CO%2D%20EOR).). Accessed July 2023

MEASURE NR-2: Catalog and improve the stability of hillside monitoring and stabilization efforts after heavy rain events in areas at risk of landslides and debris flows to minimize impacts to infrastructure and equipment.

Climate change is projected to increase the frequency and intensity of extreme precipitation events and wildfires, which can increase landslides and debris flow susceptibility. This measure seeks to implement mitigation efforts to minimize infrastructure and equipment vulnerability to landslides and debris flows. Implementing landslide monitoring equipment can report critical data regarding slope stability/hillside movement and precipitation measurements. Equipment may also provide automated warning and alarms in advance of a potential hazard scenario.⁷⁸

Actions

- **Action NR-2.1:** Conduct a landslide risk vulnerability assessment of critical assets to identify which assets are most vulnerable to damage from landslides and debris flows.
- **Action NR-2.2:** Install landslide monitoring equipment in landslide susceptibility areas that are adjacent to critical assets.
- **Action NR-2.3:** Based on the vulnerability assessment, conduct hardening upgrades to critical JPA and LVMWD assets that are most vulnerable to damage from landslides and debris flows.

Target Metrics

- Assets upgraded
- Monitoring equipment installed

GHG Emissions Reductions

- GHG Emissions Not Quantified

Objectives

- Better Protected Water Resources

78. Call&Nicholas Instruments, Inc. Real-Time Slope Monitoring. <https://www.slideminder.com/>. Accessed July 2023

MEASURE NR-3: Protect Las Virgenes Reservoir from sedimentation associated with extreme climate events.

Climate change is projected to increase the frequency and intensity of extreme precipitation and wildfires, which may trigger erosion and landslides, increasing sediment levels in Las Virgenes Reservoir which can lead to water quality impacts.⁷⁹ This measure seeks to protect Las Virgenes Reservoir from increased sedimentation through various sediment control management efforts that are focused to minimize erosion, remove sediment, and increase treatment capabilities.

Actions

- **Action NR-3.1:** Develop procedures to regularly measure reservoir sedimentation volume to determine the varying rates and patterns of potential storage loss.
- **Action NR-3.2:** Implement strategies to mitigate reservoir sedimentation including sediment removal by dredging or flushing.
- **Action NR-3.3:** Develop a vegetation and erosion management strategy to mitigate fire risk around Las Virgenes Reservoir to minimize potential post-fire soil erosion impacts on reservoir sedimentation.
- **Action NR-3.4:** Increase wastewater treatment capabilities to manage potential future sediment levels from future stormwater, landslide, wildfire, and erosion impacts.

Target Metrics

- Sediment level reduced

GHG Emissions Reductions

- GHG Emissions Not Quantified

Objectives

- Better Protected Water Resources

79. EPA. *Climate Adaptation and Erosion and Sedimentation*. <https://www.epa.gov/arc-x/climate-adaptation-and-erosion-sedimentation>. Accessed July 2023

MEASURE NR-4: Develop and implement a wildfire abatement and response policy.

Climate change is projected to increase the frequency and intensity of wildfire in the District's service area. LVMWD and JPA assets and infrastructure located in High, and Very High Fire Hazard Severity Zones are at greatest risk to impacts from wildfire. Wildfire can create risk of injury or death, damage to properties, critical facilities, infrastructure, and need for evacuation. Cascading impacts may also include worsened air quality, contaminated water supplies, power outages, and other service disruptions. This measure seeks to mitigate wildfire risk and potential future impacts through strategies that reduce vegetation and structural ignition, harden infrastructure and assets, and increase fire suppression capabilities. Relocating critical infrastructure and facilities outside of Fire Hazard Severity Zones should be considered if retrofits and upgrades are not feasible or provide adequate protection from potential fires.⁸⁰

Actions

- **Action NR-4.1:** In the development of a wildfire abatement and response policy, develop strategies to mitigate risk from wildfire through defensible space, fire-safe landscaping, reduction of structural ignition, fire resistant retrofitting, fire suppression water flow, and vegetation management, in alignment with CAL FIRE guidance, standards, and building codes.
- **Action NR-4.2:** Develop criteria for future structure and facility developments to reduce vulnerability to ember ignition.
- **Action NR-4.3:** Dedicate staff time to identify funding (e.g., CAL FIRE or FEMA) to implement upgrades or retrofits to mitigate wildfire risk.
- **Action NR-4.4:** Conduct hardening upgrades to structures and facilities (i.e., reservoirs, pump structures, treatment facilities, and administrative offices) that are in CAL FIRE High and Very High Fire Hazard Severity Zones.

- **Action NR-4.5:** When retrofits and upgrades are not adequate or feasible, develop plans to relocate critical assets outside of CAL FIRE High and Very High Fire Hazard Severity Zones to the extent practicable.
- **Action NR-4.6:** Develop a schedule and monitor vegetative management efforts and defensible space relative to critical assets at risk.
- **Action NR-4.7:** Coordinate with CAL Fire, Los Angeles County Fire Department, and surrounding property owners to ensure adequate fire road access to critical JPA and LVMWD facilities.

Target Metrics

- Wildfire abatement and response policy development and implementation
- Facilities and structures retrofitted, upgraded, or relocated

GHG Emissions

- GHG Emissions Not Quantified

Objectives

- Better Protected Water Resources
- Improved Operational Flexibility & Reliability
- Better Connected People and Water

80. UC ANR et al. 2021. Wildfire & Water Supply in California. <https://innovation.luskin.ucla.edu/wp-content/uploads/2021/12/Wildfire-and-Water-Supply-in-California.pdf>. Accessed July 2023

7.

IMPLEMENTATION AND MONITORING STRATEGY

CAAP IMPLEMENTATION

This CAAP outlines specific measures and actions to achieve GHG emissions reduction and improve the resilience of LVMWD's and the JPA's operations to climate change. Implementation of the CAAP is planned to occur between 2023 and 2045. Due to the long implementation time-period of the CAAP, measures and actions may evolve over time as LVMWD and the JPA track progress, new technologies and legislation emerge, and

funding opportunities for additional GHG emissions reduction and climate adaptation opportunities are identified. This section details an implementation plan for the CAAP, which will include transforming measures and actions into on-the-ground policies, programs, and projects. Implementation of this CAAP is grounded in science, best available data, and current best practices in climate action and adaptation planning.

Steps for Implementation: Action Prioritization

The CAAP will take a phased approach to action implementation.

- **Phase 1** will occur in the near-term (beginning of 2023–2026).
- **Phase 2** will include the implementation of mid-term actions (2026–2029).
- **Phase 3** will include the implementation of long-term actions (2029–2045).

Near-term actions with the greatest return for the least amount of investment, such as energy efficiency projects, water efficiency projects, and protocols/policies, often provide opportunities for early GHG reductions and climate adaptation from which future capital or time-intensive actions can build. Feasibility studies and surveys can often be completed

in the near-term to set a foundation for long-term capital investments or infrastructure developments that will provide LVMWD and the JPA with significant GHG emissions reduction, lifecycle cost savings, and long-term resilience to the impacts of climate change.

Table 7-1 provides a summary of the priority measures and actions, as well as their identified phase, responsible department, and metrics for tracking. The CAAP primarily focuses on Phase 1 and 2 measures and actions. Over time additional actions may need to be adopted to achieve the long-term goal of carbon neutrality and further adapt to climate change. New technologies and approaches should be monitored and incorporated into future planning initiatives.



RESPONSIBLE PARTIES

Planned CAAP implementation and monitoring is central to the success of any CAAP in achieving GHG reduction targets and increasing resilience to climate change. Implementation planning involves identifying responsible parties for implementation. Several divisions within LVMWD and the JPA will play a key role in the CAAP's implementation and monitoring. Responsible parties are listed and described below.⁸¹

Facilities

The Facilities Division is responsible for the maintenance, regulatory compliance, and replacement needs of the District Headquarters, potable water, recycled water, and sanitation facilities. The Division will play a critical role in implementing waste, energy, and other resource reduction measures, carbon capture and sequestration measures, and several climate hazard mitigation measures at LVMWD and JPA facilities. The maintenance team will also be responsible for identifying opportunities to increase energy efficiency and to decarbonize vehicles, stationary equipment, and facilities.

Water Systems

The Water Systems Division is responsible for the day-to-day operations, and regulatory compliance of the potable water distribution, storage and treatments facilities and the recycled water storage and conveyance system. . The Division will play a key role in future implementation and operations of the Advanced Water Purification Facility for the Pure Water Project Las Virgenes - Triunfo, maximizing operational flexibility and redundancies, and increasing regional dry and wet weather diversions.

Water Reclamation

The Water Reclamations Division is responsible for the day-to-day operations and regulatory compliance of the Tapia Water Reclamation Facility. The Division will play a key role in efforts to reduce GHG emissions associated with wastewater treatment, increase wastewater treatment capabilities, and manage future battery storage systems at water system facilities.

Finance

The Finance Division is responsible for managing the purchasing processes, financing options, and cost-effectiveness of the District's operations. In collaboration with other departments and divisions, the Division will play a major role in identifying and administering funding and financing opportunities to support the implementation of CAAP actions, especially those that require significant capital investments including solar photovoltaics, EV chargers, and battery storage solutions.

81. LVMWD. 2023. Management. <https://www.lvmwd.com/the-district/departments>. Accessed July 2023

Human Resources

The Human Resources Division provides guidance and support to all departments for recruitment, selection, classification/salary structures, employee benefits, employee relations, employee training, labor negotiations, performance evaluations, employee development, safety and other personnel programs and processes. The Division will play a critical role in leading efforts to implement protocols and programs to protect staff from climate extremes and promoting continued efforts to support the teleworking program and other potential programs such as rideshares.

Information Systems

The Information Systems Division supports a local area network with servers, software applications, desktop computers, laptops, wireless access points, firewalls, switches, and closed-circuit television (CCTV) cameras. The Division also manages the SCADA system, web services, Multiprotocol Label Switching (MPLS) network, Voice Over Internet Protocol (VOIP) telephony, Geographic Information Systems (GIS) and many real-time IP based communications systems, such as security video applications. The Division will play a critical role in improving the SCADA system to increase operational efficiency, optimization, and control.

Engineering and Technical Services

The Engineering and Technical Services Division is primarily responsible for project engineering and management, construction, and inspections. The Division will play a key role in conducting feasibility studies and assessments and managing capital improvement projects, such as onsite renewables, batter storage systems, and facility hardening upgrades.

Public Affairs and Communications

The Public Affairs and Communications Division manages external communications and works closely with local partners, including schools and community organizations to promote water awareness, water conservation, and environmental stewardship. The Division often supports and participates in local community events around these topics. The Division will play a key role in continuing and developing new outreach and engagement efforts around water conservation and climate resilient landscaping.

Resource Conservation

The Resource Conservation Division is responsible for the management of water resources and conservation efforts. The Division administers LVMWD's rebate programs including but not limited to the Weather-Based Irrigation and the Rain Barrel Giveaway/Rebate programs and the Landscape Transformation Program. The Division will play a key role in implementing CAAP efforts related to increasing water conservation, expanding rebate programs, and supporting the conversion from water intensive landscaping.

Customer Service

The Customer Service Division is responsible for customer billing, water meter installations and maintenance, water meter data management, the installation of flow restrictors and service shut-offs associated with wasteful water use, and other customer-centric tasks.

Table 7-1. Implementation Timeline by CAAP Action

Measure/ Action	Phase	Primary Implementing Divisions	Implementation Metric
Measure I-1 Utilize carbon-free electricity for 100% of electricity needs by 2030.			
I-1.1	2-3	Engineering and Technical Services, Facilities	MW of solar installed
I-1.2	1	Engineering and Technical Services, Facilities	Feasibility study completed
I-1.3	1	Engineering and Technical Services, Facilities	Assessment completed
I-1.4	1-2	Engineering and Technical Services, Facilities, Finance	Funding identified
I-1.5	2-3	Engineering and Technical Services, Facilities	MW of solar installed
I-1.6	1-2	Engineering and Technical Services, Facilities	Incorporate design elements to minimize GHG emissions
I-1.7	1	Engineering and Technical Services, Facilities, Finance	Analysis completed
I-1.8	1	Facilities	Switch to low carbon or carbon-free electricity
I-1.9	1	Engineering and Technical Services, Facilities	Study completed
Measure I-2 Electrify new and existing stationary equipment to reduce natural gas consumption 75% by 2030 and 100% by 2045.			
I-2.1	1	Engineering and Technical Services, Facilities	Survey completed
I-2.2	1	Facilities, Finance	Policy implemented
I-2.3	1-2	Facilities, Finance	Funding and partnership opportunities identified
I-2.4	1-3	Facilities	Schedule implemented
Measure I-3 Utilize renewable diesel and alternative fuels to bridge the technology gap and decarbonize stationary equipment to reduce diesel consumption by stationary equipment 100% by 2030.			
I-3.1	1	Facilities	Feasibility assessment completed
I-3.2	1-2	Facilities	Partners identified
I-3.3	1	Facilities, Finance	Policy implemented
I-3.4	1	Facilities	Educational materials developed
I-3.5	1-3	Facilities, Finance	LCFS credits monetized

Measure/Action	Phase	Primary Implementing Divisions	Implementation Metric
Measure I-4 Increase energy storage at facilities and buildings.			
I-4.1	1	Engineering and Technical Services, Facilities	Assessment completed
I-4.2	1	Engineering and Technical Services, Facilities	Feasibility study completed; battery storage identified
I-4.3	1-2	Facilities, Finance	Funding opportunities identified
I-4.4	1-3	Facilities	Time of use program documentation
Measure I-5 Improve energy efficiency at facilities and buildings.			
I-5.1	1	Facilities, Water Systems, Water Reclamation	Equipment due for replacement identified; ROI analysis completed
I-5.2	1-3	Facilities, Water Systems, Water Reclamation	Policy developed and implemented
I-5.3	1-3	Facilities, Water Systems, Water Reclamation	Energy audits conducted; Energy recommendations implemented
I-5.4	1-3	Facilities, Water Systems, Water Reclamation	Automated lighting controls implemented
I-5.5	1-3	Facilities, Water Systems, Water Reclamation	Requirement implemented
I-5.6	1-3	Facilities, Water Systems, Water Reclamation	Electricity usage reduced
I-5.7	1-3	Engineering and Technical Services, Facilities	Cool roofs implemented
Measure I-6 Reduce process and fugitive GHG emissions associated with wastewater treatment.			
I-6.1	1-2	Engineering and Technical Services, Water Reclamation	Feasibility and cost analysis completed
I-6.2	1-2	Engineering and Technical Services, Water Reclamation	Partnerships identified
I-6.3	2-3	Engineering and Technical Services, Water Reclamation	Total nitrogen reduced
Measure I-7 Maximize backup power facilities for all critical assets, in alignment with Measure I-4			
I-7.1	1	Engineering and Technical Services, Facilities	Backup power facilities identified
I-7.2	1	Engineering and Technical Services, Facilities	Requirement established and implemented
I-7.3	1-2	Engineering and Technical Services, Facilities, Finance	Funding secured
I-7.4	1-2	Engineering and Technical Services, Facilities	Battery energy storage system procured; generators procured

Measure/Action	Phase	Primary Implementing Divisions	Implementation Metric
Measure I-8 Support the regional development of dry and wet weather stormwater diversions as a supplementary source for recycled potable water.			
I-8.1	1	Engineering and Technical Services, Facilities, Water Reclamation, Water Systems	Acre-feet of diversions
I-8.2	1-2	Engineering and Technical Services, Facilities, Water Reclamation, Water Systems, Finance	Funding programs identified
I-8.3	1	Engineering and Technical Services, Facilities, Water Reclamation, Water Systems	Assessment conducted
Measure I-9 Improve the Supervisory control and data acquisition (SCADA) system.			
I-9.1	1	Information Systems, Water Systems, Water Reclamation	SCADA design criteria revised
I-9.2	1-2	Information Systems, Water Systems, Water Reclamation, Finance	Field instrumentation hardware procured
I-9.3	1-2	Information Systems, Water Systems, Water Reclamation, Finance	Funding obtained
I-9.4	1-2	Information Systems, Water Systems, Water Reclamation	Procedures established
I-9.5	1	Information Systems, Water Systems, Water Reclamation	Setpoint optimization techniques implemented
Measure I-10 Require the incorporation and identification of mitigation and adaptation features into new capital projects.			
I-10.1	1	Engineering and Technical Services, Facilities, Water Systems, Water Reclamation	Design criteria developed and implemented
I-10.2	1-3	Engineering and Technical Services, Facilities, Water Systems, Water Reclamation	Planning documents and programs updated
I-10.3	1	Engineering and Technical Services, Facilities, Water Systems, Water Reclamation	Protocols developed
Measure I-11 Implement the Pure Water Project Las Virgenes Triunfo.			
I-11.1	1-2	Engineering and Technical Services, Water Systems, Facilities, Finance	Advanced Water Purification Facility developed
I-11.2	1-2	Engineering and Technical Services, Water Systems, Facilities, Finance	Climate projections and potential impacts integrated into design
I-11.3	1-2	Finance	Funding obtained
I-11.4	1-2	Engineering and Technical Services, Water Systems, Finance	Feasibility study completed

Measure/ Action	Phase	Primary Implementing Divisions	Implementation Metric
Measure O-1 Electrify or otherwise decarbonize the vehicle fleet such that 75% of the vehicle fleet are zero-emission vehicles (ZEV) by 2030 and 100% of the vehicle fleet are ZEV by 2045.			
O-1.1	1	Facilities Maintenance, Finance	Study completed
O-1.2	1-2	Facilities	Pilots conducted
O-1.3	1	Engineering and Technical Services, Facilities	EV infrastructure plan completed
O-1.4	1-2	Engineering and Technical Services, Facilities, Finance	EV charger installations funded; Panels upgraded
Measure O-2 Increase employee commute ZEV adoption to 25% by 2030 and 50% by 2045.			
O-2.1	1-2	Facilities Maintenance	EV chargers installed
O-2.2	1-2	Facilities Maintenance, Finance and Accounting	Partnerships and funding opportunities identified
O-2.3	1	Facilities Maintenance, Finance and Accounting	Vehicle charging/fueling discounted
O-2.4	1	Facilities Maintenance	Education materials developed and disseminated
Measure O-3 Reduce employee commute VMT by 15% by 2030 and 30% by 2045.			
O-3.1	1-3	Human Resources	Employee commute VMT reduced
O-3.2	1-3	Facilities, Finance	Funding opportunities identified
O-3.3	1-3	Human Resources, Facilities, Finance	Preferred parking spots developed; Incentives offered
O-3.4	1-3	Human Resources, Finance, Public Affairs and Communications	Educational materials developed and disseminated
Measure O-4 Develop a net zero waste program such that waste sent to the landfill is reduced by 90% by 2030 and maintain through 2045.			
O-4.1	1	Resource Conservation, Facilities	Organic waste separation program implemented
O-4.2	1	Resource Conservation, Facilities	Waste assessment conducted
O-4.3	1-2	Resource Conservation, Facilities	Funding opportunities identified
O-4.4	1-3	Resource Conservation, Facilities	Quarterly reports completed
O-4.5	1-3	Resource Conservation, Facilities	Staff training sessions hosted

Measure/Action	Phase	Primary Implementing Divisions	Implementation Metric
Measure O-5 Increase water conservation by reducing demands by at least 20% by 2030 and maintain through 2045.			
O-5.1	1-3	Resource Conservation, Customer Service, Public Affairs and Communications	Programs and plans implemented; Water conserved
O-5.2	2	Engineering and Technical Services, Facilities, Finance	Pure Water Project implemented
O-5.3	1-2	Resource Conservation, Customer Service, Public Affairs and Communications	Recycled water use reduced; Potable water use reduced
O-5.4	1-3	Customer Service	WaterSmart Portal Registrants
O-5.5	1-3	Resource Conservation	Workshops hosted
O-5.6	1	Resource Conservation	Landscape Management Plan prepared
O-5.7	1-3	Resource Conservation	Policy implemented
O-5.8	1-3	Resource Conservation	Water conservation rebates provided
O-5.9	1	Customer Service	Schedule developed; Water meters installed
O-5.10	1-2	Engineering and Technical Services, Facilities	Water evaporation rate reduced
O-5.11	1-2	Engineering and Technical Services, Facilities, Water Systems	Technology procured
O-5.12	1	Finance	Rate structure changes implemented
Measure O-6 Develop resource programs and protocols to protect staff from climate extremes.			
O-6.1	1	Human Resources	Survey developed and distributed
O-6.2	1	Human Resources	Protocols developed
O-6.3	1	Human Resources	Protocols developed; Practice/drills hosted
O-6.4	1	Human Resources, Public Affairs and Communications	Educational materials developed and disseminated

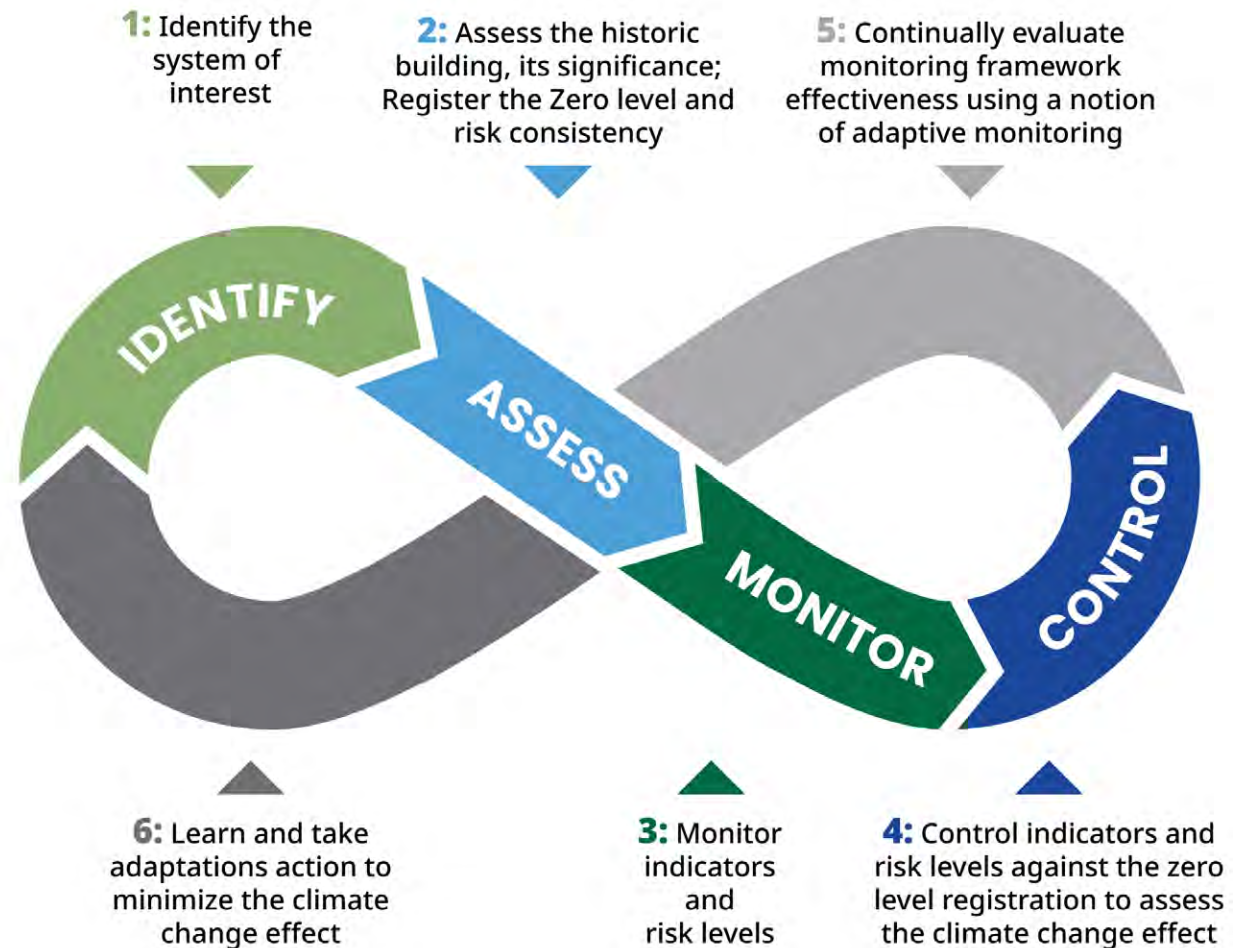
Measure/Action	Phase	Primary Implementing Divisions	Implementation Metric
Measure O-7 Maximize operational flexibility and redundancies, including water transfer agreements, interties, flexible exchanges, additional system interconnections, and points of delivery.			
O-7.1	1-2	Engineering and Technical Services, Water Systems	Interties developed
O-7.2	1-3	Engineering and Technical Services, Water Systems	Connectivity improved
O-7.3	1-3	Engineering and Technical Services, Water Systems	Peak load water supply requirement met
O-7.4	1-2	Engineering and Technical Services, Water Systems	Water storage facilities developed
Measure NR-1 Investigate and implement carbon sequestration opportunities to offset all Water Reclamation Facility fugitive emissions by 2045.			
NR-1.1	1	Engineering and Technical Services, Resource Conservation	Assessment conducted
NR-1.2	1-3	Resources Conservation	Annual employee tree planting day hosted
NR-1.3	1-2	Resource Conservation	Trees planted
NR-1.4	1-2	Engineering and Technical Services, Resource Conservation, Finance	Funding opportunities identified and secured
NR-1.5	1	Resource Conservation	Landscape guidance materials developed and disseminated
Measure NR-2 Catalog and improve the stability of hillside monitoring and stabilization efforts after heavy rain events in areas at risk of landslides and debris flows to minimize impacts to District infrastructure and equipment.			
NR-2.1	1	Engineering and Technical Services	Vulnerability assessment completed
NR-2.2	1-3	Engineering and Technical Services	Landslide monitoring equipment installed
NR-2.3	1-3	Engineering and Technical Services	Assets upgraded
Measure NR-3 Protect the Las Virgenes Reservoir from sedimentation associated with extreme climate events.			
NR-3.1	1	Engineering and Technical Services, Water Systems	Procedures developed and implemented
NR-3.2	1-3	Engineering and Technical Services, Water Systems	Sediment removed
NR-3.3	1-2	Engineering and Technical Services, Water Systems	Vegetation and erosion management strategy developed and implemented
NR-3.4	1-2	Engineering and Technical Services, Water Systems	Sediment level reduced

Measure/Action	Phase	Primary Implementing Divisions	Implementation Metric
Measure NR-4 Develop and implement a wildfire abatement and response policy.			
NR-4.1	1	Engineering and Technical Services, Facilities, Finance	Policy developed
NR-4.2	1	Engineering and Technical Services, Facilities, Finance	Criteria developed
NR-4.3	1-2	Engineering and Technical Services, Facilities, Finance	Funding identified and secured
NR-4.4	1-3	Engineering and Technical Services, Facilities, Finance	Structured and facilities upgraded
NR-4.5	2-3	Engineering and Technical Services, Facilities, Finance	Relocation plans developed
NR-4.6	1-3	Engineering and Technical Services, Facilities, Finance	Schedule developed
NR-4.7	1-3	Engineering and Technical Services, Facilities, Finance	Adequate fire road access maintained

CAAP MONITORING AND REPORTING ON PROGRESS

The climate action and adaptation planning process is infinitely iterative, as shown in Figure 7-1. As strategies and actions are implemented, it is imperative to assess success by tracking emissions reductions and variables such as cost and additional benefits achieved through implementation in order to understand the overall impact of each strategy. While substantial evidence suggests that the mitigation and adaptation measures and actions outlined in this CAAP have a high level of probability to achieve the 2030 target, consistent with SB 32, and increase resilience to climate change, uncertainty increases over time. If LVMWD and the JPA determine that implementation of specific strategies is not achieving the anticipated emissions reductions or resilience improvement, the strategy may have to be revised or replaced in order to establish a path forward to meet their ultimate goal of carbon neutrality by 2045.

Figure 7-1. CAAP Implementation and Monitoring Process



LVMWD CAAP Update Timeline

The Director of Engineering and External Affairs will report results on monitoring and implementation of each action, develop an updated GHG inventory, and report findings to LVMWD's and the JPA's Board of Directors annually. Every 5 years, the CAAP should be updated to include a revised GHG emissions forecast, assessment of climate change vulnerabilities, implementation status, and/or revised measures and actions. Technology, State legislation, funding, and operational changes over time may impact the rate of implementation and need for modification of the CAAP measures and actions. Therefore, the Director of Engineering and External Affairs will work with responsible department and division leaders to re-evaluate climate action and adaptation progress and factors influencing implementation. Through the evaluation process, LVMWD and the JPA may consider revising measures and actions in future CAAP updates.

Targets will be re-evaluated and assessed on a periodic basis to gauge progress made, address new regulations, and best practices, and evaluate LVMWD's and the JPA's ability to achieve GHG emissions reduction through the measures and actions outlined in Chapter 6. Additionally, climate change projections and potential impacts should be updated, as part of the Climate Change Vulnerability chapter (Chapter 3), in alignment with best available climate science. Measures and actions should be adjusted as more data and information become available to LVMWD and the JPA. They should also be tracked congruently with future State GHG reduction and climate adaptation legislation to ensure alignment.



Monitoring and Reporting Timeline

The CAAP implementation metrics will be monitored on an annual basis to track climate action and adaptation progress. The Director of Engineering and External Affairs will prepare an update on the implementation status of the CAAP's Measures (Table 7-1) on an annual basis, starting in 2024. As new technologies become available and new State mandates are adopted, LVMWD and the JPA may need to develop new or updated measures and actions. Re-evaluation of the CAAP's measures and actions will occur approximately every 5 years or more frequently. The Director of Engineering and External Affairs will report implementation monitoring results for each action, GHG inventory update results, and CAAP re-evaluation results to the LVMWD and JPA Board of Directors on an annual basis. Pictured below is the 5-megawatt solar field.



A.

APPENDIX



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Regulatory Context

As the impacts of climate change are becoming clearer, strategies to address climate change are emerging at all levels of government. This section provides an overview of the regulatory context at the international, state, and local levels relative to LVMWD's and the JPA's actions toward reducing GHG emissions.

International Climate Action Guidance

1992 United Nations Framework Convention on Climate Change

The primary international regulatory framework for GHG reduction is the United Nations Framework Convention on Climate Change Paris Agreement (UNFCCC). The UNFCCC is an international treaty adopted in 1992 with the objective of stabilizing atmospheric GHG concentrations to prevent disruptive anthropogenic climate change. The framework established non-binding limits on global GHG emissions and specified a process for negotiating future international climate-related agreements.¹

1997 Kyoto Protocol

The Kyoto Protocol is an international treaty that was adopted in 1997 to extend and operationalize the UNFCCC. The protocol commits industrialized nations to reduce GHG emissions per county-specific targets, recognizing that they hold responsibility for existing atmospheric GHG levels. The Kyoto Protocol involves two commitment periods during which emissions reductions are to occur, the first of which took place between 2008-2012 and the second of which has not entered into force.²

2015 The Paris Agreement

The Paris Agreement is the first-ever universal, legally binding global climate agreement that was adopted in 2015 and has been ratified by 189 countries worldwide.³ The Paris Agreement establishes a roadmap to keep the world under 2° C of warming with a goal of limiting an increase of temperature to 1.5° C. The agreement does not dictate one specific reduction target, instead relying on individual countries to set nationally

¹ United Nations Framework Convention on Climate Change (UNFCCC). United Nations Framework Convention on Climate Change.

https://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf

² UNFCCC. What is the Kyoto Protocol? https://unfccc.int/kyoto_protocol

³ UNFCCC. Paris Agreement - Status of Ratification. <https://unfccc.int/process/the-paris-agreement/status-of-ratification>

determined contributions (NDCs) or reductions based on GDP and other factors. According to the International Panel on Climate Change (IPCC) limiting global warming to 1.5° C will require global emissions to reduce through 2030 and hit carbon neutrality by mid-century.⁴

California Regulations and State GHG Targets

California remains a global leader in the effort to reduce GHG emissions and combat climate change through its mitigation and adaptation strategies. With the passage of Assembly Bill (AB) 32 in 2006, California became the first state in the United States to mandate GHG emission reductions across its entire economy. To support AB 32, California has enacted legislation, regulations, and executive orders (EO) that put it on course to achieve robust emission reductions and address the impacts of a changing climate. The following is a summary of executive and legislative actions most relevant to the CAP Update.

2002 Senate Bill 1078

In 2002, SB 1078, established the California Renewables Portfolio Standards (RPS) Program and was accelerated in 2006 by SB 107, requiring that 20 percent of retail electricity sales be composed of renewable energy sources by 2010. EO S-14-08 was signed in 2008 to further streamline California's renewable energy project approval process and increase the State's RPS to the most aggressive in the nation at 33 percent renewable power by 2020.

2002 Assembly Bill 1493

In 2002, AB 1493, also known as the Pavley Regulations, directed the California Air Resources Board (CARB) to establish regulations to reduce GHG emissions from passenger vehicles to the maximum and most cost-effective extent feasible. CARB approved the first set of regulations to reduce GHG emissions from passenger vehicles in 2004, with the regulations initially taking effect with the 2009 model year.

2005 Executive Order S-3-05

Executive Order (EO) S-3-05 was signed in 2005, establishing Statewide GHG emissions reduction targets for the years 2020 and 2050. The EO calls for the reduction of GHG emissions in California to 2000 levels by 2010, 1990 levels by 2020, and 80 percent below 1990 levels by 2050. The 2050 emission reductions target would put the State's emissions in line with the worldwide reductions needed to reach long-term climate stabilization as concluded by the IPCC 2007 *Fourth Assessment Report*.

⁴ IPCC. Global Warming of 1.5 C. <https://www.ipcc.ch/sr15/>

2006 Assembly Bill 32

California’s major initiative for reducing GHG emissions is outlined in AB 32, the “California Global Warming Solutions Act of 2006,” which was signed into law in 2006. AB 32 codifies the Statewide goal of reducing GHG emissions to 1990 levels by 2020 and requires CARB to prepare a Scoping Plan that outlines the main State strategies for reducing GHG emissions to meet the 2020 deadline. In addition, AB 32 requires CARB to adopt regulations to require reporting and verification of Statewide GHG emissions.

Based on this guidance, CARB approved a 1990 Statewide GHG baseline and 2020 emissions limit of 427 million metric tons of CO₂ equivalent (MMT CO₂e). The Scoping Plan was approved by CARB on December 11, 2008, and included measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures. Many of the GHG reduction measures included in the Scoping Plan (e.g., Low Carbon Fuel Standard, Advanced Clean Car standards,⁵ and Cap-and-Trade) have been adopted since approval of the Scoping Plan.

In May 2014, CARB approved the first update to the AB 32 Scoping Plan. The 2014 Scoping Plan update defined CARB’s climate change priorities for the next five years and set the groundwork to reach post-2020 Statewide goals. The update highlighted California’s progress toward meeting the “near-term” 2020 GHG emission reduction goals defined in the original Scoping Plan. It also evaluated how to align the State’s longer-term GHG reduction strategies with other State policy priorities, including those for water, waste, natural resources, clean energy, transportation, and land use (CARB 2014).

2007 Executive Order S-1-07

Also known as the Low Carbon Fuel Standard, EO S-1-07, issued in 2007, established a Statewide goal that requires transportation fuel providers to reduce the carbon intensity of California’s transportation fuels by at least 10 percent by 2020. EO S-1-07 was readopted and amended in 2015 to require a 20 percent reduction in carbon intensity by 2030, the most stringent requirement in the nation. The new requirement aligns with California’s overall 2030 target of reducing climate changing emissions 40 percent below 1990 levels by 2030, which was set by Senate Bill 32 and signed by the governor in 2016.

2007 Senate Bill 97

Signed in August 2007, SB 97 acknowledges that climate change is an environmental issue that requires analysis in California Environmental Quality Act (CEQA) documents. In March 2010, the California Natural Resources Agency adopted amendments to the State CEQA Guidelines for

⁵ On September 19, 2019, the National Highway Traffic Safety Agency (NHTSA) and the US Environmental Protection Agency (EPA) issued a final action entitled the One National Program on Federal Preemption of State Fuel Economy Standards Rule. This action finalizes Part I of the Safer, Affordable, Fuel-Efficient (SAFE) Vehicles Rule. This rule states that federal law preempts State and local tailpipe greenhouse gas (GHG) emissions standards as well as zero emission vehicle (ZEV) mandates. The SAFE Rule withdraws the Clean Air Act waiver it granted to California in January 2013 as it relates to California’s GHG and zero emission vehicle programs.

the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted guidelines give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and climate change impacts.

2008 Senate Bill 375

SB 375, signed in August 2008, enhances the State’s ability to reach AB 32 goals by directing CARB to develop regional GHG emission reduction targets to be achieved from passenger vehicles by 2020 and 2035. In addition, SB 375 directs each of the State’s 18 major Metropolitan Planning Organizations (MPOs), including the Metropolitan Transportation Commission (MTC), to prepare a “sustainable communities’ strategy” (SCS) that contains a growth strategy to meet these emission targets for inclusion in the MPO’s Regional Transportation Plan (RTP).

On March 22, 2018, CARB adopted updated regional targets for reducing GHG emissions from 2005 levels by 2020 and 2035.

2009 California Green Building Code

The California Green Building Standards Code (CALGreen) is Part 11 of the California Building Standards Code or Title 24 and is the first Statewide “green” building code in the nation. The purpose of CALGreen is to improve public health, safety, and general welfare by enhancing the design and construction of buildings. Enhancements include reduced negative impact designs, positive environmental impact designs, and encouragement of sustainable construction practices. The first CALGreen Code was adopted in 2009 and has been updated in 2013, 2016, and 2019. The CALGreen Code will have subsequent, and continually more stringent, updates every three years.

2009 Senate Bill X7-7

In 2009, SB X7-7, also known as the Water Conservation Act, was signed, requiring all water suppliers to increase water use efficiency. This legislation sets an overall goal of reducing per capita urban water use by 20 percent by 2020.

2011 Senate Bill 2X

In 2011, SB 2X was signed, requiring California energy providers to buy (or generate) 33 percent of their electricity from renewable energy sources by 2020.

2012 Assembly Bill 341

AB 341 directed the California Department of Resources Recycling and Recovery (CalRecycle) to develop and adopt regulations for mandatory commercial recycling. As of July 2012, businesses are required to recycle, and jurisdictions must implement a program that includes education, outreach, and monitoring. AB 341 also set a Statewide goal of 75 percent waste diversion by the year 2020.

2014 Assembly Bill 32 Scoping Plan Update

In 2014, CARB approved the first update to the Scoping Plan. This update defines CARB's climate change priorities and sets the groundwork to reach the post-2020 targets set forth in EO S-3-05. The update highlights California's progress toward meeting the near-term 2020 GHG emissions reduction target, defined in the original Scoping Plan. It also evaluates how to align California's longer-term GHG reduction strategies with other Statewide policy priorities, such as water, waste, natural resources, clean energy, transportation, and land use.

2014 Assembly Bill 1826

AB 1826 was signed in 2014 to increase the recycling of organic material. GHG emissions produced by the decomposition of these materials in landfills were identified as a significant source of emissions contributing to climate change. Therefore, reducing organic waste and increasing composting and mulching are goals set out by the AB 32 Scoping Plan. AB 1826 specifically requires jurisdictions to establish organic waste recycling programs by 2016, and phases in mandatory commercial organic waste recycling over time.

2015 Senate Bill 350

SB 350, the Clean Energy and Pollution Reduction Act of 2015, has two objectives: to increase the procurement of electricity from renewable sources from 33 percent to 50 percent by 2030 and to double the energy efficiency of electricity and natural gas end users through energy efficiency and conservation.

2015 Executive Order B-30-15

In 2015, EO B-30-15 was signed, establishing an interim GHG emissions reduction target to reduce emissions to 40 percent below 1990 levels by 2030. The EO also calls for another update to the CARB Scoping Plan.

2016 Senate Bill 32

On September 8, 2016, the governor signed SB 32 into law, extending AB 32 by requiring the State to further reduce GHGs to 40 percent below 1990 levels by 2030 (the other provisions of AB 32 remain unchanged). The bill charges CARB to adopt the regulation so that the maximum technologically feasible emissions reductions are achieved in the most cost-effective way.

2016 Senate Bill 1383

Adopted in September 2016, SB 1383 requires CARB to approve and begin implementing a comprehensive strategy to reduce emissions of short-lived climate pollutants. The bill requires the strategy to achieve the following reduction targets by 2030:

- Methane – 40 percent below 2013 levels

- Hydrofluorocarbons – 40 percent below 2013 levels
- Anthropogenic black carbon – 50 percent below 2013 levels

SB 1383 also requires CalRecycle, in consultation with CARB, to adopt regulations that achieve specified targets for reducing organic waste in landfills. The bill further requires 20% of edible food disposed of at the time to be recovered by 2025.

2017 Scoping Plan Update

On December 14, 2017, CARB adopted the 2017 Scoping Plan, which provides a framework for achieving the 2030 goal set by SB 32. The 2017 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently adopted policies, such as SB 350 and SB 1383.

The 2017 Scoping Plan also puts an increased emphasis on innovation, adoption of existing technology, and strategic investment to support its strategies. As with the 2014 Scoping Plan Update, the 2017 Scoping Plan does not provide project-level thresholds for land use development. Instead, it recommends that local governments adopt policies and locally appropriate quantitative thresholds consistent with Statewide per capita goals of six metric tons (MT) CO₂e by 2030 and two MT CO₂e by 2050 (CARB 2017). As stated in the 2017 Scoping Plan, these goals may be appropriate for plan-level analyses (city, county, subregional, or regional level), but not for specific individual projects because they include all emissions sectors in the State.

2018 Senate Bill 100

Adopted on September 10, 2018, SB 100 supports the reduction of GHG emissions from the electricity sector by accelerating the State’s Renewables Portfolio Standard Program, which was last updated by SB 350 in 2015. SB 100 requires electricity providers to increase procurement from eligible renewable energy resources to 33 percent of total retail sales by 2020, 60 percent by 2030, and 100 percent by 2045.

2018 Executive Order B-55-18

Also, on September 10, 2018, the governor issued Executive Order B-55-18, which established a new Statewide goal of achieving carbon neutrality by 2045 and maintaining net negative emissions thereafter. This goal is in addition to the existing Statewide GHG reduction targets established by SB 375, SB 32, SB 1383, and SB 100.

2020 Advanced Clean Trucks Regulation

The Advanced Clean Trucks Regulation was approved on June 25, 2020. The regulation establishes a zero-emissions vehicle sales requirement for trucks or on-road vehicles over 8,500 lbs gross vehicle weight and set a one-time reporting requirement for large entities and fleets. Under the

regulation, manufacturers who certify Class 2b-8 chassis or complete vehicles with combustion engines are required to sell zero-emission trucks as an increasing percentage of their annual California sales from 2024 to 2035. By 2035, zero-emission truck/chassis sales need to be 55% of Class 2b – 3 truck sales, 75% of Class 4 – 8 straight truck sales, and 40% of truck tractor sales. Additionally, the regulation established a one-time reporting requirement for large entities and fleets where fleet owners, with 50 or more trucks, are required to report about their existing fleet operations by March 15, 2021.

2022 Senate Bill 1020

Adopted in September 2022, SB 1020 advances the state’s trajectory to 100 percent clean energy procurement by 2045 by creating clean energy targets of 90 percent by 2035 and 95 percent by 2040. SB 1020 builds upon SB 100, which accelerated the state’s RPS, which requires electricity providers to increase procurement from eligible renewable energy resources to 60 percent by 2030 and 100 percent by 2045.

2022 Assembly Bill 1279

Adopted in September 2022, AB 1279, codifies the statewide carbon neutrality goal into a legally binding requirement for California to achieve carbon neutrality no later than 2045 and ensure 85 percent GHG emissions reduction under that goal. AB 1279 builds upon EO B-55-18 which originally established California’s 2045 goal of carbon neutrality.

2022 Scoping Plan Update

In November 2022, CARB adopted the 2022 Scoping Plan, which provides a framework for achieving the 2045 carbon neutrality goal set forth by AB 1279. The 2022 Scoping Plan relies on the continuation and expansion of existing policies and regulations, such as the Cap-and-Trade Program, as well as implementation of recently approved legislation, such as AB 1279.

The 2022 Scoping Plan includes, for the first time, a robust discussion of the Natural and Working Lands (NWL) sectors as both sources of emissions and carbon sinks. The Plan also centers equity when outlining state climate investments and climate mitigation strategies. As with the 2014 and 2017 Scoping Plans, the 2022 Scoping Plan does not provide project-level thresholds for land use development.

2022 Advanced Clean Cars II

The Advanced Clean Cars II regulation was adopted in August 2022. The regulation amends the Zero-emission Vehicle Regulation to require an increasing number of zero-emission vehicles, and relies on advanced vehicle technologies, including battery electric, hydrogen fuel cell electric and plug-in hybrid electric-vehicles, to meet air quality, climate change emissions standards, and Executive Order N-79-20, which requires that all new passenger vehicles sold in California be zero emissions by 2035. The regulation also amends standards for gasoline cars and heavier passenger trucks to continue to reduce smog-forming emissions.

2023 Advanced Clean Fleet

Approved by CARB on April 28, 2023, the Advanced Clean Fleets Regulation requires fleets, businesses, and public entities that own or direct the operation of medium- and heavy-duty vehicles in California to transition to 100 percent zero-emission capable utility fleets by 2045. Under the regulation, fleet operators may choose to purchase only ZEVs beginning in 2024 and remove internal combustion engine vehicles at the end of their useful life or fleet operators may elect to meet the State’s ZEV milestone targets as a percentage of the total fleet starting with vehicle types that are most suitable for electrification.



**Las Virgenes
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DATE: October 3, 2023
TO: Board of Directors
FROM: Engineering and External Affairs

SUBJECT: On-Call Grant Writing and Administration Services: Award

SUMMARY:

On July 20, 2023, staff issued a Request for Proposals (RFP) for on-call grant writing and administration services. The RFP was posted on the District’s website, and staff contacted grant writing firms to encourage them to submit proposals. On August 17, 2023, the District received four competitive proposals in response to the RFP. An evaluation committee reviewed the four proposals and unanimously ranked West Yost & Associates, Inc., as most qualified. As a result, staff recommends accepting the proposal from West Yost & Associates, Inc., in the amount of \$100,000, with four one-year renewal options, for on-call grant writing and administration services.

RECOMMENDATION(S):

Accept the proposal from West Yost & Associates, Inc., and authorize the General Manager to execute a one-year professional services agreement, in the amount of \$100,000, with four one-year renewal options, for on-call grant writing and administration services.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

The total cost of this action will not exceed \$100,000 for the first year of services. The actual amount to be paid would be based on the hourly rate for services performed including direct reimbursable costs for travel and other business-related expenses. Sufficient funds for the work are available in the adopted Fiscal Year 2023-24 Budget for the first year of services and will be proposed in future fiscal year budgets for the renewal options. The cost for future renewal options would be adjusted for inflation based on actual changes to the applicable

Consumer Price Index for the location where staff from the firm performs the work.

DISCUSSION:

The District places a high priority on securing grant funding to offset the cost of capital improvement projects and program initiatives to keep rates competitively low for customers. Successful grant management requires strategizing to identify applicable grant opportunities, preparing grant applications, securing grant funding, and administering funding awarded through state, federal and local grant and loan programs.

Following is a summary of grant funding successfully secured by the District in recent years:

- 2017 USBR Research Grant – \$300k
- 2019 Prop. 12 Coastal Conservancy Grant – \$924k
- Prop 1/SWRCB Pure Water Demonstration Facility Grant – \$893k
- 2020 IRWMP AMI Project Grant – \$715k
- USBR WaterSMART Grant – AMI Project Grant – \$500k
- Prop 84- CMWD/LVMWD Intertie Project Grant – \$2 million
- Title XVI Water Reclamation and Reuse Grant – \$10.2 million

Over the last seven years, the District has secured a total of \$15.5 million in grant funding. In an effort to continue and expand upon its success in securing grant funding for the District, staff has developed a model to utilize key grant funding support services to assist key staff in achieving comprehensive grant program outcomes. The scope of work includes development of a customized strategic funding plan, grant application assistance, on-going grant administration, and labor compliance monitoring services in compliance with California and/or federal laws for public works projects.

Recently, a Management Analyst position was assigned to the Resource Conservation Section, and the job description was refined to include grant management, acting as the District liaison for grant oversight. The Management Analyst will manage the proposed professional services agreement and ensure achievement of the District's overarching grant goals. The work includes a significant effort for researching, planning and applying for grant funding, notwithstanding the long-term grant management, final reporting and financial tracking required for a successful program.

Proposals for on-call grant writing and administration services were received from the following firms:

- West Yost & Associates, Inc.
- B & A Grant Services and Software
- Engineering Solutions Services, Inc.
- Townsend Public Affairs, Inc.

The four proposals were evaluated, scored and ranked by staff. Overall, the proposals received were very competitive in terms of cost, and all the firms are well-qualified to perform the work. Of the four proposals, the one submitted by West Yost & Associates, Inc., was unanimously ranked highest across six key scoring areas. From August 2022 to August 2023, West Yost & Associates, Inc., successfully provided the District with grant writing and administration services. West Yost has been instrumental in the successful award and

administration of the Advanced Metering Infrastructure (AMI) Project grants, as well as completing the recent Pure Water Demonstration Facility Proposition 1 Grant. The firm has a solid understanding of the District's projects and priorities and is well positioned to address the grant funding pursuits of the District going forward. West Yost & Associates, Inc., was also the only firm to provide comments on the proposed professional services agreement as requested in the RFP to expedite the process to execute the agreement.

Attached for reference is a copy of the proposal by West Yost & Associates, Inc.

GOALS:

Ensure Effective Utilization of the Public's Assets and Money

Prepared by: Craig Jones, Resource Conservation Manager

ATTACHMENTS:

[Proposal by West Yost & Associates, Inc.](#)



LAS VIRGENES MUNICIPAL WATER DISTRICT

On-Call Grant Writing and Administration Services

AUGUST 17, 2023



August 17, 2023

23692 Birtcher Drive 949.517.9060 phone
Lake Forest, CA 92630 530.756.5991 fax
westyost.com

Mr. Craig A. Jones

Las Virgenes Municipal Water District
4232 Las Virgenes Road, Calabasas, CA 91302

RE: Response to Request for Proposals for On-Call Grant Writing and Administration Services

Dear Craig:

The Las Virgenes Municipal Water District (LVMWD) is seeking a highly qualified firm to aid with grant research, application writing, and preparation efforts in support of LVMWD's capital financing needs. West Yost has a proven team with experience and demonstrated success to provide these services. West Yost has reviewed the Grant Writing and Grant Administration Support Services RFP and has a clear understanding of the scope of work. West Yost's Funding Team offers a full services approach to funding projects. We assist clients in strategizing and identifying, applying for, securing, and managing funds obtained through state, federal and local grant and loan programs. **We have assisted over 30 clients in securing nearly \$1 billion in total funding, with over \$100 million of the funding through grants.** Our success is based on maintaining excellent working relationships with funding agency staff, solid technical and writing skills, close coordination with our clients, and attention to detail.

Our team is led by Project Manager and Senior Grant Funding Specialist **Sheri Lasick** who has more than 20 years of experience strategizing, securing, and managing funds awarded for various types of federal and state grant programs. She has had the pleasure of assisting LVMWD for over two years through her consulting business, Sylvir Consulting, Inc, and continuing that work after joining West Yost in 2022. Our other senior Funding Team members assigned to this project, **Monique Day, PE** and **Hawkeye Sheene**, have demonstrated success in providing grant strategy services, funding application support, and grant management support for over 30 municipal and water agency clients in California. Our team is cohesive, with Monique and Sheri having worked together on funding strategies, applications, and management pursuits for the past ten years, first with Sheri as a West Yost subconsultant and now working at West Yost. West Yost is excited for the opportunity to continue to offer our assistance to LVMWD in its funding efforts and to help identify funding solutions for your important projects. Our Funding Team is well known for our energy, responsiveness, dedication, and collaborative approach to problem-solving. We are confident that the LVMWD will be completely satisfied with the quality of our work and our commitment to achieving the highest possible level of client support. West Yost will provide:

- **A commitment to working collaboratively.** West Yost is committed to working with LVMWD staff to identify and prepare projects for grant funding, prepare high quality grant applications, and administer the funding reporting requirements.
- **Leadership that delivers.** With over 20 years of experience from each of our key team members, you can count on us to lead your funding pursuits to successful outcomes.
- **A team with a deep bench to deliver projects of any type and size.** West Yost will leverage our team of over 200 technical and administrative staff to complete projects of any type and size.

Thank you for providing West Yost the opportunity to be of service to the LVMWD. West Yost has reviewed the terms of the Professional Services Agreement and have included requested edits in Appendix A. As Principal-in-Charge and Project Manager, we are committed to allocating the resources and support needed to deliver a successful project.

Sincerely,

WEST YOST



Lindsay Smith, PE
Principal-in-Charge/Vice President
530.574.5734 | lsmith@westyost.com



Sheri Lasick
Project Manager/Senior Grant Funding Specialist
916.622.2348 Cell | slasick@westyost.com

2 // FIRM EXPERIENCE



We are grant funding and strategic planning experts.



Firm Overview

West Yost is a consulting engineering firm that was founded in 1990. Our focus is exclusively water, wastewater, recycled water, groundwater, and stormwater. We have broad experience in providing planning, design, construction management, and program management services in these areas.

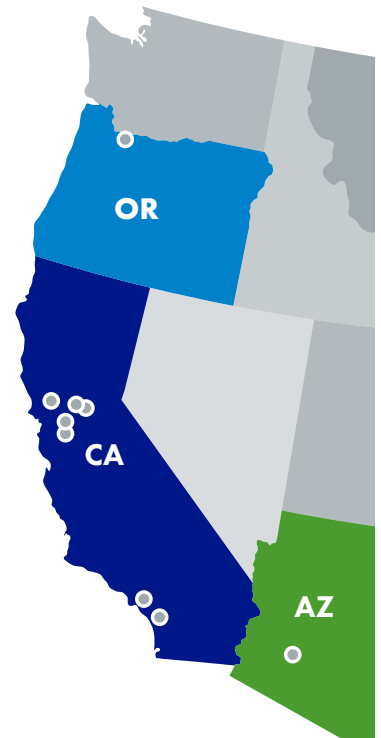
West Yost is headquartered in Davis, California, and has more than 200 staff members in nine offices. Our staff includes certified or registered professionals in chemical, civil, control systems, electrical, environmental, and mechanical engineering; wastewater treatment and regulatory compliance; geology, engineering geology, and hydrogeology; architecture; GIS; control systems, cybersecurity, and risk management; asset management and condition assessment; project management; and construction management and inspection services.

Grant Funding

West Yost's Funding Team offers a full services approach to funding. We assist clients in strategizing and identifying, applying for, capturing, and managing funds obtained through state, federal and local loan and grant programs. **We have assisted over 30 clients in securing nearly \$1 billion in funding.** Our success is based on maintaining excellent working relationships with funding agency staff, solid technical and writing skills, close coordination with our clients, and attention to detail.

OFFICES

- OREGON**
Lake Oswego
- CALIFORNIA**
Concord
Davis (Corporate HQ)
Lake Forest
Oceanside
Pleasanton
Sacramento
Santa Rosa
- ARIZONA**
Phoenix



FAST FACTS

30+ LOCAL STAFF	40+ LOS ANGELES COUNTY PROJECTS SINCE 2018	80+ GRANT FUNDING PROJECTS
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Dedication to Client Service and Quality

West Yost provides exceptional client service and high-quality work products. Our success at meeting ongoing client needs is exemplified by our long-term relationships and repeat work. Our experience will allow us to serve as a valuable extension of your staff. West Yost will manage projects proactively and provide responsive service and timely work products.

Our Funding Team members selected to support the District includes senior Funding Team members, Sheri Lasick, Monique Day, and Hawkeye Sheene. Supporting staff include Grant Funding Analyst, Raven Lasick. The Funding Team has provided grant strategy services, funding application support, and grant management support for over 30 municipal and water agency clients in California over the past 20 years.

Each team member was selected to support the LVMWD based on their experience and skill sets. All the senior Funding Team members are highly experienced with all phases of grant services, including strategic planning, funding research, application development, and grant administration. At varying times, the availability of each senior staff member fluctuates; therefore, assigning overlapping roles for all three senior Funding Team members will allow West Yost to provide the support that the LVMWD needs, and will allow the Funding Team to coordinate with other West Yost staff to increase support when needed. Team members listed in the proposal are committed for the duration of the work and any team member substitutions or changes will be brought to the attention of, and approved by, the LVMWD.

Grant Services Approach

The West Yost Funding Team will apply our knowledge and broad experience to optimize the LVMWD's pursuit of grant funding. Our approach to grant funding support services is to provide comprehensive services, including development of a customized strategic funding plan, grant application assistance, and subsequent grant administration. Our Funding Team will meet regularly with the LVMWD to assess and discuss the current and anticipated funding opportunities that will be proactively and strategically pursued. The development of a strategic funding plan will be the cornerstone to LVMWD's pursuit of funding for its projects and programs. West Yost is prepared to provide all the tasks noted on page 2 of the RFP, in addition to labor compliance monitoring services in compliance with California and/or Federal laws for public works projects.

Scope of Services

TASK 1 KICK-OFF AND MONTHLY MEETINGS

- The West Yost team will lead a kick-off meeting to confirm the work plan, strategic approach, schedule, communications, and related processes.
- The West Yost team will meet with the LVMWD staff monthly via virtual meetings to review new funding opportunities, discuss project status updates, consider new projects, and discuss funding pursuits.

TASK 2 STRATEGIC FUNDING PLAN

- A strategic Funding Plan will be developed to identify the best funding sources for LVMWD's projects and the necessary steps to develop competitive grant applications. This plan will likely span multiple years, to be defined by LVMWD.

TASK 3 GRANT TRACKING AND MONITORING

- West Yost will monitor grant opportunities and maintain, refine, and update a customized grant tracking matrix and project matrix during monthly meetings, and provide timely updates via email informing of funding opportunities of interest to LVMWD.

TASK 4 FUNDING APPLICATION DEVELOPMENT

- Funding applications will be developed on an as-needed, as requested basis. It is anticipated that through the development of a strategic plan and regular grant tracking (Tasks 2 & 3) funding programs will be identified, and application development will focus primarily on those programs identified.

TASK 5 GRANT ADMINISTRATION SUPPORT

- West Yost will provide grant administration services including preparation of periodic progress reports, final reports, disbursement requests, funding agency coordination, scope amendments, requests for extensions, and other support as needed in compliance with grant and/or loan programs.
- West Yost also offers labor compliance monitoring services as part of our grant administration support, including contractor education, pre-construction meetings, on-site interviews of workers, certified payroll record reviews, letters to contractors regarding labor compliance findings and wage restitution, and reporting to and on behalf of the LVMWD.

Project Team Grant Experience

The West Yost Funding Team has extensive experience with securing and managing state and federal funding. The following are summaries of specialized grant support services provided to other clients representing the level of support West Yost can provide the District.

GRANT FUNDING RESEARCH, APPLICATION DEVELOPMENT, ADMINISTRATION, AND LABOR COMPLIANCE MONITORING LAS VIRGENES MUNICIPAL WATER DISTRICT



DATES OF SERVICE/FEE: October 2022-June 2023/\$35,857

TEAM: Sheri Lasick (Project Manager/Grant Strategist, Grant Writer, Grant Administration, Labor Compliance Monitoring), Monique Day (QA/QC), and Raven Lasick (Grant Administration, Labor Compliance Monitoring)

REFERENCE: Craig Jones, Resource Conservation Manager, Engineering and External Affairs, 4232 Las Virgenes Road, Calabasas, CA 91302, 818.251.2131

SCOPE: The Funding Team has provided Las Virgenes Municipal Water District with grant administration services for multiple sources of funding, including a US Bureau of Reclamation Water and Energy Efficiency Grant and California Prop. 1 IRWM grant for a residential AMI implementation project secured by Sheri Lasick. Grant administration services include preparation of progress reports, development of grant disbursement requests, serving as LVMWD staff liaison, and providing labor compliance monitoring services to verify contractor compliance with California prevailing wage laws for public works.

SPECIALTY AREAS ADDRESSED: The West Yost team also provided grant administration services for a Prop. 1 grant the District was awarded for its Pure Water Demonstration project. This included completion of quarterly progress reports, verifying eligible costs for grant reimbursement, preparation of draft, final technical knowledge transfer report, grant project final technical report, and project closeout report.

GRANT AMOUNT AWARDED:
\$3 million
(Approximate)
GRANT FUNDS MANAGED:
\$2,108,363

GRANT STRATEGY SERVICES AND APPLICATION DEVELOPMENT ALAMEDA COUNTY WATER DISTRICT



GRANT AMOUNT AWARDED:
\$37.59 million

DATES OF SERVICE/FEE:

2016-current/\$342,509 (as of June 2023)

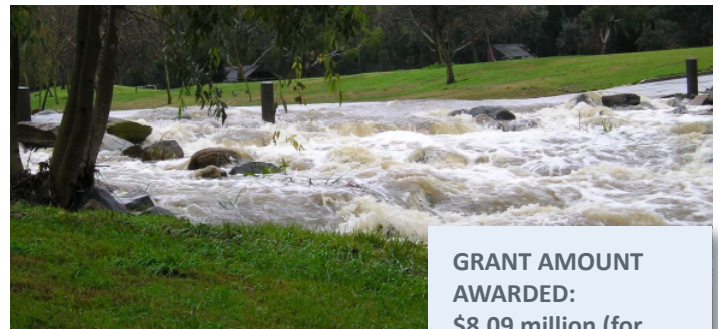
TEAM: Monique Day (Project Manager/Project Engineer/Grant Strategist), Sheri Lasick (Grant Strategist and Grant Writer)

REFERENCE: Ethan Burch, Administrative Analyst, 43885 South Grimmer Boulevard, Fremont, CA 94538, 510.668.4252

SCOPE: Since 2016, West Yost has provided Alameda County Water District (ACWD) with strategic grant and funding services to optimize its ability to proactively seek and receive grant funding for capital improvement projects and to increase its understanding of funding opportunities.

SPECIALTY AREAS ADDRESSED: West Yost prepared a funding strategy plan and identified, monitored, and pursued multiple grant funding opportunities for ACWD projects, QA/QC of applications prepared by the ACWD staff, and served as a resource for grant program and labor compliance questions. Recent grant applications completed and awarded: Two Hazard Mitigation Grant Program grants totaling approximately \$20.1 million.

GRANT STRATEGY, APPLICATION, AND ADMINISTRATION SERVICES MOULTON NIGUEL WATER DISTRICT



GRANT AMOUNT AWARDED:
\$8.09 million (for multiple projects) secured to-date

DATES OF SERVICE/FEE:

2017-current/\$383,005 (as of June 2023)

TEAM: Monique Day (Project Manager/Project Engineer/Grant Strategist/Grant Administration), Sheri Lasick (Grant Strategist/

Grant Writer/Grant Manager), Hawkeye Sheene (Grant Writer), and Raven Lasick (Grant Writer)

REFERENCE: Todd Dmytryshyn, Assistant Director of Engineering, 26161 Gordon Road Laguna Hills, CA 92653, 949.452.3549

SCOPE: Since 2017, West Yost has provided grant strategy services to Moulton Niguel Water District, which has included review of their top-priority CIP projects to evaluate potentially applicable grant opportunities and develop a strategic funding plan. Services include grant opportunity research, monthly grant matrix updates, check-in conference calls, grant application preparation, and as-needed grant administration.

SPECIALTY AREAS ADDRESSED: West Yost prepared CalOES Hazard Mitigation grant applications for a Sewer Lift Station Force Mains Replacement and Relocation Project (\$10.3M Notice of Award summer 2023), for a Steel Tank Seismic Retrofits Project (\$2.8M Awarded), and for a FEMA Building Resilient Infrastructure and Communities (BRIC-2023) for a feasibility assessment (\$1.5M). West Yost also prepared six grant applications for the WaterSMART program, all of which received grant awards. Grant administration services provided by West Yost include preparation of the final reports for the WaterSMART Water and Energy Efficiency grant agreements for multiple phases of their AMI Implementation Program.

SURFACE WATER SUPPLY PROJECT FUNDING STRATEGY AND LOAN/ GRANT WRITING

STANISLAUS REGIONAL WATER AUTHORITY



GRANT AMOUNT AWARDED:
\$35.05 million
secured to-date

DATES OF SERVICE/FEE: April 2016 – current/\$809,605

TEAM: Monique Day (Program Management, Funding Task Manager, Grant Writer and Grant Manager), Sheri Lasick (Funding Strategist, Grant Writer, Grant Manager), Hawkeye Sheene (Grant Manager), and Katie Jones (Loan/Grant Administration)

REFERENCE: Bob Granberg, General Manager, 156 South Broadway Suite 270 Turlock, CA 95380, 209.401.0439

SCOPE: Since 2016, West Yost has been providing program management services for Stanislaus Regional Water Authority's regional surface water supply project, which consists of funding

strategy and pursuits, infrastructure planning, design-build contractor procurement, owner's advisory services, and design.

SPECIALTY AREAS ADDRESSED: West Yost's funding work includes evaluating grant and loan opportunities, meeting with funding agencies, and drafting applications, including a Drinking Water SRF application, two WaterSMART Drought Resiliency grant applications, a Riverine Stewardship grant application, an IRWM implementation grant application, a Proposition 50 Chapter 6c grant, an Urban and Multi-Benefit Drought Relief grant application, and a Water Storage Improvement Program screening form application. These efforts have resulted in \$40.0 million grants secured and \$184.92 million in SRF loan funding secured. West Yost is also supporting SRWA with grant management services such as disbursement requests and progress reporting for the SRF loan, IRWM grant, and Prop. 50 Chapter 6c grant (2023).

2021 CALIFORNIA DEPARTMENT OF WATER RESOURCES URBAN AND MULTI-BENEFIT DROUGHT RELIEF GRANT ON-CALL

CITY OF CLOVERDALE



GRANT AMOUNT AWARDED:
\$3 million

DATES OF SERVICE/FEE: August 2021- current/\$150,000

TEAM: Monique Day (Grant Writer), Hawkeye Sheene (Grant Administrator), Sheri Lasick (QA/QC)

REFERENCE: David Kelley, City Manager, dkelley@ci.cloverdale.ca.us, 707.894.1710

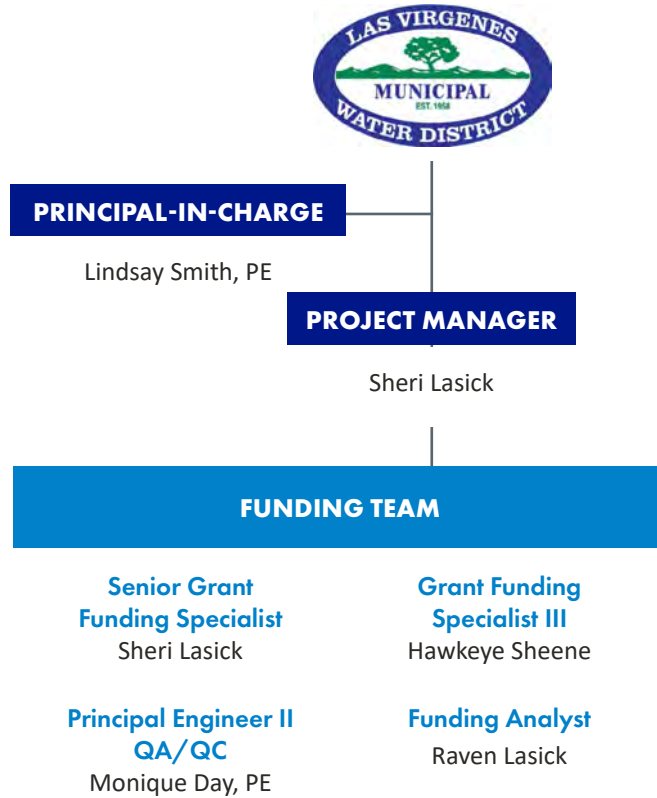
SCOPE: The City was awarded \$3 million in grant funding through the 2021 California Department of Water Resources Urban and Multi-Benefit Drought Relief program for AMI upgrades to 3,300 existing water meters, SCADA expansion and upgrades, and well replacement and well rehabilitation. West Yost prepared the grant application on behalf of the City and is providing grant administration services for this new project.

SPECIALTY AREAS ADDRESSED: Recent on-call, as needed grant writing services provided to complete and submit a USBR Recycled Water Planning Grant, SWRCB Recycled Water Planning grant, and other smaller grants. All are currently pending, and under review by funding agencies.

Table 1. Summary of Current Grant Projects for our PM and Key Project Staff

PROJECT/OWNER/LOCATION	GRANT SIZE	ESTIMATED COMP. DATE	TIME COMMITMENT PERCENTAGE			
			SHERI LASICK	MONIQUE DAY	HAWKEYE SHEENE	RAVEN LASICK
Recycled Water Expansion Program Grant Management, City of Tracy, CA	\$51,000	5/30/2026	4%	0%	0%	1%
Grant Support Services, City of Stockton, CA	\$100,000	12/31/2025	5%	6%	1%	1%
Grant Administration, Eastern San Joaquin Ground Water Authority, Stockton, CA	\$187,500	6/30/2025	5%	0%	0%	5%
On-Call Grant Writing Services, Ukiah Valley Basin Groundwater Sustainability Agency, Ukiah, CA	\$35,000	3/31/2025	3%	0%	3%	2%
Grant Writing Services, City of Sunnyvale, CA	\$100,000	12/31/2024	5%	5%	2%	1%
Grant Management Services, Alameda County Water District, Fremont, CA	\$349,025	3/31/2024	4%	3%	1%	0%
Surface Water Supply Project Grant Administration, Stanislaus Regional Water Authority, Stanislaus County, CA	\$100,000	6/30/2024	3%	10%	6%	0%
Grayson Water Infrastructure DWSRF Planning Grant Administration and Construction Application, City of Modesto, CA	\$178,000	6/30/2024	0%	5%	0%	0%
Grant Writing Services & Grant Administration, Petaluma Valley Groundwater Sustainability Agency, Petaluma, CA	\$50,000	6/30/2024	1%	1%	5%	0%
Grant Writing & Grant Administration services, Sonoma Valley Groundwater Sustainability Agency, Sonoma, CA	\$50,000	6/30/2024	1%	1%	8%	0%
Grant Tracking and Grant Writing services, Las Gallinas Valley Sanitary District, Marin County, CA	\$74,960	6/30/2024	3%	3%	1%	1%
SRF Loan Support Services 2023-0224, Silicon Valley Clean Water, Silicon Valley, CA	\$381,800	6/30/2024	3%	0%	0%	0%
Grant Writing Services & Grant Administration, Santa Rosa Plain Groundwater Sustainability Agency, Santa Rosa, CA	\$50,000	6/30/2024	0%	0%	5%	0%
2022-23 Grant Support Services, City of Beverly Hills, CA	\$50,000	6/30/2024	2%	1%	1%	1%
Labor Compliance Services Sutter Trunk Rehabilitation Phase I, City of Modesto, CA	Included in const. mgmnt. budget	4/8/2024	3%	0%	0%	5%
Funding Services, California Water Service, multiple California locations	\$192,185	3/31/2024	8%	6%	3%	2%
SRF Grant Application, Winston-Dillard Water District Funding Support, Winston, OR	\$79,359	3/30/2024	3%	0%	0%	0%
Sewer Repair & Rehabilitation CWSRF Grant Administration, Graton CSD, Sebastopol, CA	\$10,000	1/30/2024	0%	2%	0%	0%
Labor Compliance Services, River Trunk Shackelford PS Project, City of Modesto, CA	Included in const. mgmnt. budget	1/30/2024	3%	0%	0%	5%
Septic to Sewer Program CWSRF Grant Application, City of Modesto, CA	\$125,000	12/31/2023	0%	5%	0%	0%
EPA Community Grant Application for Septic to Sewer project, Sacramento Area Sewer District, Sacramento, CA	\$59,000	12/31/2023	1%	5%	0%	0%
Groundwater Well Strategy Plan, City of Modesto, CA	\$100,900	12/31/2023	1%	5%	0%	0%
2022-2023 Funding Support Services, California American Water, multiple California locations	\$100,000	12/31/2023	6%	1%	2%	2%
Recycled Water Construction Grant Application, West Bay Sanitary District, Menlo Park, CA	\$40,000	11/30/2023	0%	5%	0%	0%
Grant Support Services, Moulton Niguel WD, Laguna Hills, CA	\$71,496	12/31/2023	6%	3%	1%	1%

Organizational Chart



“Wanted to share the great news that our Urban River Grant request was approved...this is a huge success for our Grants Team and our overall funding strategy. A big thanks to your team for the support to get this grant!”

—Mr. Leonard Ash, Water Resources Planning, Alameda County Water District

“The District began working with West Yost Associates to perform grant administration services in 2017. Since that time, the District has received approximately \$8 million in Federal grants, representing a return on investment of nearly 2,100%.”

—Moulton Niguel Water District - \$383,005 Grant Administration Services Agreement Approved by Board of Directors

2A // PROJECT MANAGER

SHERI LASICK

SENIOR GRANT FUNDING SPECIALIST



Role: Project Manager, Funding Strategist, Grant Writer, Grant Administrator

Availability: 35%

Years with West Yost: 1

Years as West Yost Subconsultant: 10

Years with Sylvir Consulting, Inc.: 22

Years of Experience: 22+

Education:

- MA, Anthropology/Archaeology Graduate Studies
- BA, Anthropology, California State University, Sacramento
- Project Management, University of Phoenix

Specializations:

- Funding Strategy
- Grant Writing and Management
- Labor Compliance

As Project Manager, she will be the primary point of contact and will be available to meet and coordinate with the District as needed throughout the duration of the contract. With more than 20 years of funding experience identifying, securing, and managing grants, Sheri was selected to lead the Funding Team for this project.

Sheri Lasick has extensive and diverse experience providing grant writing, funding research, and funding management services to public and non-profit entities, as well as program analyses, policy development and industry research for a wide range of projects for water, wastewater, water conservation, recycled water, transportation, parks, public safety, energy efficiency, clean energy, and microgrids. Having worked for federal, state, and local governments as well as private firms prior to starting her own business, Sheri has a keen understanding of the issues and challenges faced by public employees and assists local public agencies in meeting the needs of the communities they serve by locating alternative funding sources and by providing analytical services. Sheri has assisted cities, special districts, and municipalities in receiving over \$120 million in grants 12 million in low interest loans to date for water and wastewater infrastructure projects, developing and upgrading parks, transportation improvement projects, and public safety activities as an independent consultant, and subconsultant to West Yost. She has managed grant reporting requirements for projects ranging from \$26,000 to

multi-million-dollar projects with multiple funding sources. Sheri will be the project manager, and lead funding strategist. Sheri will also provide application preparation, grant management and labor compliance services as needed.

RELEVANT PROJECTS/EXPERIENCE:

1. Advanced Meter Infrastructure (AMI), Las Virgenes Municipal Water District, Calabasas, CA: This project provided potable water, recycled water and sanitation services to the cities of Agoura Hills, Calabasas, Westlake Village, Hidden Hills, and unincorporated areas of Los Angeles County including the Santa Monica Mountains and Chatsworth.

Dates of Service/Fee: October 2022-June 2023/\$ \$35,857

Reference: Craig Jones, Resource Conservation Manager, Engineering and External Affairs, 4232 Las Virgenes Road, Calabasas, CA 91302, 818.251.2131 | **Level of Commitment:** Completed | **Firm:** West Yost | **Individual Responsibilities:** Served as Project Manager, Grant Strategist, Grant Writer, Grant Administration, Labor Compliance Monitoring

2. Grant Strategy Services, Alameda County Water District, Fremont, CA: Owner, grant description, and completion date/fee information is included on page 3.

Level of Commitment: 4% | **Firm:** West Yost | **Individual Responsibilities:** Sheri provided funding strategy and grant writing services for this project.

3. Grant Strategy Services, Moulton Niguel Water District, Laguna Niguel, CA: Owner, grant description, and completion date/fee information is included on page 3.

Level of Commitment: 6% | **Firm:** West Yost and Sylvir Consulting Inc. | **Individual Responsibilities:** Sheri provided funding strategy, grant writing, and grant management services for this project.

4. Surface Water Supply Project – Multiple Grant Applications, Stanislaus Regional Water Authority, Stanislaus County, CA: Owner, grant description, and completion date/fee information is included on page 4.

Level of Commitment: 3% | **Firm:** West Yost | **Individual Responsibilities:** Grant writing, funding strategy development, and grant management services for this project.

5. Sustainable Groundwater Grant Administrator – Multiple Grant Applications, Eastern San Joaquin Groundwater Authority, CA: West Yost is providing grant funding administration services for three projects.

Dates of Service/Fee: November 2022 - June 2025/\$187,530 | **Reference:** Matt Zidar, Water Resources Manager, County of San Joaquin, 1810 East Hazelton Avenue, 209.953.7460 | **Level of Commitment:** 5% | **Firm:** West Yost | **Individual Responsibilities:** Sheri is the grant funding administrator.

2B // OTHER KEY PROJECT STAFF

Lindsay Smith, PE

PRINCIPAL-IN-CHARGE



Role: Principal-in-Charge

Availability: 10%

Years with West Yost: 17

Years of Experience: 21

Professional Registration:

- Professional Civil Engineer, California No. 72996, Oregon No. 91823 PE

Education:

- BS, Civil Engineering, Santa Clara University

With 21 years of experience and as the previous leader of the West Yost Program and Procurement Management Business Sector, Lindsay provides unmatched oversight to the Funding Team and will serve as Principal-in-Charge. Lindsay will be responsible for confirming that West Yost provides the staff time and company resources necessary to meet LVMWD's needs.

RELEVANT PROJECTS/EXPERIENCE:

- Regional Surface Water Supply Project, Stanislaus Regional Water Authority, Turlock, CA: Program Manager
- Owner's Representative, Davis Woodland Water Supply Project, Woodland-Davis Clean Water Agency: Program Manager
- RiverArc Regional Water Supply Project, Placer County Water Agency, Auburn, CA: Deputy Program Manager

MONIQUE DAY, PE

PRINCIPAL ENGINEER II/QA/QC



Role: Funding Strategist, Grant Writer, Grant Administrator

Availability: 20%

Years with West Yost: 19

Years of Experience: 20

Education:

- MS, Environmental Engineering, University of California, Berkeley
- BA, Environmental Studies, University of California, Santa Cruz

- BS, Civil and Environmental Engineering, University of California, Berkeley

Specializations:

- Funding Strategy
- Grant Writing and Management
- Labor Compliance

Monique has more than 20 years of experience in civil and environmental engineering and has provided similar funding services to many clients throughout her career. Most of her project work has involved multi-stakeholder planning and implementation processes and funding pursuits.

She is the lead engineer and strategist for providing grant strategy services for the Alameda County Water District, Moulton Niguel Water District, Stanislaus Regional Water Authority, Placer County Water Agency, Sacramento Area Sewer District, City of Sunnyvale, Las Gallinas Sanitary District, City of Modesto, and California Water Services Company. She works closely with Sheri Lasick on these projects to inform clients of relevant upcoming grant opportunities, to pursue funding opportunities, and to manage awarded opportunities.

Monique will be the secondary point of contact if Sheri Lasick, Project Manager, is not available. Monique leads West Yost's Funding Practice and has extensive experience in both water resources planning projects and strategizing and securing funding for water agencies in California.

RELEVANT PROJECTS/EXPERIENCE:

1. Grant Strategy Services, Alameda County Water District, Fremont, CA: Owner, grant description, and completion date/fee information is included on page 3.

Level of Commitment: Completed | **Firm:** West Yost | **Individual Responsibilities:** Monique was the project manager and lead funding strategist for this project.

2. Grant Strategy Services, Moulton Niguel Water District, Laguna Niguel, CA: Owner, grant description, and completion date/fee information is included on page 6.

Level of Commitment: 3% | **Firm:** West Yost | **Individual Responsibilities:** Monique was the project manager, funding strategist, and grant writer for this project.

3. Surface Water Supply Project – Multiple Grant Applications, Stanislaus Regional Water Authority, Stanislaus County, CA: Owner, grant description, and completion date/fee information is included on page 6.

Level of Commitment: Completed | **Firm:** West Yost | **Individual Responsibilities:** Monique was the funding task manager and provided strategy, grant writing, and grant management services for this project.

HAWKEYE SHEENE

GRANT FUNDING SPECIALIST III



Role: Funding Strategist, Grant Writer

Availability: As much as 60% to support time-sensitive tasks.

Years with West Yost: 1

Years of Experience: 18

Education:

- BS, Geological/Earth Systems Sciences, University of California, Santa Barbara
- Post Graduate Studies, Department of Integrative Biology, University of California, Berkeley

Professional Affiliation:

- California Stormwater Quality Association, Legislation Subcommittee Co-chair

Specializations:

- Funding Strategy
- Grant Writing and Management
- Public Outreach Coordination

Hawkeye was selected based on her experience working closely with water resources agencies to identify funding priorities, to develop funding strategies for program and project development, and to engage with regional partners and key stakeholders to increase competitiveness for successful funding and implementation.

RELEVANT PROJECTS/EXPERIENCE:

1. Preliminary Evaluation of Green Stormwater Infrastructure Funding Approaches, City of Palo Alto, CA: Collaborated with City of Palo Alto staff to evaluate funding options identified in the City's GSI Plan with the goal of assessing the funding potential and challenges of establishing each of these options as a City program.

Date of Service/Fee: Jan-June, 2019/\$40,000 | **Reference:** Pam Boyle Rodriguez, Stormwater Compliance Program Manager, 2501 Embarcadero Way, Palo Alto CA 94303, pamelaboyle.rodriguez@cityofpaloalto.org, 510.759.1689 | **Level of Commitment:** Completed | **Firm:** Woodward & Curran | **Individual Responsibilities:** As Stormwater Funding Task Manager, Hawkeye researched potential funding options for the City's green stormwater infrastructure program and prepared a report and presentation.

2. Petaluma Valley Groundwater Sustainability Implementation Program, Petaluma Valley Groundwater Sustainability Agency, City of Petaluma, CA: Hawkeye served as Grant Funding Lead for the development and preparation of a Sustainable Groundwater Management Grant application to implement a suite of stormwater capture, groundwater recharge, monitoring, modeling, water conservation and recycled water projects necessary to attain and maintain groundwater sustainability in the subbasin.

Date of Service/Fee: Sept-Dec, 2022/\$28,000 | **Reference:** Sandi Potter, Petaluma Valley GSA Administrator, 2235 Mercury Way, Suite 105, Santa Rosa, CA 95407 spotter@westyost.com, 707.543.1860 | **Level of Commitment:** Completed | **Firm:** West Yost | **Individual Responsibilities:** Grant Funding Lead

3. PureWaterSF, San Francisco Public Utilities Commission (SFPUC), San Francisco, CA: As Grant Coordinator, Hawkeye worked with SFPUC staff, City departments and consultants to support the installation and operation of PureWaterSF (co-funded by the SFPUC and with grants

from US Bureau of Reclamation and The Water Research Foundation), developed grant funding strategies, and provided grant administration, budgeting and reporting. Hawkeye also mentored staff in funding strategies, as well as grant project development and management. As Public Outreach Coordinator, worked extensively with SFPUC to develop a branding strategy to both gauge and expand support of purified water as a potential water source in San Francisco, preparing the full branding package of outreach materials through diverse media platforms, including fact sheets, graphics, an innovative animated video, website content, in-person tour materials, and building signage. The PureWaterSF research project explored how advanced water purification and monitoring technologies can reliably convert building-sourced wastewaters into a high-quality supply to meet diverse end uses in San Francisco.

Date of Service/Fee: June 2017 - February 2020/\$ 150,000 | **Level of Commitment:** Completed | **Firm:** SFPUC | **Individual Responsibilities:** Hawkeye was the grant strategist, grant writer and manager, and public outreach coordinator for this project.

RAVEN LASICK

FUNDING ANALYST



Role: Grant Administration, Grant Writer

Availability: As much as 60% to support time-sensitive tasks.

Years with West Yost: 1

Years of Experience: 5

Education:

- AS, Business Administration, Sierra College
- AS, Management, Sierra College
- AS, Social and Behavioral Sciences, Sierra College
- BS (In Progress) Business Administration - emphasis in General Management, California State University, Sacramento

Specializations:

- Funding Analysis
- Grant Management
- Labor Compliance

Raven Lasick specializes in grant management and labor compliance services. She has five years of experience performing labor compliance monitoring services for various types of public works including water and wastewater projects. Raven has performed grant administration services for three years, organizing and verifying grant eligible costs and submitting requests for funding disbursement. When working on the Feather River Parkway, she reviewed invoices for eligible

expenses based on the grant agreement, including eligible dates and expense types, and categorize according to the grant agreement. She is knowledgeable in all Microsoft Software, DIR, & grants research websites.

RELEVANT PROJECTS/EXPERIENCE:

1. Pure Water Demonstration Project, Las Virgenes Municipal Water District, Calabasas, CA: Owner, grant description, and completion date/fee information is included on page 5.

Level of Commitment: Completed | **Firm:** Sylvir Consulting, Inc./ West Yost | **Individual Responsibilities:** Raven was responsible for reviewing invoices, timecards, and budget/expense tracking for quarterly reimbursements. She also performed labor compliance monitoring tasks and preparation of final reports.

2. Advanced Meter Infrastructure (AMI), Las Virgenes Municipal Water District, Calabasas, CA: This project provided potable water, recycled water and sanitation services to the cities of Agoura Hills, Calabasas, Westlake Village, Hidden Hills, and unincorporated areas of Los Angeles County including the Santa Monica Mountains and Chatsworth.

Completion Date/Fee: October 2022-June 2023/\$ \$35,857 **Reference:** Craig Jones, Resource Conservation Manager, Engineering and External Affairs, 4232 Las Virgenes Road, Calabasas, CA 91302, 818.251.2131 | **Level of Commitment:** Completed | **Firm:** West Yost | **Individual Responsibilities:** Raven was the project assistant/coordinator responsible for grant reporting, labor compliance monitoring tasks, and preparation of final reports.

3. River Trunk Realignment – Gravity System, City of Modesto, CA: West Yost is providing construction management and inspection services for a \$22 million construction project that includes installation of approximately 1.7 miles of new pipelines.

Completion Date/Fee: March 2024 (est.)/Included in const. mgmnt. budget | **Reference:** Peter J. Kambel, PE, Senior Civil Engineer, Utilities Department/Construction Administration Office, 1010 Tenth Street, Suite 4600, Modesto, CA 95353, 209.577.5444 | **Level of Commitment:** 3% | **Firm:** West Yost | **Individual Responsibilities:** Raven is responsible for labor compliance monitoring tasks, including reviewing certified payroll records, identifying wage classifications, and conducting on-site worker interviews.

3 // COST PROPOSAL

TABLE 2. ESTIMATED PROJECT HOURS AND BUDGET†

TASK	ESTIMATED HOURS	ESTIMATED BUDGET, DOLLARS	RATE ASSUMPTION
TASK 1. PROJECT MANAGEMENT AND KICKOFF MEETING	56	\$14,000.00	Blended rate: \$250/hr
TASK 2: STRATEGIC FUNDING PLAN	60	\$15,000.00	Blended rate: \$250/hr
TASK 3. GRANT TRACKING AND MONITORING	70	\$14,000.00	Blended rate: \$200/hr
TASK 3. AS NEEDED GRANT APPLICATION SUPPORT (2 APPLICATIONS)	178	\$44,500.00	Blended rate: \$250/hr
TASK 4. GRANT ADMINISTRATION	61	\$12,505.00	Blended rate: \$205/hr
TOTAL PROJECT HOURS AND BUDGET	425	\$100,000.00	(Rounded)

†Billing rates are updated annually with the calendar year based on market conditions and will not to exceed 4.5% annually.

*Estimated hours for each task not fixed to that task and will be adjusted according to actual LVMWD services requested.

** Blended rate represents an average of rates for employees that may work on tasks for budgetary purposes. Actual rates for employee work completed will be invoiced at the rates included in the Billing Rate Schedule.

2023 Billing Rate Schedule

(Effective January 1, 2023 through December 31, 2023)*



POSITIONS	LABOR CHARGES (DOLLARS PER HOUR)
ENGINEERING	
Principal/Vice President	\$338
Engineer/Scientist/Geologist Manager I / II	\$319 / \$334
Principal Engineer/Scientist/Geologist I / II	\$288 / \$307
Senior Engineer/Scientist/Geologist I / II	\$259 / \$272
Associate Engineer/Scientist/Geologist I / II	\$215 / \$231
Engineer/Scientist/Geologist I / II	\$173 / \$201
Engineering Aide	\$101
Field Monitoring Services	\$125
Administrative I / II / III / IV	\$92 / \$115 / \$138 / \$152
ENGINEERING TECHNOLOGY	
Engineering Tech Manager I / II	\$332 / \$334
Principal Tech Specialist I / II	\$305 / \$315
Senior Tech Specialist I / II	\$279 / \$291
Senior GIS Analyst	\$252
GIS Analyst	\$239
Technical Specialist I / II / III / IV	\$178 / \$203 / \$228 / \$254
Technical Analyst I / II	\$128 / \$152
Technical Analyst Intern	\$103
Cross-Connection Control Specialist I / II / III / IV	\$133 / \$144 / \$162 / \$180
CAD Manager	\$201
CAD Designer I / II	\$156 / \$176
CONSTRUCTION MANAGEMENT	
Senior Construction Manager	\$322
Construction Manager I / II / III / IV	\$197 / \$211 / \$224 / \$283
Resident Inspector (Prevailing Wage Groups 4 / 3 / 2 / 1)	\$172 / \$191 / \$213 / \$221
Apprentice Inspector	\$156
CM Administrative I / II	\$83 / \$112
Field Services	\$221

- Hourly rates include Technology and Communication charges such as general and CAD computer, software, telephone, routine in-house copies/prints, postage, miscellaneous supplies, and other incidental project expenses.
- Outside Services such as vendor reproductions, prints, shipping, and major West Yost reproduction efforts, as well as Engineering Supplies, etc. will be billed at actual cost plus 15%.
- The Federal Mileage Rate will be used for mileage charges and will be based on the Federal Mileage Rate applicable to when the mileage costs were incurred. Travel other than mileage will be billed at cost.
- Subconsultants will be billed at actual cost plus 10%.
- Expert witness, research, technical review, analysis, preparation and meetings billed at 150% of standard hourly rates. Expert witness testimony and depositions billed at 200% of standard hourly rates.
- A Finance Charge of 1.5% per month (an Annual Rate of 18%) on the unpaid balance will be added to invoice amounts if not paid within 45 days from the date of the invoice.

4 // ADDITIONAL INFORMATION

Table 4: Additional Representative Experience for Project Funding and Grant Writing

PROJECT/CLIENT/FUNDING AGENCY AND/OR PROGRAM	FUNDING AMOUNT	APPLICATION	MANAGEMENT, MONITORING, AND REPORTING
PROPOSITION 1 (GRANT)			
Joint Intake and Fish Screen Project: Reclamation District 2035 (RD 2035) and Woodland-Davis Clean Water Agency (California Department of Fish and Wildlife (CDFW) Restoration Grants Program)	\$8,128,621	■	
Joint Intake and Fish Screen: RD 2035 and Woodland-Davis Clean Water Agency (Delta Conservancy for the Ecosystem Restoration and Water Quality Program)	\$2,000,000	■	
Storm Water Resources Plan: Russian River Watershed Association (Department of Water Resources[DWR])	\$500,000	■	■
Regional Surface Water Supply Project: Stanislaus Regional Water Authority (DWR IRWM Implementation)	\$5,800,000	■	■
PROPOSITION 13 (GRANT)			
24/30-Inch Agency Intertie Pipelines: City of Roseville	\$2,000,000		■
Aquifer Storage and Recovery (ASR) Project-Diamond Creek Well: City of Roseville	\$786,111		■
ASR System: Town of Yountville	\$2,000,000	■	
PROPOSITION 50 (GRANT)			
Recycled Water Project: City of Redwood City (DWR IRWM Planning Grant)	\$1,00,000		■
ASR Project, Woodcreek North Well: City of Roseville	\$360,000		■
Water Supply Project: City of Roseville	\$6,000,000		■
Regional Surface Water Supply Project: Stanislaus Regional Water Authority (Proposition 50 Chapter 6c)	\$4,000,000	■	■
PROPOSITION 68 (GRANT)			
Regional Surface Water Supply Project: Stanislaus Regional Water Authority (DWSRF Grant from Prop. 68 Funds)	\$27,750,000	■	■
PROPOSITION 84 (GRANT)			
Preparation of Northern Sacramento Valley IRWMP: Northern Sacramento Valley Regional Water Management Group (DWR IRWM Planning Grant)	\$900,000	■	■
Preparation of Westside-Sacramento IRWMP: Westside-Sacramento Regional Water Management Group (DWR IRWM Planning Grant)	\$1,000,000	■	
Willow Hill System Repair Project: City of Roseville	\$1,900,000		■
Water Supply Reliability Well: City of Live Oak/Northern Sacramento Valley Regional Water Management Group (DWR IRWM Implementation Grant)	\$2,000,290	■	
Drought Response Disinfection By-Product Reduction Project: Placer County Water Agency/ Consumnes, American, Bear and Yuba IRWM Group (DWR IRWM Implementation Grant)	\$445,030	■	

Table 4: Additional Representative Experience for Project Funding and Grant Writing

PROJECT/CLIENT/FUNDING AGENCY AND/OR PROGRAM	FUNDING AMOUNT	APPLICATION	MANAGEMENT, MONITORING, AND REPORTING
STATE REVOLVING FUND (SRF) LOW INTEREST LOANS AND PRINCIPAL FORGIVENESS LOANS/ GRANTS			
Davis Woodland Water Supply Project: Woodland-Davis Clean Water Agency (State Board Clean Water and Drinking Water SRF Program)	\$270,000,000	■	■
Regional Surface Water Supply Project: Stanislaus Regional Water Authority (State Board Drinking Water SRF Program)	\$184,920,000	■	■
Davis Wastewater Treatment Plant: City of Davis (State Board Clean Water SRF Program)	\$81,000,000	■	■
McCall Avenue Sewer: Selma-Kingsburg-Fowler County Sanitation District (State Board Clean Water SRF Program)	\$6,600,000	■	
Septic to Sewer Conversions: Sacramento Area Sewer District (State Board Small Community Wastewater Grant Program)	\$29,749,000	■	
DERWA Phase 2 Recycled Water Treatment Plant – Expansion: DSRSD-EBMUD Recycled Water Authority (State Board Clean Water SRF Program and Green Project Reserve (Principal Forgiveness Loan/Grant))	\$2,500,000	■	■
Grayson Water Infrastructure Replacements and Upgrades: City of Modesto (State Board Drinking Water SRF Program Principal Forgiveness Grant)	\$671,000	■	■
Tertiary Filtration, UV Disinfection, and Biosolids Dewatering Project: City of Galt (State Board Clean Water SRF Program)	\$17,000,000	■	
Wastewater Treatment Plant Upgrade Project: City of Galt (State Board Clean Water SRF Program)	\$26,000,000	■	
RESCU Program Conveyance System and Treatment: Silicon Valley Clean Water (State Board Clean Water SRF Program)	\$169,000,000	■	■
Recycled Water Project: City of Millbrae (State Board Clean Water SRF Program - Recycled Water Planning Loan)		■	
Water System Improvements: Markleeville Water Company (Grant through State Board Drinking Water SRF Program)	\$11,863,000	■	■
Recycled Water Facilities Planning: City of Rialto (State Board Water Recycling Program)			
US BUREAU OF RECLAMATION			
Water Distribution System Flow-Monitoring and System Analysis: City of Folsom (System Optimization Review Program, WaterSMART)	\$395,000		■
Water Transmission Main from Folsom Dam to Folsom Water Treatment Plant: City of Folsom (System Optimization Review Program, WaterSMART)	\$3,500,000		■
Drought Contingency Plan: City of Rialto (WaterSMART Drought Response Program)	\$200,000	■	
AMI Implementation Program Phase 2: Moulton Niguel Water District (WaterSMART: Water and Energy Efficiency Grant)	\$299,000	■	■
Advanced Metering Infrastructure (AMI): Alameda County Water District (Water SMART: Water and Energy Efficiency)	\$2,000,000	■	
NatureScope and Smart Timer Water Conservation Programs: Moulton Niguel Water District (WaterSMART Water and Energy Efficiency)	\$400,000	■	■
AMI Implementation Phase III: Moulton Niguel Water District (WaterSMART Water and Energy Efficiency)	\$1,500,000	■	

Table 4: Additional Representative Experience for Project Funding and Grant Writing

PROJECT/CLIENT/FUNDING AGENCY AND/OR PROGRAM	FUNDING AMOUNT	APPLICATION	MANAGEMENT, MONITORING, AND REPORTING
Regional Surface Water Supply Project Phase II: Stanislaus Regional Water Authority (WaterSMART Drought Resiliency Program)	\$750,000	■	■
Regional Surface Water Supply Distribution to Turlock: Stanislaus Regional Water Authority (WaterSMART Drought Resiliency Program)	\$750,000	■	■
Low Resolution Meter Replacement Project, Phase 1: Moulton Niguel Water District (WaterSMART Water and Energy Efficiency Grant)	\$750,000	■	■
Low Resolution Meter Replacement Project, Phase 2: Moulton Niguel Water District (WaterSMART Water and Energy Efficiency Grant)	\$405,198	■	
Commercial/HOA Landscape Water Use Efficiency Program: Moulton Niguel Water District (WaterSMART Water and Energy Efficiency Grant)	\$500,000	■	
HAZARDOUS MITIGATION GRANT PROJECTS			
Alvarado-Niles Water Transmission Pipeline Replacement: Alameda County Water District	\$12,224,604	■	
Roof Seismic Retrofit, Alameda Reservoir: Alameda County Water District	\$ 8,094,627	■	
Potable Water Steel Reservoir Seismic Retrofits: Moulton Niguel Water District	\$2,785,430	■	
OTHER GRANT PROJECTS			
Phase II Water Meter Implementation: City of Woodland (ARRA Grant/Loan)	\$14,800,000	■	
Brownfields Assessment: City of Petaluma (US EPA)	\$1,800,000	■	
Pipeline Replacement: City of Folsom (US EPA)	\$280,000		■
Sewer/Water Rehabilitation Project: City of Folsom (US EPA)	\$235,000		■
Smart Watershed Network: (MNWD submitted via the Municipal Water District of Orange County) (Metropolitan Water District of Southern California Future Supply Actions Funding Program)	\$205,754	■	
RiverArc Surface Water Supply Project: Placer County Water Agency (WCB Streamflow Enhancement Grant)	\$1,567,860	■	
Regional Surface Water Supply Project: Stanislaus Regional Water Authority (Riverine Stewardship Grant)	\$5,000,000	■	

West Yost respectfully requests the following edits to the Professional Services Agreement.

Sample Professional Services Agreement, page 2 of 11, section 2.3.1:

2.3 Responsibilities of Consultant.

2.3.1 Independent Contractor. The Services shall be performed by Consultant or under its supervision. Consultant will determine the means, methods and details of performing the Services subject to the requirements of this Agreement. Consultant is an independent contractor and not an employee of Agency. Consultant shall have no responsibility for the safety or acts of Agency or employees. Except as Agency may specify in writing, Consultant shall have no authority, expressed or implied, to act on behalf of Agency in any capacity whatsoever as an agent. Any additional personnel performing the Services under this Agreement on behalf of Consultant shall also not be employees of Agency and shall at all times be under Consultant's exclusive direction and control.

Sample Professional Services Agreement, pages 2-3 of 11, section 2.3.3:

2.3.3 Standard of Care. Consultant shall perform all Services under this Agreement in a skillful and competent manner, consistent with the standards generally recognized as being employed by professionals in the same discipline in the State of California. Consultant represents and maintains that it is skilled in the professional calling necessary to perform the Services. Consultant ~~warrants~~represents and confirms that all employees and subconsultants shall have sufficient skill and experience to perform the Services assigned to them.

Sample Professional Services Agreement, page 5 of 11, section 2.5:

2.5 Indemnification.

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, into the extent caused by any ~~manner arising out of, pertaining to, or incident to any- alleged negligent~~ 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, reasonable~~ attorneys' fees and costs, including expert witness fees. The Parties also acknowledge that this Agreement is subject to California Civil Code 2782.8 as amended and effective January 1, 2018. 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.

Consultant shall immediately defend, with Counsel of Agency's choosing and at Consultant's own cost, expense and risk, any and all claims, suits, actions, or other proceedings of every kind that may be brought or instituted against Agency or its directors, officials, officers, employees, and 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.

Sample Professional Services Agreement, page 7 of 11, section 2.6.3 (ii):

(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

Sample Professional Services Agreement, page 9 of 11, section 2.8.1:

sublicense any and all copyrights, designs, and other intellectual property embodied in plans, specifications, studies, drawings, estimates, and other documents or works of authorship fixed in any tangible medium of expression, including but not limited to, physical drawings or data magnetically or otherwise recorded on computer diskettes, which are prepared or caused to be prepared by Consultant under this Agreement, excluding any standard designs, details, specifications and other intellectual property to which Consultant held the copyright prior to performing services for this Agreement("Documents & Data"). The Consultant shall deliver to Agency upon payment of all invoices due and owing to Consultant on demand or upon completion of the Project, all such Documents & Data which shall be and remain the property of the Agency. 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 third parties concerning the use of the data, reports, and documents. The Consultant may retain copies of the materials. The Agency may use or reuse at its sole risk the materials prepared by Consultant without additional compensation to Consultant.

2.8.2 Confidentiality. All Documents & Data, either created by or provided to Consultant in connection with the performance of this Agreement, shall be held confidential by Consultant. All Documents & Data shall not, without the prior written consent of Agency, be used or reproduced by Consultant for any purposes other than the performance of the Services. Consultant shall not disclose, cause, or facilitate the disclosure of the Documents & Data to any person or entity not connected with the performance of the Services or the Project. Nothing furnished to Consultant that is otherwise known to Consultant or is generally known, or has become known, to the related industry shall be deemed confidential. Consultant shall not use Agency's name or insignia, photographs of the Project, or any publicity pertaining to the Services or the Project in any magazine, trade paper, newspaper, television, or radio production, or other similar medium without the prior written consent of Agency.

2.9 Subcontracting/Subconsulting.

2.9.1 Prior Approval Required. Consultant shall not subcontract any portion of the work required by this Agreement, except as expressly stated herein, without prior written approval of Agency. Subcontracts, if any, shall contain a provision making them subject to all provisions stipulated in this Agreement.

3. General Provisions.

3.1.1 Notices. All notices permitted or required under this Agreement shall be given to the respective parties at the following address, or at such other address as the respective parties may provide in writing for this purpose:

Agency:

Las Virgenes Municipal Water District
Attn: **District Contact**
4232 Las Virgenes Road
Calabasas, CA 91302

Consultant:

Consultant, Contact & Address

Sample Professional Services Agreement, page 10 of 11, section 3.1.3:

3.1.3 Time of ~~Essence~~critical importance. Time is of ~~the essence~~critical importance for each and every provision of this Agreement. The acceptance of late performance shall not waive the right to claim damages for such breach nor constitute a waiver of the requirement of timely performance of any obligations remaining to be performed.

Sample Professional Services Agreement, page 11 of 11, section 3.1.13:

3.1.13 Authority to Enter Agreement. Consultant has all requisite power and authority to conduct its business and to execute, deliver, and perform the Agreement. Each Party ~~warrants~~represents and confirms that the individuals who have signed this Agreement have the legal power, right, and ~~authority~~ to make this Agreement and bind each respective Party.

WE SUPPORT OUR COMMUNITIES
WE ARE WATER FOCUSED
WE TAKE PRIDE IN WHAT WE DO
WE STRIVE TO BECOME OUR BEST
WE DO WHAT'S RIGHT
WE BELIEVE IN QUALITY
WE LISTEN
WE SOLVE CHALLENGING PROBLEMS
WE SEE THE BIGGER PICTURE
WE TAKE OWNERSHIP
WE COLLABORATE
WE HAVE FUN
WE ARE WEST YOST

