LAS VIRGENES MUNICIPAL WATER DISTRICT

4232 Las Virgenes Road, Calabasas, CA 91302

AGENDA
REGULAR MEETING
May 19, 2020, 9:00 AM

Public Participation for Meetings of Las Virgenes Municipal Water District Board of Directors in Response to COVID-19

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

PUBLIC PARTICIPATION: Pursuant to Executive N-29-20 and given the current health concerns, members of the public can access meetings live on-line, with audio and limited video, at www.LVMWD.com/LiveStream. In addition, members of the public can submit comments electronically for consideration by sending them to www.LVMWD.com/LiveStream. To ensure distribution to the members of the Las Virgenes Municipal Water District Board of Directors prior to consideration of the agenda, please submit comments 24 hours prior to the day of the meeting. Those comments, as well as any comments received 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 implementation thereof. Any person who requires a disability-related modification or accommodation, in order to observe and/or offer public comment may request such reasonable modification, accommodation, aid, or service by contacting the Executive Assistant/Clerk of the Board by telephone at (818) 251-2123 or via email to jguzman@lvmwd.com no later than 9:00 AM on the day before the scheduled 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.

A **List of Demands: May 19, 2020 (Pg. 5)**
Receive and File

B **Minutes: Regular Meeting of May 5, 2020 (Pg. 25)**
Approve

C **Directors' Per Diem: April 2020 (Pg. 34)**

Ratify

D **Contract Laboratory Services: Amendment of Purchase Order (Pg. 41)**

Authorize the General Manager to extend the term and increase the amount of the annual purchase order to Weck Laboratories, Inc., by $40,000, from $60,000 to $100,000, for contract laboratory services.

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

A **MWD Representative Report (Pg. 43)**

B **Legislative and Regulatory Updates**

C **Water Supply Conditions Update (Pg. 47)**

6 **TREASURER**

7 **BOARD OF DIRECTORS**

A **Response to Coronavirus (COVID-19) Pandemic: Amended and Reenacted Emergency Declaration with Additional Relief for Customers (Pg. 49)**

Pass, approve and adopt proposed Resolution No. 2576, amending and reenacting the declaration of a local state of emergency due to the novel coronavirus (COVID-19) pandemic and authorizing waiving service initiation fees for commercial customers who temporarily closed their accounts due to hardship associated with COVID-19.

RESOLUTION NO. 2576

A RESOLUTION OF THE BOARD OF DIRECTORS OF LAS VIRGENES MUNICIPAL WATER DISTRICT AMENDING RESOLUTION NOS. 2572 AND 2574, STATE OF EMERGENCY DUE TO THE NOVEL CORONAVIRUS (COVID-19) PANDEMIC AND AUTHORIZING ACTIONS TO SUPPORT THE RESPONSE AND RECOVERY EFFORT

(Reference is hereby made to Resolution No. 2576 on file in the District's Resolution Book and by this reference the same is incorporated herein.)

8 **FACILITIES AND OPERATIONS**

A **Energy Storage and Resiliency Capability Feasibility Assessment: Award (Pg. 53)**

Authorize the General Manager to execute a Professional Services Agreement with TerraVerde Energy, in the amount of $59,925, to perform an investment-grade feasibility assessment on implementation of a battery energy storage system project.

B **Mullholland Highway Bridge over Triunfo Creek Water Main Replacement Project: CEQA Determination and Call for Bids (Pg. 70)**

Find that the work is categorically exempt from the provisions of California

Environmental Quality Act and authorize the issuance of a Call for Bids for the Mullholland Highway Bridge over Triunfo Creek Water Main Replacement Project.

9 **ENGINEERING AND EXTERNAL AFFAIRS**

A **Comprehensive Water Conservation Plan for Fiscal Years 2020-22 (Pg. 76)**

Provide feedback on options for a Weather Based Irrigation Controller Cost Share Program, and receive and file the Comprehensive Water Conservation Plan for Fiscal Years 2020-22.

10 **INFORMATION ITEMS**

A **Collection and Write-Off of Aged Accounts Receivables (Pg. 100)**

11 **NON-ACTION ITEMS**

A **Organization Reports**

B **Director's Reports on Outside Meetings**

C **General Manager Reports**

(1) General Business

(2) Follow-Up Items

D **Director's Comments**

12 **FUTURE AGENDA ITEMS**

13 **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

14 **CLOSED SESSION**

15 **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: LYNDA LO-HILL, TREASURER

Payments for Board Meeting of : May 19, 2020

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. 84910 through 84996 were issued in the total amount of			**$**	**713,911.35**
Payments through wire transfers as follows:				
4/30/2020	Metropolitian Water District	Payment for water deliveries in the month of February 2020	$	1,027,628.66
		Sub-Total Wires	**$**	**1,027,628.66**
		Total Payments	**$**	**1,741,540.01**

(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
05/19/20

Company Name	Company No.	Check No. 84910 thru 84938 05/05/20 Amount	Check No. 84939 thru 84996 05/12/20 Amount	Total
Potable Water Operations	101	20,840.67	86,707.18	107,547.85
Recycled Water Operations	102		320.12	320.12
Sanitation Operations	130	112.79	9,481.90	9,594.69
Potable Water Construction	201	13,948.04		13,948.04
Water Conservation Construction	203			-
Sani- Construction	230			-
Potable Water Replacement	301	14,521.77	1,665.00	16,186.77
Reclaimed Water Replace	302			-
Sanitation Replacement	330		7,700.00	7,700.00
Internal Service	701	62,018.22	72,782.45	134,800.67
JPA Operations	751	54,685.08	158,025.40	212,710.48
JPA Construction	752			-
JPA Replacement	754		211,102.73	211,102.73
	Total Printed	**166,126.57**	**547,784.78**	**713,911.35**
	Net Total	**166,126.57**	**547,784.78**	**713,911.35**

MWD

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

INVOICE

Billed To:

Las Virgenes Municipal Water District

February 2020	Page No. 1 of 1
Mailed: 03/10/2020	**Due Date: 04/30/2020**
Invoice Number: 10000	Revision: 0

NOTICE

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

Service Address

4232 Las Virgenes Road
Calabasas, CA 91302

DELIVERIES	Volume (AF)
Total Water Treated Delivered	813.2
Total Water Untreated Delivered	

SALES	Type	Volume (AF)	Rate ($ /AF)	Total ($)
Full Service	Tier 1 Supply Rate	813.2	$208.00	$169,145.60
	System Access Rate	813.2	$346.00	$281,367.20
	Water Stewardship Rate	813.2	$65.00	$52,858.00
	System Power Rate	813.2	$136.00	$110,595.20
	Treatment Surcharge	813.2	$323.00	$262,663.60
	SUBTOTAL			$876,629.60

OTHER CHARGES AND CREDITS		Rate ($ /AF)	
Capacity Charge(Payment Schedule: M)			$33,660.00
Readiness To Serve Charge(Payment Schedule: M)			$117,339.06
	SUBTOTAL		$150,999.06

ADDITIONAL INFORMATION	Volume (AF)	Tier1 %	Peak Day	Flow (CFS)
Capacity Charge			8/9/2018	45.9
Purchase Order Firm Delivery To Date (Jan 2015 to Dec 2024)	98,649.7			
Tier 1 Annual Limit (For Current Calendar Year)	24,359.0			
Tier 1 YTD Deliveries (For Current Calendar Year)	2,043.0	8.4		
Tier 1 Current Month Deliveries	813.2			
Purchase Order Commitment (Jan 2015 to Dec 2024)	162,390.0			

INVOICE TOTAL

Volume AF	Amount Now Due
813.2	**$1,027,628.66**

Note: Amount Due is based on highlighted fields

Approved for Payment:

John Zhao 2/9/20
John Zhao Date

PAID
Wired on 4/30/20
JC

Recommended for Payment:

3/10/20
Doug Anders Date

03/12/20

Batch Number - 279557

Bank Account - 00146807 Cash-General

Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Itm	Key Co	Amount	Invoice Number
84910	05/05/20	17361	ACCURATE FIRST AID SERVICES	1ST AID SITE SRV-WLK	PV	169886	001	00701	215.82	B-3413
				1ST AID SITE SRV-OPS	PV	169887	001	00701	169.51	B-3414
				1ST AID SITE SRV-HQ	PV	169888	001	00701	167.92	B-3415
				Payment Amount					553.25	
84911	05/05/20	2869	AT&T	SRV 4/14~5/13/20	PV	169808	001	00701	219.45	4639/041420
				Payment Amount					219.45	
84912	05/05/20	20698	BATTERIES PLUS	(2) 80 AMP BTTRY	PV	169821	001	00101	387.99	P25868519
				Payment Amount					387.99	
84913	05/05/20	20655	CANNON CORPORATION	P/E 3/31-MULHLND BRDG	PV	169802	001	00701	9,705.90	72140
				P/E 2/29 CORNELL P/S UPGD	PV	169803	001	00701	1,443.88	71723
				P/E 2/29-DSGN SRV INTRCNT	PV	169804	001	00701	5,051.25	71786
				P/E 3/31-DSGN SRV INTRCNT	PV	169805	001	00701	8,896.79	72104
				P/3 3/20-J BRIDGER PIPELN	PV	169883	001	00701	3,371.99	72196
				Payment Amount					28,469.81	
84914	05/05/20	16821	CLEAN SWEEP SUPPLY CO., INC	HAND SANITIZER	PV	169841	001	00101	164.25	579715
				HAND SANITIZER	PV	169842	001	00101	164.25	580060
				Payment Amount					328.50	
84915 ∞	05/05/20	15755	CORE & MAIN LP	COPPER TUBE	PV	169796	001	00701	1,072.89	M160027
				ADAPTERS/PVC PIPE	PV	169797	001	00701	917.39	M190009
	Alt Payee	15948	CORE & MAIN LP P. O. BOX 28330							

Batch Number - 279557

Bank Account - 00146807 Cash-General

Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Itm	Key Co	Amount	Invoice Number
			ST. LOUIS MO 63146							
				Payment Amount				1,990.28		
84916	05/05/20	6966	CS-AMSCO	ACTUATOR/MOTOR/CAPCTR	PV	169836	001	00701	7,885.10	15815
				ACTUATOR/MOTOR/CAPCTR	PV	169836	004	00701	201.80	15815
				Payment Amount				8,086.90		
84917	05/05/20	16364	D&H WATER SYSTEMS INC.	PROBE	PV	169822	001	00751	1,260.04	I 2020-0395
				Payment Amount				1,260.04		
84918	05/05/20	18933	DAVIS WHOLESALE ELECTRIC, INC.	MOTOR STARTRS & HEATRS	PV	169823	001	00751	624.81	1021-442609
				WIRE & LUGS	PV	169824	001	00101	45.77	1021-442944
				Payment Amount				670.58		
84919	05/05/20	2654	FAMCON PIPE	HYDRANT PARTS	PV	169839	001	00101	10,101.63	S100025517.001
				RTN-#S1000209 32.001	PD	169840	001	00101	9,702.32-	S100026421.001
				Payment Amount				399.31		
84920	05/05/20	2658	FEDERAL EXPRESS CORP	OVERNIGHT DELIVERY 4/14	PV	169882	001	00701	30.70	6-994-48132
				Payment Amount				30.70		
84921	05/05/20	2655	FERGUSON ENTERPRISES	AIR VACS	PV	169798	001	00701	5,322.57	0690924-2
		Alt Payee 3207	FERGUSON ENTERPRISES, INC. #1083 P. O. BOX 740827 LOS ANGELES CA 90074-0827							
				Payment Amount				5,322.57		
84922	05/05/20	2660	FISHER SCIENTIFIC	TUBING	PV	169819	001	00701	194.82	7255091
				OIL/GREASE DISKS	PV	169820	001	00701	879.56	7255104
		Alt Payee 3202	FISHER SCIENTIFIC FILE #50129 LOS ANGELES CA 90074-0129							
				Payment Amount				1,074.38		
84923	05/05/20	21197	JACOBS ENGINEERING	P/E 2/21-PH2 WHT PAPER	PV	169801	001	00701	43,980.63	W9Y23500-011

Batch Number - 279557

Bank Account - 00146807 Cash-General

Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Itm	Key Co	Amount	Invoice Number
			GROUP INC.	STDY						
				Payment Amount					43,980.63	
84924	05/05/20	17447	KONECRANES INC.	RPR WLFP OVERHEAD CRANE	PV	169831	001	00701	2,853.51	154291584
				Payment Amount					2,853.51	
84925	05/05/20	16412	KOPPL PIPELINE SERVICES, INC.	TAP 10" AC MAIN	PV	169830	001	00101	780.00	21710
				Payment Amount					780.00	
84926	05/05/20	3352	LAS VIRGENES MUNICIPAL WATER DISTRICT	L/S #1 3/12~4/16	PV	169811	001	00130	54.97	1775/042220
				L/S #2 3/12~4/16	PV	169812	001	00130	57.82	0570/042220
				JED SMTH P/S 3/9~4/13	PV	169813	001	00101	58.34	0254/042220
				RLV FARM 3/11~4/14	PV	169814	001	00751	171.80	2080/042220
				Payment Amount					342.93	
84927	05/05/20	2839	MOTION INDUSTRIES, INC.	CYLINDRICAL ROLLER BRGS	PV	169833	001	00701	431.38	CA22-654360
				V-BELTS	PV	169834	001	00701	26.94	CA22-654395
				V-BELTS	PV	169835	001	00701	49.84	CA22-654504
		Alt Payee	10317 MOTION INDUSTRIES INC. FILE 749376 LOS ANGELES CA 90074							
				Payment Amount					508.16	
84928	05/05/20	18983	POWERFLO PRODUCTS, INC.	RPR PARTS CENTRT TNK 3	PV	169832	001	00701	1,483.73	55358
				RPR PARTS CENTRT TNK 3	PV	169832	002	00701	50.00	55358
				Payment Amount					1,533.73	
84929	05/05/20	18505	RAFTELIS FINANCIAL CONSULTANTS,	P/E 3/31 RATE STDY	PV	169799	001	00701	7,523.75	14720

Batch Number - 279557

Bank Account - 00146807 Cash-General

Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Itm	Key Co	Amount	Invoice Number
			INC.							
				Payment Amount					7,523.75	
84930	05/05/20	20124	RON'S PORTABLE WELDING	WELD TAP-24811 CALBS RD	PV	169829	001	00701	220.00	6668
				Payment Amount					220.00	
84931	05/05/20	2957	SOUTHERN CALIFORNIA EDISON	RLV CMPST-DL 3/24~4/22	PV	169806	001	00751	382.80	3293-30/04242 0
				Payment Amount					382.80	
84932	05/05/20	2957	SOUTHERN CALIFORNIA EDISON	RLV CMPST 3/24~4/22	PV	169807	001	00751	17,716.99	5165-46/04232 0
				Payment Amount					17,716.99	
84933	05/05/20	2958	SOUTHERN CALIFORNIA GAS CO	CONDUIT 3/20~4/20/20	PV	169809	001	00101	15.29	8400/042220
				Payment Amount					15.29	
84934	05/05/20	3789	T & T TRUCK & CRANE SERVICE	CRANE SRV-TAPIA 4/13	PV	169838	001	00701	1,075.00	0146270-IN
				Payment Amount					1,075.00	
84935	05/05/20	12149	THATCHER CO. OF CALIFORNIA	V	PV	169837	001	00701	5,394.78	274293
				274 GAL CITRIC ACID	PV	169884	001	00701	2,163.22	274341/274342 -R
				Payment Amount					7,558.00	
84936	05/05/20	3035	VWR SCIENTIFIC	GLOVES	PV	169815	001	00701	454.43	8089763408
				FILTERS	PV	169816	001	00701	621.92	8089756499
				CONDUCTIVITY STD	PV	169817	001	00701	26.86	8089763407
				MIXER	PV	169818	001	00751	299.07	8089763406
	Alt Payee	3216	VWR INTERNATIONAL, INC P. O. BOX 640169 PITTSBURGH PA 15264-0169							
				Payment Amount					1,402.28	
84937	05/05/20	19685	W. LITTEN INC.	SPRYFLD 4/13~4/18	PV	169800	001	00701	7,986.98	20017
				SPRYFLD	PV	169885	001	00701	7,480.80	20018

Batch Number - 279557

Bank Account - 00146807 Cash-General

. . . Payment . . . Number	Date	Address Number	Name	Payment Stub Message	. . . Document . . . Ty	Number	Key Itm	Co	Amount	Invoice Number
				4/19~4/24						
				Payment Amount				15,467.78		
84938	05/05/20	3025	WATER & SANITATION SRV./VENTURA COUNTY	PCH WTR 3/17~4/14	PV	169810	001	00101	15,971.96	1983386
				Payment Amount				15,971.96		
				Total Amount of Payments Written				166,126.57		
				Total Number of Payments Written			29			

Batch Number - 279704

Bank Account - 00146807 Cash-General

Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Itm	Key Co	Amount	Invoice Number
84939	05/12/20	19269	ACC BUSINESS	INTERNET 3/11~4/10	PV	169914	001	00701	913.82	201047208
				Payment Amount					913.82	
84940	05/12/20	2317	ACORN NEWSPAPER	DISPLAY AD-EARTH DAY 4/23	PV	169961	001	00701	670.60	151014
				Payment Amount					670.60	
84941	05/12/20	19993	ALEXANDER'S CONTRACT SERVICES, INC.	MTR READS 3/23~4/24	PV	169875	001	00701	19,360.56	102781
				Payment Amount					19,360.56	
84942	05/12/20	2869	AT&T	SRV 4/23~5/22	PV	169937	001	00101	260.71	7426/042320
				SRV 4/20~5/19	PV	169938	001	00101	219.42	2150/042020
				SRV 4/23~5/22	PV	169939	001	00101	268.95	2430/042320
				Payment Amount					749.08	
84943	05/12/20	7770	AUTOMATIONDIRECT.COM	PANEL METER	PV	169852	001	00101	163.16	10906645
				Payment Amount					163.16	
84944	05/12/20	21056	BATTERY SYSTEMS INC	BATTERY STOCK	PV	169881	001	00701	681.09	5497568
				Payment Amount					681.09	
84945	05/12/20	18071	BLUE DIAMOND MATERIALS	3.18 TN A/C 3/8 FINE	PV	169916	001	00701	176.10	1807032
				Payment Amount					176.10	
84946	05/12/20	21548	BRH SUPPLY	DISINFECTANT & WIPES	PV	169876	001	00701	432.96	5000
				Payment Amount					432.96	
84947	05/12/20	8091	BROWN AND CALDWELL	P/E 3/26-CORSN CTL STDY	PV	169872	001	00701	1,303.50	45369560
				P/E 3/26-PWP OPS SPPRT	PV	169873	001	00701	1,961.50	45369562
				Payment Amount					3,265.00	
84948	05/12/20	21536	BUILDING BLOCK ENTERTAINMENT INC.	LICENSE-3 EDU VIDEOS	PV	169964	001	00101	3,000.00	3406-9
				Payment Amount					3,000.00	
84949	05/12/20	18107	CAROLLO ENGINEERING,	P/E 3/31-PWP DEMO	PV	169878	001	00701	16,196.23	0186420

Batch Number - 279704

Bank Account - 00146807 Cash-General

Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Itm	Key Co	Amount	Invoice Number
			INC							
				Payment Amount					16,196.23	
84950	05/12/20	21550	DAMATO ASSOCIATES INC.	RFND BAL-CLOSED A/C	PV	169845	001	00101	939.58	9999447
				Payment Amount					939.58	
84951	05/12/20	2601	DELL COMPUTER CORP	(9) LAPTOP DOCKS	PV	169858	001	00701	2,393.68	10388604208
				(12) DELL LAPTOPS	PV	169944	001	00701	17,650.23	10384944536
		Alt Payee	7819 DELL MARKETING LP P.O. BOX 910916 PASADENA CA 91110-0916							
				Payment Amount					20,043.91	
84952	05/12/20	11330	DIAL SECURITY	5/20 SEC SRV-HQ	PV	169951	001	00701	355.00	375987
				5/20 SEC SRV-TAPIA	PV	169952	001	00701	271.00	375988
				5/20 SEC SRV-RLV	PV	169953	001	00701	35.00	375989
				5/20 SEC SRV-RLV FARM	PV	169954	001	00701	35.00	375990
				5/20 SEC SRV-WLK	PV	169955	001	00701	125.00	375991
				5/20 SEC SRV-WLK P/S	PV	169956	001	00701	35.00	375992
				5/20 SEC SRV-IT ROOM	PV	169957	001	00701	147.00	375993
				5/20 CELL PLAN-RLV	PV	169958	001	00701	15.00	375994
				5/20 SEC SRV-OPS	PV	169959	001	00701	114.00	375995
				Payment Amount					1,132.00	
84953	05/12/20	20685	DOCUMENT SYSTEMS INC	3/24~4/23 CANON MNT-CS	PV	169868	001	00701	46.06	130735
				Payment Amount					46.06	
84954	05/12/20	20739	DOUBLE 3 LLC	RFND BAL-CLOSED A/C	PV	169844	001	00101	72.69	2150348-07412 5
				Payment Amount					72.69	

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Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Itm	Key Co	Amount	Invoice Number
84955	05/12/20	18441	EMPLOYEE RELATIONS NETWORK	EE BACKGROUND CHECK	PV	169928	001	00701	255.20	87623
				Payment Amount					255.20	
84956	05/12/20	2638	ENVIRONMENTAL RESOURCE ASSOC	MICROBE STANDARDS	PV	169926	001	00701	651.76	936079
				Payment Amount					651.76	
84957	05/12/20	2658	FEDERAL EXPRESS CORP	PKG DLVRD 4/29	PV	169963	001	00701	30.34	7-000-38900
				Payment Amount					30.34	
84958	05/12/20	20544	FORESTAR CHATSWORTH, LLC	RFND BAL-CLOSED A/C	PV	169843	001	00101	406.45	9998702-07312 1
				Payment Amount					406.45	
84959	05/12/20	6770	G.I. INDUSTRIES	5/20 DISP-RLV FARM	PV	169932	001	00751	96.64	2940193-0283-4
				5/20 DISP-RLV	PV	169933	001	00751	96.64	2940192-0283-6
				10 YD @ RLV 4/16~4/30	PV	169934	001	00751	356.33	2940354-0283-2
				SHOP BLDG 4/16~4/30	PV	169935	001	00701	982.62	2940353-0283-4
				5/20 DISP-HQ & SHOP	PV	169936	001	00701	977.87	2940194-0283-2
	Alt Payee	6771	G.I. INDUSTRIES P. O. BOX 541065 LOS ANGELES CA 90054-1065							
				Payment Amount					2,510.10	
84960	05/12/20	2701	GRAINGER, INC.	BATTERIES	PV	169864	001	00701	200.71	9506439992
				PAINT	PV	169877	001	00701	477.13	9495151764/CM 9503754070
				HOUR METERS	PV	169901	001	00701	64.63	9500476222
				WIRE STRIPPER	PV	169902	001	00701	29.00	9501181110
				METER TEST LEADS/CLIPS	PV	169903	001	00701	120.88	9509395902
				SWIVEL SOCKETS	PV	169904	001	00701	234.78	9512071581
				TORQUE WRENCH	PV	169905	001	00701	82.03	9512071599

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Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Itm	Key Co	Amount	Invoice Number
				AIR FILTERS	PV	169906	001	00701	288.29	9505810649
				ICE THICKNESS SENSOR	PV	169907	001	00701	167.33	9490272862
				TILE DRILL BIT	PV	169908	001	00701	21.39	9492074654
				WELDING SUPPLIES	PV	169910	001	00701	264.29	9498156174
				WELDING SUPPLIES	PV	169911	001	00701	214.68	9498156182
				HOUR METER	PV	169930	001	00701	21.57	9493787411
				HOUR METERS	PV	169931	001	00701	43.14	9498216465
	Alt Payee	5453	GRAINGER, INC. DEPT 805178142 PALATINE IL 60038-0001							
				Payment Amount					2,229.85	
84961	05/12/20	18679	GSE CONSTRUCTION, INC.	RTN#1-DGSTR 2 REHAB	PD	169941	001	00754	10,155.00-	10680/RTN#1
				PMT#1-DGSTR 2 REHAB	PV	169942	001	00701	203,100.00	10680/PMT#1
				Payment Amount					192,945.00	
84962	05/12/20	2705	HACH COMPANY	FILTER/TUBING	PV	169929	001	00701	311.01	11921808
				SENSOR CAP	PV	169948	001	00701	146.74	11901748
				CR-#11887809	PD	169960	001	00751	233.23-	2176172
	Alt Payee	6442	HACH COMPANY 2207 COLLECTIONS CENTER DR CHICAGO IL 60693							
				Payment Amount					224.52	
84963	05/12/20	7421	HAMNER, JEWELL AND ASSOCIATES	P/E 4/15-EMGCY GNRTRS	PV	169874	001	00701	1,665.00	200162
				Payment Amount					1,665.00	
84964	05/12/20	10102	INFOSEND INC.	3/4~3/25 BILL/PMT MLNG	PV	169945	001	00701	8,431.33	170009
				REMIT ENVELOPES	PV	169946	001	00701	104.94	170798
				Payment Amount					8,536.27	
84965	05/12/20	2752	KAMAN INDUSTRIAL TECHNOLOGIES	OIL FILTERS	PV	169854	001	00751	378.15	I108460

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Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Itm	Key Co	Amount	Invoice Number
				Payment Amount					378.15	
84966	05/12/20	2611	LA DWP	RECTIFIER 3/27~4/29	PV	169940	001	00101	42.20	851260/042920
				GERMAIN TEMP 2/18~2/26	PV	169997	001	00101	9.80	952169/050420
				Payment Amount					52.00	
84967	05/12/20	3352	LAS VIRGENES MUNICIPAL WATER DISTRICT	TAPIA 3/11~4/14	PV	169918	001	00751	892.61	1760/042220
				RLV 3/11~4/14	PV	169919	001	00751	759.96	2090/042220
				HQ PWP/DEMO 3/11~4/14	PV	169920	001	00751	60.56	2620/042220
				HQ BD#8 3/11~4/14	PV	169921	001	00701	318.48	2647/042220
				FIRE PRTCN #8 3/11~4/14	PV	169922	001	00701	7.50	2650/042220
				FIRE PRTCN #7 3/11~4/14	PV	169923	001	00701	7.50	2654/042220
				BLDG #7 3/11~4/14	PV	169924	001	00701	828.04	2656/042220
				BLDG #2 3/11~4/14	PV	169925	001	00701	363.00	2658/042220
				Payment Amount					3,237.65	
84968	05/12/20	21551	ANDREA LAZARUS	RFND BAL-CLOSED A/C	PV	169846	001	00101	83.22	072531
				Payment Amount					83.22	
84969	05/12/20	2814	MCMASTER-CARR SUPPLY CO	AUTOMATIC DRAIN	PV	169855	001	00751	289.24	38495605
				SEWER SNAKE PARTS	PV	169856	001	00751	366.38	38351637
	Alt Payee	3197	MC MASTER-CARR P. O. BOX 7690 CHICAGO IL 60680-7690							
				Payment Amount					655.62	
84970	05/12/20	2839	MOTION INDUSTRIES, INC.	RLV CONVEYOR GEARBOXES	PV	169949	001	00701	19,211.31	CA22-654833
				RLV CONVEYOR	PV	169949	003	00701	567.97	CA22-654833

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Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Itm	Key Co	Amount	Invoice Number
				GEARBOXES						
		Alt Payee	10317	MOTION INDUSTRIES INC. FILE 749376 LOS ANGELES CA 90074						
				Payment Amount					19,779.28	
84971	05/12/20	20736	NATIONWIDE	SURETY BOND RENEWAL	PV	169851	001	00701	250.00	BD7900692571/ 20-21
				Payment Amount					250.00	
84972	05/12/20	2302	OFFICE DEPOT	TONER CARTRIDGES	PV	169894	001	00701	1,792.39	478582343001
				HDMI CABLE	PV	169895	001	00701	36.12	472902786001
				DISH	PV	169896	001	00701	30.77	472902369001
				SOAP/ENVLPS/PUNCH						
				PENS/STAMP	PV	169897	001	00701	45.71	480583957001
				GEL PENS	PV	169898	001	00701	12.64	480587268001
				GEL PENS	PV	169899	001	00701	23.14	480587269001
				Payment Amount					1,940.77	
84973	05/12/20	16372	OLIN CORPORATION - CHLOR ALKALI	4,836 GAL HYPOCHLORITE	PV	169879	001	00701	4,073.48	2820178
				4,958 GAL HYPOCHLORITE	PV	169915	001	00701	4,176.25	2822898
				4,902 GAL HYPOCHLORITE	PV	169950	001	00701	4,129.08	2823906
		Alt Payee	16373	OLIN CORPORATION - CHLOR ALKALI P.O. BOX 402766 ATLANTA GA 30384-2766						
				Payment Amount					12,378.81	
84974	05/12/20	21552	JENNIFER OSTROW	RFND BAL-OPEN A/C	PV	169847	001	00101	199.73	066343
				Payment Amount					199.73	
84975	05/12/20	3110	GLEN PETERSON	MWD REP FEES-APR'20	PV	169943	001	00701	1,540.00	17
				Payment Amount					1,540.00	
84976	05/12/20	8484	PRAXAIR DISTRIBUTION, INC	CYLNDR RENT 3/20~4/20	PV	169859	001	00101	203.67	96184365
		Alt Payee	8898	PRAXAIR DISTRIBUTION INC. DEPT. LA 21511						

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Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Itm	Key Co	Amount	Invoice Number
			PASADENA CA 91185-1511							
				Payment Amount					203.67	
84977	05/12/20	2585	PURETEC	2/25 TANK EXCHG-TAPIA	PV	169913	001	00701	268.71	1782944
				2/1~4/30 DI RNTL-WLK	PV	169947	001	00701	82.03	1777402
				Payment Amount					350.74	
84978	05/12/20	19293	RISK MANAGEMENT PROFESSIONALS , INC.	CALARP HAZ ASSESS-WLK	PV	169995	001	00701	224.00	171540
				Payment Amount					224.00	
84979	05/12/20	18973	SOUTHERN COUNTIES OIL	(2) LUBRICANTS	PV	169865	001	00701	420.05	1617242-IN
				(3) LUBRICANTS	PV	169866	001	00701	630.06	1617237-IN
				Payment Amount					1,050.11	
84980	05/12/20	21553	TIFFANY SHAH	RFND BAL-CLOSED A/C	PV	169848	001	00101	128.89	063669
				Payment Amount					128.89	
84981	05/12/20	2956	SOUTH COAST AIR QUALITY MGMT DIST	HOT SPOTS PRGM FEE-TP	PV	169860	001	00751	137.63	3636900
				HOT SPOTS PRGM FEE-OPS	PV	169861	001	00701	137.63	3637039
				HOT SPOTS PRGM FEE-WLK	PV	169862	001	00101	137.63	3637249
				HOT SPOTS PRGM FEE-L/S2	PV	169863	001	00130	137.63	3637357
				Payment Amount					550.52	
84982	05/12/20	2957	SOUTHERN CALIFORNIA EDISON	RW P/S-3/31~4/29 /20 NEM	PV	169962	001	00751	31,828.17	4500-42/05022 0
				Payment Amount					31,828.17	
84983	05/12/20	2957	SOUTHERN CALIFORNIA EDISON	ENERGY CHGS-APR'20	PV	169990	001	00101	3,219.92	2957/050220
				ENERGY CHGS-APR'20	PV	169990	002	00101	291.57	2957/050220
				ENERGY	PV	169990	003	00101	10.35	2957/050220

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Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Itm	Key Co	Amount	Invoice Number
				CHGS-APR'20 ENERGY	PV	169990	004	00101	13.52	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	005	00101	11.68	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	006	00101	4,360.50	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	007	00101	4,965.87	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	008	00101	5,170.35	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	009	00101	1,969.04	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	010	00101	10.75	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	011	00101	139.01	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	012	00101	2,614.89	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	013	00101	14,707.90	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	014	00101	58,831.62	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	015	00101	13.29	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	016	00101	292.84	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	017	00101	555.46	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	018	00101	5,457.87	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	019	00101	827.82	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	020	00101	132.40	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	021	00101	541.19	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	022	00101	1,916.92	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	023	00101	14.71	2957/050220
				CHGS-APR'20						

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Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Itm	Key Co	Amount	Invoice Number
				ENERGY CHGS-APR'20	PV	169990	024	00101	1,052.38	2957/050220
				ENERGY CHGS-APR'20	PV	169990	025	00101	14.92	2957/050220
				ENERGY CHGS-APR'20	PV	169990	026	00101	346.96	2957/050220
				ENERGY CHGS-APR'20	PV	169990	027	00101	12.81	2957/050220
				ENERGY CHGS-APR'20	PV	169990	028	00101	4,115.33	2957/050220
				ENERGY CHGS-APR'20	PV	169990	029	00101	4,434.69	2957/050220
				ENERGY CHGS-APR'20	PV	169990	030	00101	1,258.52	2957/050220
				ENERGY CHGS-APR'20	PV	169990	031	00101	1,382.11	2957/050220
				ENERGY CHGS-APR'20	PV	169990	032	00101	4,983.77	2957/050220
				ENERGY CHGS-APR'20	PV	169990	033	00101	6,988.32	2957/050220
				ENERGY CHGS-APR'20	PV	169990	034	00101	2,291.73	2957/050220
				ENERGY CHGS-APR'20	PV	169990	035	00101	70.36	2957/050220
				ENERGY CHGS-APR'20	PV	169990	036	00101	296.81	2957/050220
				ENERGY CHGS-APR'20	PV	169990	037	00101	11.62	2957/050220
				ENERGY CHGS-APR'20	PV	169990	038	00101	20.23	2957/050220
				ENERGY CHGS-APR'20	PV	169990	039	00101	707.90	2957/050220
				ENERGY CHGS-APR'20	PV	169990	040	00101	1,441.50	2957/050220
				ENERGY CHGS-APR'20	PV	169990	041	00101	3,096.26	2957/050220
				ENERGY CHGS-APR'20	PV	169990	042	00101	10.35	2957/050220
				ENERGY CHGS-APR'20	PV	169990	043	00101	14.28	2957/050220
				ENERGY	PV	169990	044	00101	12.44	2957/050220

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Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Itm	Key Co	Amount	Invoice Number
				CHGS-APR'20 ENERGY	PV	169990	045	00101	78.16	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	046	00101	13.89	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	047	00101	526.70	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	048	00101	6.23	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	049	00101	6.23	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	050	00101	313.89	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	051	00101	18.47	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	052	00101	18.99	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	053	00101	313.34	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	054	00101	1,899.70	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	055	00101	1,343.03	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	056	00101	671.52	2957/050220
				CHGS-APR'20 ENERGY	PV	169990	057	00101	1,021.21-	2957/050220
				CHGS-APR'20 Payment Amount					142,821.70	
84984	05/12/20	2958	SOUTHERN CALIFORNIA GAS CO	JBR P/S 4/1~4/30	PV	169986	001	00101	15.36	1200/050420
				Payment Amount					15.36	
84985	05/12/20	20648	STANTEC CONSULTING SERVICES INC.	P/E 8/30/19-TTHM STDY	PV	169996	001	00701	1,750.00	1561417
				Payment Amount					1,750.00	
84986	05/12/20	2969	STATE WATER RESOURCES CONTROL BOARD	ELAP CERT FEES	PV	169853	001	00701	6,352.00	EA 0520-1533
				Payment Amount					6,352.00	
84987	05/12/20	21557	THE HOME	HAND	PV	169988	001	00101	106.13	546192048

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Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Itm	Key Co	Amount	Invoice Number
			DEPOT PRO-SUPPLY WORKS	SANITIZER						
				Payment Amount					106.13	
84988	05/12/20	20971	THOUSAND OAKS PLUMBING INC.	CLEAR DRAIN-FILL STATION	PV	169857	001	00751	160.00	24221861
				Payment Amount					160.00	
84989	05/12/20	21252	TYLER TECHNOLOGIES, INC.	ERP IMPLTN 3/31~4/2	PV	169869	001	00701	3,500.00	045-298979
				ERP IMPLTN 4/7~4/9	PV	169870	001	00701	4,200.00	045-299861
				Payment Amount					7,700.00	
84990	05/12/20	21511	URBAN WATER GROUP, INC.	WEB PAGE-SUSTAIN GRDN	PV	169880	001	00701	4,335.00	1358
				Payment Amount					4,335.00	
84991	05/12/20	18604	VENTURA PEST CONTROL	PEST CNTRL-FEB'20	PV	169991	001	00701	135.00	705249
				PEST CNTRL-FEB'20	PV	169991	002	00701	100.00	705249
				PEST CNTRL-FEB'20	PV	169991	003	00701	340.00	705249
				PEST CNTRL-MAR'20	PV	169992	001	00701	135.00	708290
				PEST CNTRL-MAR'20	PV	169992	002	00701	100.00	708290
				PEST CNTRL-MAR'20	PV	169992	003	00701	340.00	708290
				PEST CNTRL-APR'20	PV	169993	001	00701	135.00	711279
				PEST CNTRL-APR'20	PV	169993	002	00701	100.00	711279
				PEST CNTRL-APR'20	PV	169993	003	00701	340.00	711279
				PEST CNTRL-MAY'20	PV	169994	001	00701	135.00	714635
				PEST CNTRL-MAY'20	PV	169994	002	00701	100.00	714635
				PEST	PV	169994	003	00701	340.00	714635

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Payment Number	Payment Date	Address Number	Name	Payment Stub Message	Document Ty	Document Number	Key Itm	Key Co	Amount	Invoice Number
				CNTRL-MAY'20						
				Payment Amount					2,300.00	
84992	05/12/20	21425	VITAL COATINGS INC	RECOAT SURGE TNK-SEMNLE	PV	169900	001	00701	28,200.00	1080
				Payment Amount					28,200.00	
84993	05/12/20	21554	JEFF WALLACH	RFND BAL-CLOSED A/C	PV	169849	001	00101	47.41	082311
				Payment Amount					47.41	
84994	05/12/20	18914	WECK LABORATORIES, INC.	TAPIA EFFLNT-0D0706 6	PV	169889	001	00701	613.60	W0D1060-LV
				WLK-0D07061	PV	169890	001	00701	41.38	W0D1204-LV
				TAPIA EFFLNT-0D0706 5	PV	169891	001	00701	290.67	W0D1592-LV
				DIONIZED WTR-0D07062	PV	169892	001	00701	26.52	W0D1591-LV
				TAPIA EFFLNT-0D0706 4	PV	169893	001	00701	291.74	W0D0945-LV
				Payment Amount					1,263.91	
84995	05/12/20	3047	WESCO DISTRIBUTION, INC.	INSTRUMENT CABLE	PV	169867	001	00701	545.31	996199
		Alt Payee	6443 WESCO DISTRIBUTION, INC PO BOX 31001-0465 PASADENA CA 91110-0465							
				Payment Amount					545.31	
84996	05/12/20	21555	JOSEPH YOUNAN	RFND BAL-CLOSED A/C	PV	169850	001	00101	59.30	053972
				Payment Amount					59.30	
				Total Amount of Payments Written					547,784.78	
				Total Number of Payments Written			58			

LAS VIRGENES MUNICIPAL WATER DISTRICT

4232 Las Virgenes Road, Calabasas CA 91302

MINUTES
REGULAR MEETING

9:00 AM May 5, 2020

PLEDGE OF ALLEGIANCE

The Pledge of Allegiance to the Flag was led by Lee Renger.

1. CALL TO ORDER AND ROLL CALL

The meeting was called to order at **9:00 a.m.** by Board President Lewitt via teleconference in the Board Room at Las Virgenes Municipal Water District headquarters at 4232 Las Virgenes Road, Calabasas, CA 91302. The meeting was conducted via teleconference pursuant to the provisions of the Governor's Executive Order, N-29-20, which suspended certain requirements of the Ralph M. Brown Act to support social distancing guidelines associated with response to the coronavirus (COVID-19) pandemic. Josie Guzman, Clerk of the Board, conducted the roll call.

Present:	Directors Charles Caspary, Jay Lewitt, Lynda Lo-Hill, Len Polan, and Lee Renger
Absent:	None
Staff Present:	David Pedersen, General Manager
	Joe McDermott, Director of Engineering and External Affairs
	Don Patterson, Director of Finance and Administration
	John Zhao, Director of Facilities and Operations
	Josie Guzman, Clerk of the Board
	Keith Lemieux, District Counsel

2. APPROVAL OF AGENDA

General Manager David Pedersen noted that Syrus Devers from Best Best & Krieger, LLP, would provide the State Legislative update.

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

3. PUBLIC COMMENTS

None.

4. CONSENT CALENDAR

Director Lo-Hill pulled Item 4E from the Consent Calendar for discussion.

A List of Demands: May 5, 2020: Receive and file

B Minutes Special Meeting of April 13, 2020; Regular Meeting of April 21, 2020; and Special Meeting of April 27, 2020: Approve

C Las Virgenes Municipal Water District Conflict of Interest Code: Adoption

Pass, approve, and adopt proposed Resolution No. 2575, amending Resolution No. 2468 (Las Virgenes Code) as it relates to the Conflict of Interest Code.

RESOLUTION NO. 2575

A RESOLUTION OF THE BOARD OF DIRECTORS OF LAS VIRGENES MUNICIPAL WATER DISTRICT AMENDING RESOLUTION NO. 2468 (LAS VIRGENES CODE) AS IT RELATES TO THE CONFLICT OF INTEREST CODE

(Reference is hereby made to Resolution No. 2575 on file in the District's Resolution Book and by this reference the same is incorporated herein.)

D Annual Purchase Order with Grainger Industrial Supply: Approval of Increase

Authorize the General Manager to approve an increase to the purchase order with Grainger Industrial Supply, in the amount of $12,000, from $33,000 to $45,000, with four one-year renewal options in the annual amount of $45,000.

Director Lo-Hill moved to approve the Consent Calendar Items 4A, 4B, 4C, and 4D. Motion seconded by Director Renger. Motion carried unanimously by roll call vote.

4. CONSENT CALENDAR – SEPARATE ACTION ITEM

E Tract No. 53138 Deerlake Ranch, Chatsworth: Approval of Change in Scope for Environmental Documentation

Authorize the Director of Engineering and External Affairs to execute Change in Scope No. 2 to Envicom Corporation, increasing the contract amount by $2,215, from $28,562 to $30,777, for a spring botanical survey for the proposed one-million gallon tank to serve the Twin Lakes Sub-system.

David Pedersen, General Manager, left the meeting due to a potential or actual conflict of interest as previously disclosed to the Board and described in the staff report.

Director Lo-Hill moved to approve Item 4E. Motion seconded by Director Polan.

Joe McDermott, Director of Engineering and External Affairs, presented the report. He responded to a question regarding replacing the tank instead of adding a second tank by stating that there was not sufficient space for an additional tank at the current site.

Eric Schlageter, Principal Engineer, discussed the challenges in seeking alternate sites for the new tank, which required that it be constructed at the same elevation as the current tank.

Mr. McDermott responded to a question regarding the history of the original tank by stating that the tank was designed for the development that was appropriate at the time; however, the new development would require additional water storage.

Motion carried unanimously by roll call vote.

General Manager Pedersen returned to the meeting.

5. ILLUSTRATIVE AND/OR VERBAL PRESENTATION AGENDA ITEMS

A Legislative and Regulatory Updates

Syrus Devers, representing Best Best & Krieger, LLP, provided an update regarding Governor Newsom's criteria for reopening public spaces, businesses, and schools with the COVID-19 pandemic. He reported that the State Assembly returned to session on May 4th, and the State Senate would return on May 11th. He responded to a question regarding the State's efforts in securing funds from the federal government for unemployment compensation claims.

Mr. Devers also provided an update regarding proposed SB 1099 (Dodd) related to emergency generator testing. He noted that this bill might be considered as part the COVID-19 response, wildfires, and housing topics to be addressed by the Legislature. He stated that he believed the bill would move forward; however, Senator Benjamin Allen, the Chair of the Senate Standing Committee on Environmental Quality, expressed reservations regarding the bill's effect on air quality. He noted that a call was held with the Association of Air Quality Management Districts, where they discussed concerns with the amount of air pollution that would be produced should all emergency generators be run for over 200 hours annually.

General Manager David Pedersen noted that at Board President Lewitt's request, staff would arrange a meeting with Senator Henry Stern to discuss support for SB 1099 and other topics concerning the District.

B Water Supply Conditions Update

Joe McDermott, Director of Engineering and External Affairs, presented the report. He responded to a question regarding the yellow highlighted area shown on the 2020 State Water Project Allocation graphic by stating that he would follow-up.

6. TREASURER

Director Lo-Hill stated that the Treasurer's report was in order.

7. BOARD OF DIRECTORS

A Response to Coronavirus (COVID-19) Pandemic: Continuation of Emergency

Approve the continuation of emergency declaration for response to the coronavirus (COVID-19) pandemic.

General Manager David Pedersen presented the report. He provided an update regarding employees' alternate working arrangements and coordinating with local public agencies on returning to work and reopening to the public.

Ursula Bosson, Customer Service Manager, provided an update on the number of customer calls received regarding inability to pay, payment plan arrangements, number of autopay enrollments and cancellations, comparison of yearly balances due, payment numbers and totals comparing current and previous year/month data, and customers' use of on-line features. She responded to questions regarding the number of high water users requesting payment arrangements and payments for combined water and sewer bills, which reflected as two payments. She stated that she would follow-up on whether Finance staff could provide the average per day per month for payment numbers and payment totals for the previous and current years.

Board President Lewitt suggested that staff bring back a policy for the Board's consideration regarding whether to allow payment arrangements for repeat high water users. The General Manager responded that staff would follow-up.

Director Lo-Hill moved to approve Item 7A. Motion seconded by Director Renger.

Board President Lewitt suggested looking into implementing telework arrangements for employees after the Safer at Home Order has ended. General Manager David Pedersen responded that staff would collect all of the ideas and lessons learned and bring back proposed changes to current policies.

Motion carried unanimously by roll call vote.

8. FACILITIES AND OPERATIONS

A Water Main and Asphalt Repair on Lake Shore Drive, Malibou Lake: Approval

Authorize the General Manager to approve an increase in the purchase order with Toro Enterprises, Inc., in the amount of $12,365, from $33,843 to $46,208, for additional asphalt paving required for the water main repair on Lake Shore Drive, Malibou Lake.

General Manager David Pedersen presented the report.

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

A discussion ensued regarding thick asphalt used to level off slumping road conditions, taking a core sample of the asphalt prior to a repair to determine its thickness, and considering asking contractors to base their pricing on the asphalt conditions that they might encounter.

Motion carried unanimously by roll call vote.

9. FINANCE AND ADMINISTRATION

A Reclassification of Financial Analyst Position

Reclassify an existing Financial Analyst (M83) position to a flexibly-staffed Financial Analyst I/II (M63/M77) position.

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

Director Caspary moved to approve Item 9A. Motion seconded by Director Polan.

Mr. Patterson responded to a question regarding the cost savings in reclassifying the position due to the position not having a supervisory role.

Motion carried unanimously by roll call vote.

10. ENGINEERING AND EXTERNAL AFFAIRS

A Rancho Las Virgenes Compost Facility Repairs: Approval of Change Order

Authorize the General Manager to execute Change Order No. 2 to Pacific Hydrotech Corporation, in the amount of $1,542,900, for mechanical and structural repairs to the Rancho Las Virgenes Composting Facility Amendment Building and release the retention, in the amount of $71,009.88, for the Amendment Bin and Conveyance Modification Project.

Eric Schlageter, Principal Engineer, presented the report.

Director Lo-Hill moved to approve Item 10A. Motion seconded by Director Polan.

Brett Dingman, Water Reclamation Manager, responded to a question regarding ways to protect the amendment and woodchips from future fire risk by stating that it was not normal practice to have the amendment stored outside. He noted that there was an unscheduled delivery of amendment after composting operations were suspended prior to the Woolsey Fire, and the standard practice was to store the amendment inside.

A discussion ensured regarding preparing an operating procedure for storing amendment, fashioning a cover to place over the opening of the amendment, installing an exterior sprinkler system to protect the building and any amendment that might be left outside, and installing a slide gate in the conveyor to isolate the receiving bin from the storage bin.

General Manager David Pedersen stated that staff would follow-up and bring back recommendations to protect the amendment building and receiving facilities from fire risk.

Don Patterson, Director of Finance and Administration, provided an update regarding reimbursement from the District's insurance carrier and the Federal Emergency Management Agency (FEMA) for damages resulting from the Woolsey Fire.

Motion carried unanimously by roll call vote.

11. NON-ACTION ITEMS

A Organization Reports

None.

B Director's Reports on Outside Meetings

Board President Lewitt noted that he and General Manager David Pedersen were working with staff from the Association of Water Agencies of Ventura County to facilitate an upcoming WaterWise Breakfast Program via teleconference.

C General Manager Reports

(1) General Business

General Manager David Pedersen announced that this week was the 51st Annual Professional Municipal Clerks Week. He recognized Josie Guzman, Clerk of the Board, for her efforts and for achieving her Master Municipal Clerk designation from the International Institute of Municipal Clerks. He also provided an update regarding the insurance claim for costs incurred from the Willow Incident and noted that the District received payment in the amount of $21,150.43. He also noted that security remained at District Headquarters at the request of the insurance company while remedial work

continued at the site. He also provided an update regarding the Metropolitan Water District of Southern California's (MWD) litigation against the California Department of Fish and Wildlife and the California Department of Water Resources. He stated that the Association of California Water Agencies (ACWA) Water Management Committee would be leading an effort to weigh in more heavily on this issue. He noted that the State Water Project and the Central Valley Project had been operating with collaboration between the State of California and the federal government for the past 50 years; both projects share a portion of the California Aqueduct, and both projects have large pumping stations in the Bay Delta. He also stated that in the past six months there has been an erosion of collaboration between the state and federal governments with the State suing the federal government, and MWD and several State Water Project contractors suing the State. He commented that the litigation and conflict would negatively impact water users throughout the State, and there was interest and value in urging the State Administration and the Governor to come back to the table and work cooperatively with the federal government on managing the two projects. He expressed concern that the Delta Conveyance Project would not have a viable path forward without a resolution to this conflict. He also expressed concern that the conflict could result in a loss of 200,000 acre-feet of supply from the State Water Project. He stated that the recommendation would be for ACWA to make this a top priority for the current calendar year, and employ a combination of communication and advocacy to encourage the state and federal administrations to work together and come to consensus so that both projects could operate together. He suggested that ACWA put together draft policy principles that outline how these two projects ought to be operated. The solutions should be collaborative, comprehensive, and formulated without litigation; recognize and honor the co-equal goals for the Bay Delta that were established in 2009 and codified in the Water Code; and utilize the latest and best science in looking at these issues.

(2) Follow-Up Items

General Manager David Pedersen noted that the follow-up items included a report on uncollected receivables and alternatives for the Weather Based Irrigation Controller Program, as well as the items identified during today's meeting.

D Directors' Comments

Director Caspary asked that the meeting be adjourned in memory of Corey Pederson, Collection Systems Technician, who worked for the District for 18 years.

Director Lo-Hill noted that Timothy Quinn, former Executive Director of the Association of California Water Agencies (ACWA) and Landreth Visiting Fellow at Stanford's Water in the West Program, prepared a report entitled *Forty Years of California Water Policy: What Worked, What Didn't and Lessons for the Future*.

12. FUTURE AGENDA ITEMS

None.

13. PUBLIC COMMENTS

None.

14. CLOSED SESSION

None.

15. OPEN SESSION AND ADJOURNMENT

Seeing no further business to come before the Board, the meeting was duly adjourned at **10:46 a.m.**, in memory of Corey Pederson.

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

ATTEST:

Charles Caspary, Secretary
Board of Directors
Las Virgenes Municipal Water District

(SEAL)

May 1, 2020

To: Payroll

From: David W. Pedersen
General Manager

RE: Per Diem Request – April 2020

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

On April 25, 2017, the Board adopted Resolution No. 2513, amending the per diem rate to $220.

	Director	No. of Meetings	Rate	Total
8014	Charles Caspary	7	$220.00	$1,540.00
19447	Jay Lewitt	5	$220.00	$1,100.00
21169	Lynda Lo-Hill	5	$220.00	$1,100.00
18856	Leonard Polan	5	$220.00	$1,100.00
14702	Lee Renger	5	$220.00	$1,100.00

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

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

LAS VIRGENES MUNICIPAL WATER DISTRICT - PER DIEM REPORT

To: Clerk of the Board

Director's Name: Charles Caspary

Month of: Apr-20

Division: 1

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

Date(s)	# of Days Claimed			Reimbursible Expenses[2] (Y/N)	Check One		Event Title
	Event	Travel [1]	Total		MWD	LVMWD	
4/6/2020	1		1	N		X	LAS VIRGENES - TRIUNFO JPA BOARD MTG.
4/7/2020	1		1	N		X	LAS VIRGENES MWD - REGULAR BOARD MEETING
4/13/2020	1		1	N		X	LAS VIRGENES - STRATEGIC PLAN WORKSHOP
4/16/2020	1		1	N		X	SANTA MONICA BAY RESTORATION COMMISSION
4/21/2020	1		1	N		X	LAS VIRGENES MWD - REGULAR BOARD MEETING
4/24/2020	1		1	N		X	ACWA - STATE LEGISLATIVE COMMITTEE MTG.
4/27/2020	1		1	N		X	LVMWD - SPECIAL BOARD MEETING - BUDGET WORKSHOP
		TOTAL	7				

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

Date Submitted: April 30, 2020

Director Signature: Charles Caspary (via email)

LAS VIRGENES MUNICIPAL WATER DISTRICT - PER DIEM REPORT

To: Josie Guzman

Director's Name: Jay Lewitt

Month of: April

Division: 5

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

Date(s)	# of Days Claimed			Reimbursible Expenses[2] (Y/N)	Check One		Event Title
	Event	Travel [1]	Total		MWD	LVMWD	
4.6.20	1		1			x	JPA Board Meeting
4.7.20	1		1			x	LVMWD Board Meeting
4.13.20	1		1			x	LV Board Workshop
4.21.20	1		1			x	LV Board Meeting
4.27.20	1		1			x	LV Budget Workshop
		TOTAL	5				

Date Submitted: 4.30.20

JL

Director Signature: _____

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

LAS VIRGENES MUNICIPAL WATER DISTRICT - PER DIEM REPORT

To: Josie Guzman, Clerk of the Board

Director's Name: Lynda Lo-Hill

Month of: April, 2020

Division: 2

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

Date(s)	# of Days Claimed			Reimbursible Expenses[2] (Y/N)	Check One		Event Title
	Event	Travel [1]	Total		MWD	LVMWD	
4/6/2020	1		1			X	JPA Meeting
4/7/2020	1		1			X	LVMWD Board Meeting
4/13/2020	1		1			X	Strategic Planning Workshop
4/21/2020	1		1			X	LVMWD Board Meeting
4/27/2020	1		1			X	Budget Review Meeting
		TOTAL	5				

Date Submitted: April 29, 2020

Director Signature: *Lynda Lo-Hill submitted by email*

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

LAS VIRGENES MUNICIPAL WATER DISTRICT - PER DIEM REPORT

To: Josie Guzman, Clerk of the Board

Director's Name: Leonard Polan

Month of: Apr-20

Division: #4

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

Date(s)	# of Days Claimed			Reimbursible Expenses[2] (Y/N)	Check One		Event Title
	Event	Travel [1]	Total		MWD	LVMWD	
4/6/20	1	----	1	----	----	Y	JPA Mtg
4/7/20	1	----	1	----	----	Y	LVMWD Board Mtg
4/13/20	1	----	1	----	----	Y	Special LVMWD Board Mtg
4/21/20	1	----	1	----	----	Y	LVMWD Board Mtg
4/27/20	1	----	1	----	----	Y	Special LVMWD Board Mtg
		TOTAL	5				

Date Submitted: 5/2/20

Director Signature: *Leonard E. Polan*

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

LAS VIRGENES MUNICIPAL WATER DISTRICT - PER DIEM REPORT

To: Josie Guzman, Clerk of the Board

Director's Name: LEE RENGER

Month of: April 2020

Division: 3

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

Date(s)	# of Days Claimed			Reimbursible Expenses? (Y/N)	Check One		Event Title
	Event	Travel	Total		MWD	LVMWD	
4/6/2020	1		1	N		X	JPA BOARD MEETING
4/7/2020	1		1	N		X	LVMWD BOARD MEETING
4/13/2020	1		1	N		X	PLANNING WORKSHOP
4/21/2020	1		1	N		X	LVMWD BOARD MEETING
4/27/2020	1		1	N		X	BUDGET WORKSHOP
		TOTAL	5				

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

Date Submitted: 30-Apr-20

Director Signature: Lee Renger

RECEIVED
MAY 0 5 2020
BY:

17238 oJ

INVOICE

Glen Peterson, Director
Metropolitan Water District of Southern California
2936 Triunfo Canyon Rd
Agoura, CA. 91301
email: glenpsop@icloud.com

DATE: 05/04/20
INVOICE # 17
FOR: *Director fees*

Bill To:
Las Virgenes Municipal Water District
4232 Las Virgenes Canyon Rd
Calabasas, CA. 91302
attn: Josie Guzman, Clerk of the Board
818-251-2100

Date	Description	fee
4/9/2020	Northern Caucus	$220.00
4/13/2020	MWD Committees	$220.00
4/14/2020	MWD Board and committees	$220.00
4/15/2020	ACWA Webinar on Financing in the Covid era	$220.00
4/21/2020	Report to LV Board	$220.00
4/28/2020	MWD Committees	$220.00
4/30/2020	SCWC webinar on Communication in crisis	$220.00
	TOTAL	$1,540.00

Make Check payable to Glen Peterson

Thank you for the opportunity to serve

Approved for Payment
David W. Pedersen, P.E. 05/05/20

May 19, 2020 LVMWD Regular Board Meeting

TO: Board of Directors

FROM: Facilities & Operations

Subject : Contract Laboratory Services: Amendment of Purchase Order

SUMMARY:

Although the District has a state-certified water quality laboratory, staff contracts for the collection and analyses of samples that exceed the capabilities of the in-house laboratory. Staff recommends that the Board authorize the General Manager to extend the term and increase the amount of the existing purchase order for this work.

RECOMMENDATION(S):

Authorize the General Manager to extend the term and increase the amount of the annual purchase order to Weck Laboratories, Inc., by $40,000, from $60,000 to $100,000, for contract laboratory services.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

The total cost of the work is $40,000. Sufficient funds for the service are available in the adopted Fiscal Year 2019-20 Budget.

DISCUSSION:

The District operates and maintains a state-certified water quality laboratory. However, the services of a contract laboratory are still required for the collection and analyses of samples that exceed the capabilities of the in-house laboratory. The work includes laboratory

sampling and analyses of potable water, recycled water, wastewater, and biosolids and composting sources. Weck Laboratories is the current firm providing these services to the District and has been very responsive.

A competitive request for quotations (RFQ) process was conducted for contract laboratory services from February 20, 2020, through March 26, 2020. Weck Laboratories was the only firm to submit a quotation for the work. Two other firms indicated an interest in the potable water portion of the work but were not able to perform the wastewater-related components. As a result, Weck's proposal was the only one that offered the full suite of services required by the District. Weck's proposal reflects an average 20% increase in pricing as compared to the current rates.

Staff negotiated with Weck Laboratories and received a commitment by them to honor their current pricing for laboratory services through December 31, 2020. Given the circumstances, staff plans to re-issue an RFQ prior to the end of the year to seek multiple quotes for the service.

The table below provides the actual annual expenses for contract laboratory services by fiscal year. The following factors contribute to the variance: (1) enhanced and expanded regulatory requirements contained in facility permits (Tapia/Westlake); (2) activation of the expanded Westlake Filtration Plant in Fiscal Year 2018-19 and related sampling protocol development with the State Water Resources Control Board, Division of Drinking Water (DDW); and (3) other contract laboratory work, as needed.

Weck Laboratories, Inc. – Expense by Fiscal Year:

Vendor	FY13-14	FY14-15	FY15-16	FY16-17	FY17-18	FY18-19
Weck Laboratories	$120,757	$81,439	$86,473	$70,334	$69,653	$103,719

GOALS:

Provide Safe and Quality Water with Reliable Services

Laboratory sampling and analyses is critical to supply safe and high quality water and ensure regulatory compliance.

Prepared by: Doug Anders, Administrative Services Coordinator

THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA

MWD MEETING AGENDA

Regular Board Meeting

May 12, 2020

12:00 p.m.

Tuesday, May 12, 2020 Meeting Schedule	
11:00 AM	L&C
12:00 PM	Board

Live streaming is available for all board and committee meetings on our mwdh2o.com website (Click to Access Board Meetings Page)

Public Comment Via Teleconference Only: Members of the public may present their comments to the Board on matters within their jurisdiction as listed on the agenda via teleconference only. To participate call (404) 400-0335 and use Code: 9601962.

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

1. Call to Order

a. Pledge of Allegiance: Director Glen D. Peterson, Las Virgenes Municipal Water District

2. Roll Call

3. Determination of a Quorum

4. Opportunity for members of the public to address the Board on matters within the Board's jurisdiction. (As required by Government Code Section 54954.3(a))

5. OTHER MATTERS

A. Approval of the Minutes of the Meeting for April 14, 2020
(Copies have been submitted to each Director)
Any additions, corrections, or omissions

B. Report on Directors' events attended at Metropolitan expense for month of April 2020

C. Approve committee assignments

D. Chairwoman's Monthly Activity Report

Date of Notice: May 5, 2020

6. DEPARTMENT HEADS' REPORTS

A. General Manager's summary of activities for the month of April 2020

B. General Counsel’s summary of activities for the month of April 2020

C. General Auditor’s summary of activities for the month of April 2020

D. Ethics Officer’s summary of activities for the month of April 2020

7. CONSENT CALENDAR ITEMS — ACTION

7-1 Authorize an agreement with Sespe Consulting, Inc., in an amount not-to-exceed $510,000 for preparation of Surface Mining and Reclamation Act reclamation plans and environmental documentation; the General Manager has determined the proposed action is exempt or otherwise not subject to CEQA

7-2 Authorize an agreement with Computer Aid, Inc. in an amount not-to-exceed $771,219.00 for the implementation of a new Information Technology Service Management System; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. (OP&T)

7-3 Review and consider the City of Hemet’s certified Final Environmental Impact Report and take related CEQA actions, and authorize the General Manager to grant a drainage easement to the City of Hemet along State Street just south of Domenigoni Parkway

7-4 Review and consider the City of Perris' certified Final Environmental Impact Report and take related CEQA actions, and authorize the General Manager to grant three permanent easements to the City of Perris for public road purposes traversing Metropolitan fee-owned Colorado River Aqueduct right of way in Perris, California

END OF CONSENT CALENDAR

8. OTHER BOARD ITEMS — ACTION

8-1 Adopt resolution to continue Metropolitan's Water Standby Charge for fiscal year 2020/21; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. (F&I)

8-2 Approve and authorize the distribution of Appendix A for use in the issuance and remarketing of Metropolitan's Bonds; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. (F&I)

8-3 Authorize an increase in the maximum amount payable under contract with Best, Best & Krieger LLP for legal services related to the Surface Mining and Reclamation Act by $150,000 to a maximum amount payable of $250,000; the General Manager has determined that the proposed action is exempt or otherwise not subject to CEQA. (L&C)

9. BOARD INFORMATION ITEMS

9-1 Update on Conservation Program

9-2 Communications and Legislation Committee Report

9-3 Renewal Status of Metropolitan's Property and Casualty Insurance Program. (F&I)

9-4 Financing Overview for Bond Issuance. (F&I)

10. FOLLOW-UP ITEMS

11. FUTURE AGENDA ITEMS

12. ADJOURNMENT

NOTE: Each agenda item with a committee designation will be considered and a recommendation may be made by one or more committees prior to consideration and final action by the full Board of Directors. The committee designation appears in parentheses at the end of the description of the agenda item e.g., (E&O, F&I). Committee agendas may be obtained from the Board Executive Secretary.

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

Requests for a disability related modification or accommodation, including auxiliary aids or services, in order to attend or participate in a meeting should be made to the Board Executive Secretary in advance of the meeting to ensure availability of the requested service or accommodation.

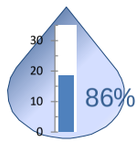
Water Supply Conditions Report

As of: 05/04/2020

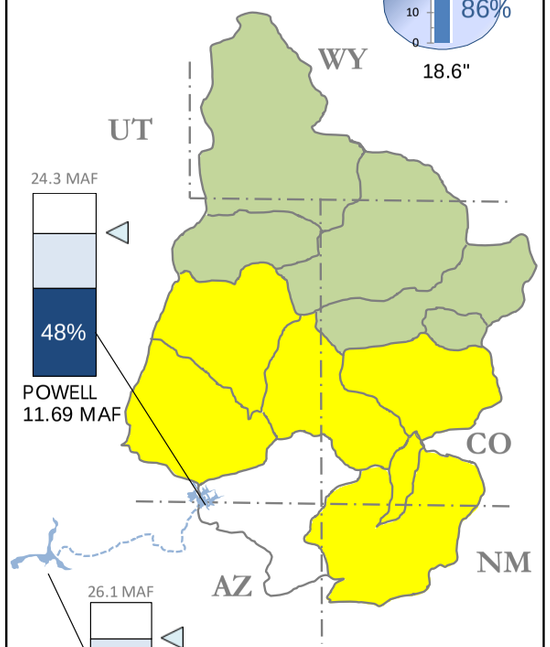
2020 Colorado River

1,078,108 AF
86% of full CRA
Does not include storage withdrawals

Upper Colorado River Basin
106%
Peak Snowpack % of Normal April 1



18.6"



Snow Water Equivalent (% of Normal)

Peak Snowpack % of Normal April 1

- No Data
- Less than 50
- 50 - 80
- 81 - 120
- 121 - 150
- Greater than 150

Turn page for more CRA Data

Flip Over for SWP Data

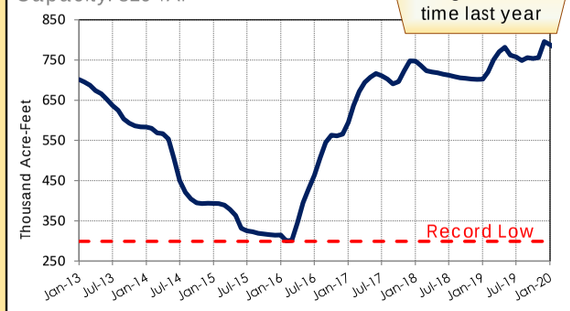
Highlights

- Sacramento River Runoff forecast is 52% of normal
- Statewide snowpack peaked at 64% of normal
- Lake Powell inflow forecast is 68% of normal
- Snowpack in the Upper Colorado River Basin peaked at 106% of normal

Diamond Valley Lake Storage

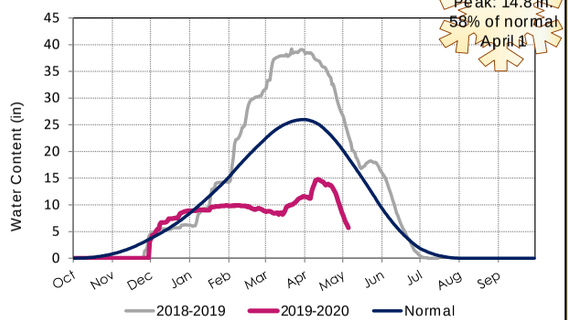
Capacity: 810 TAF

12 TAF less in storage than this time last year

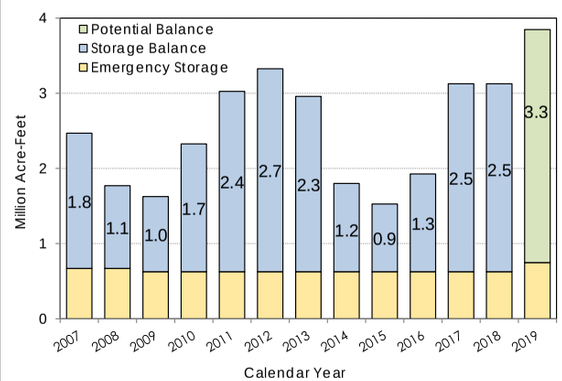


Southern Sierra Snowpack

Peak: 14.8 in. 58% of normal April 1



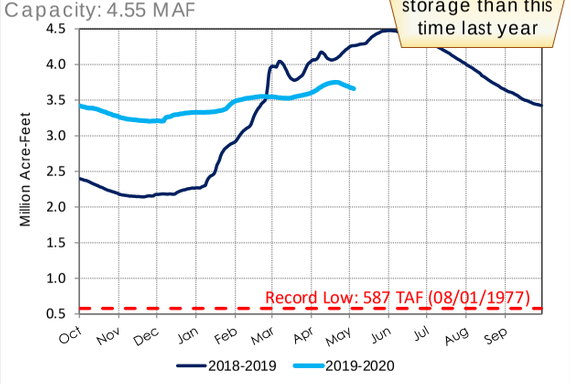
MWD Storage Reserve Levels



Lake Shasta Reservoir Storage

Capacity: 4.55 MAF

604 TAF less in storage than this time last year

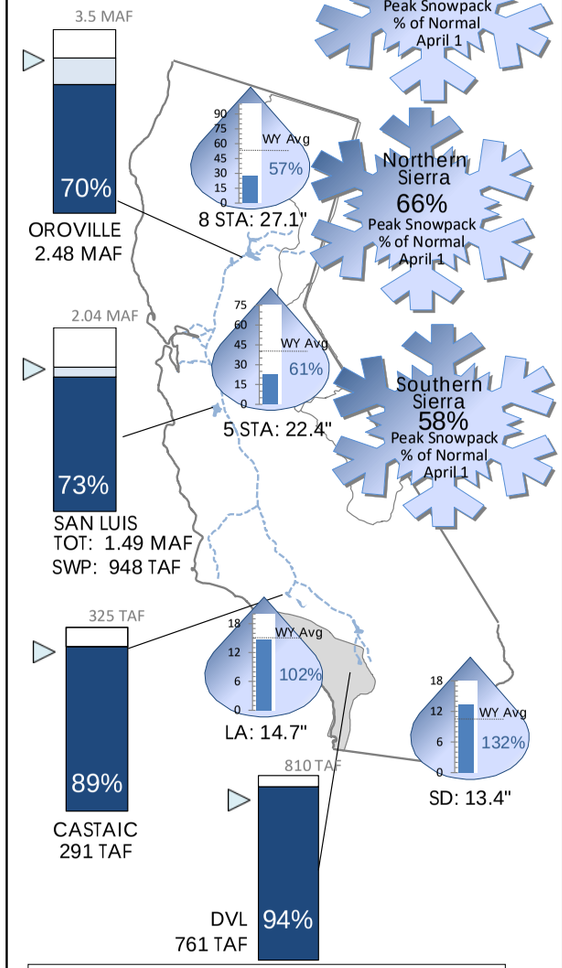


Water Supply Conditions Report

As of: 05/04/2020

2020 SWP Allocation

286,725 AF
15% of Table A



WY Avg
% Normal WY to Date
Rainfall to Date (in)

Capacity
Average EOM
Current Storage (% Capacity)

Flip Over for CRA Data

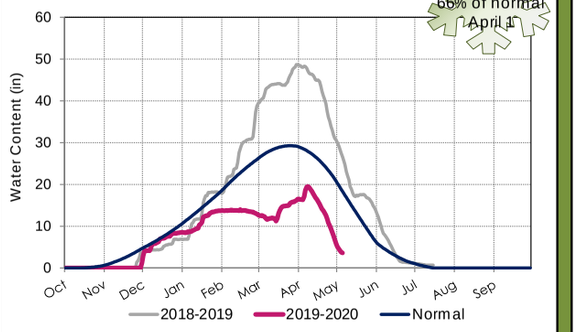
Turn page for more SWP Data

State Water Project Resources

As of: 05/04/2020

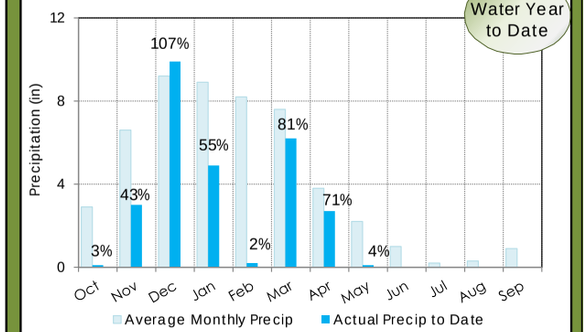
Northern Sierra Snowpack

Peak: 19.5 in.
66% of normal
April 1



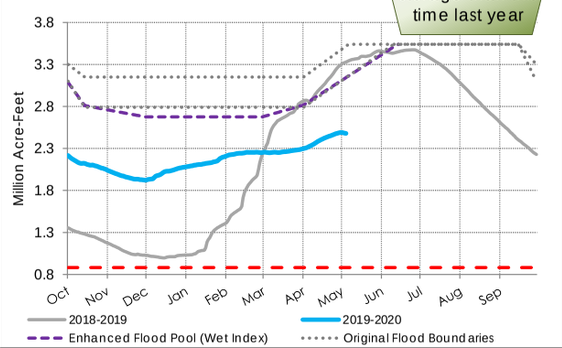
8 Station Index Precip

27.1 in.
Water Year
to Date



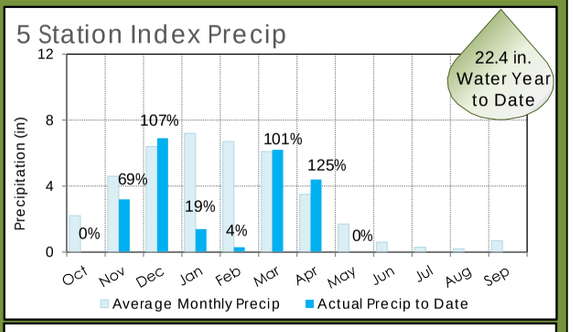
Oroville Reservoir Storage

850 TAF less in storage than this time last year



5 Station Index Precip

22.4 in.
Water Year
to Date



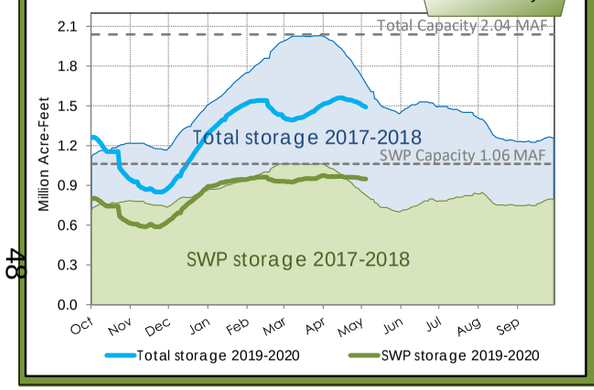
Other SWP Contract Supplies for 2020 (AF)

Carryover	330,766
Transfer Supplies	TBD

San Luis Reservoir Storage

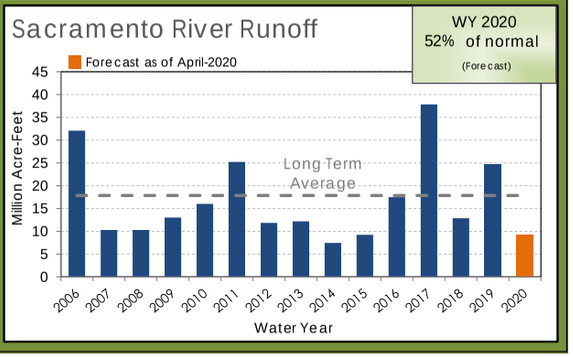
Capacity: 2.04 MAF

123 TAF more in SWP storage than this time last year



Sacramento River Runoff

WY 2020
52% of normal
(Forecast)

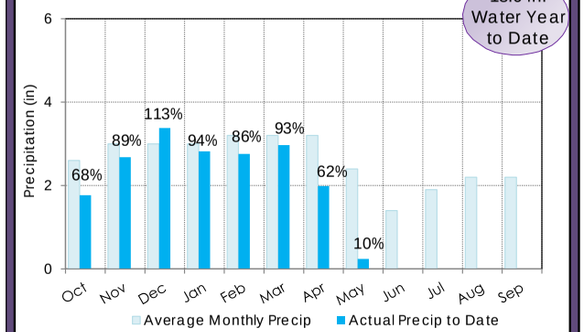


Colorado River Resources

As of: 05/04/2020

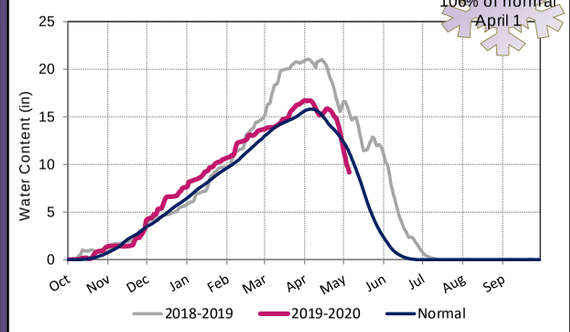
Upper Colorado Basin Precip

18.6 in.
Water Year
to Date

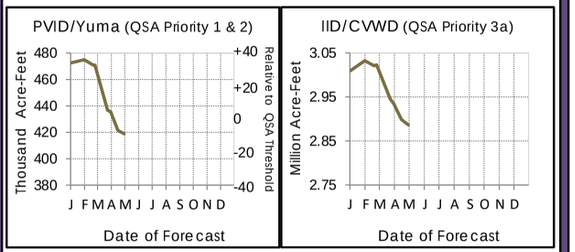


Upper Colorado Basin Snowpack

Peak: 16.7 in.
106% of normal
April 1



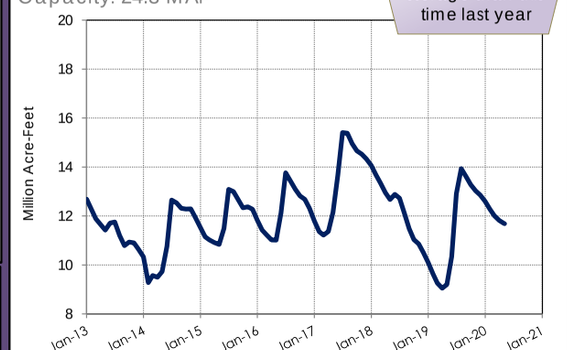
2018 Colorado River Ag Use



Lake Powell Storage

Capacity: 24.3 MAF

2.24 MAF more in storage than this time last year



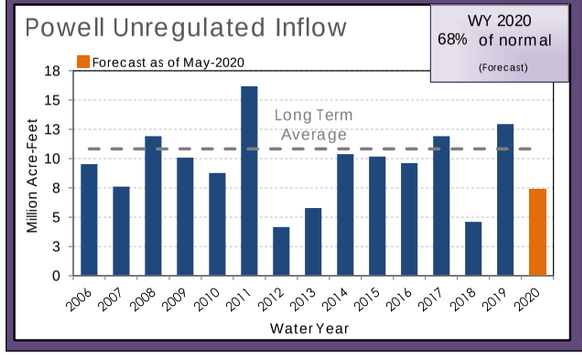
Lake Mead Shortage/Surplus Outlook

	2020	2021	2022	2023	2024
Shortage	0%	0%	9%	31%	37%
Surplus	0%	0%	<1%	6%	10%

Likelihood based on results from the April 2020 MTOM/CRSS model run.
Includes DCP Contributions.

Powell Unregulated Inflow

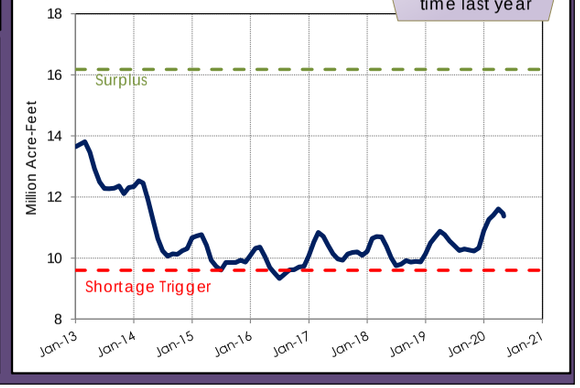
WY 2020
68% of normal
(Forecast)



Lake Mead Storage

Capacity: 26.1 MAF

630 TAF more in storage than this time last year



May 19, 2020 LVMWD Regular Board Meeting

TO: Board of Directors

FROM: General Manager

Subject : Response to Coronavirus (COVID-19) Pandemic: Amended and Reenacted Emergency Declaration with Additional Relief for Customers

SUMMARY:

On March 24, 2020, the Board adopted Resolution No. 2572, declaring a state of emergency for the District's service area due to the coronavirus (COVID-19) pandemic and authorizing actions to support the response and recovery effort. Subsequently, on April 21, 2020, the Board adopted Resolution No. 2574, amending and reenacting the declaration of a local state of emergency and authorizing interest-free flexible payments plans for up to 24 months. Staff has considered additional measures to mitigate the impact of the emergency on customers and requests authorization to waive service initiation fees for commercial customers who temporarily closed their accounts due to hardship associated with COVID-19.

Section 2-6.402 of the Las Virgenes Municipal Water District Code requires that once the Board has declared an emergency, it must determine by a 4/5's vote at each subsequent regular Board meeting whether to continue or terminate the authorization for emergency. Staff recommends that the emergency declaration be continued.

RECOMMENDATION(S):

Pass, approve and adopt proposed Resolution No. 2576, amending and reenacting the declaration of a local state of emergency due to the novel coronavirus (COVID-19) pandemic and authorizing waiving service initiation fees for commercial customers who temporarily closed their accounts due to hardship associated with COVID-19.

RESOLUTION NO. 2576

A RESOLUTION OF THE BOARD OF DIRECTORS OF LAS VIRGENES MUNICIPAL WATER DISTRICT AMENDING RESOLUTION NOS. 2572 AND 2574, STATE OF EMERGENCY DUE TO THE NOVEL CORONAVIRUS (COVID-19) PANDEMIC AND AUTHORIZING ACTIONS TO SUPPORT THE RESPONSE AND RECOVERY EFFORT

(Reference is hereby made to Resolution No. 2576 on file in the District's Resolution Book and by this reference the same is incorporated herein.)

FISCAL IMPACT:

Yes

ITEM BUDGETED:

No

FINANCIAL IMPACT:

There is a minimal financial impact associated with this action.

DISCUSSION:

Resolution Nos. 2572 and 2574 authorized and directed the General Manager to temporarily grant relief to District customers, as follows:

- Avoid shutting off water service for non-payment;
- Discontinue the issuance of door tags and associated fees for non-payment;
- Waive late charges for past due water and wastewater bills; and
- Authorize interest-free flexible payment plans for up to 24 months.

Proposed Resolution No. 2576 adds authorization for the General Manager to waive service initiation fees commercial customers who temporarily closed their accounts due to hardship associated with COVID-19.

At the Board meeting, staff will provide a comprehensive update on the District's response to the coronavirus (COVID-19) pandemic, including the following items:

- Response actions taken to-date;
- Effectiveness of the above-described actions;
- Feedback received from customers; and
- Billing and financial metrics.

GOALS:

Provide Safe and Quality Water with Reliable Services

Prepared by: David W. Pedersen, General Manager

ATTACHMENTS:

Proposed Resolution No. 2576

RESOLUTION NO. 2576

A RESOLUTION OF THE BOARD OF DIRECTORS OF LAS VIRGENES MUNICIPAL WATER DISTRICT AMENDING RESOLUTION NOS. 2572 AND 2574, STATE OF EMERGENCY DUE TO THE NOVEL CORONAVIRUS (COVID-19) PANDEMIC AND AUTHORIZING ACTIONS TO SUPPORT THE RESPONSE AND RECOVERY EFFORT

BE IT RESOLVED BY THE BOARD OF DIRECTORS OF LAS VIRGENES MUNICIPAL WATER DISTRICT as follows:

Section 1. Purpose.

This resolution amends Resolution Nos. 2572 and 2574, declaring an emergency due to the novel coronavirus (COVID-19) pandemic and authorizing actions to support the response and recovery effort. The Board of Directors desires to provide additional assistance to customers with delinquent accounts through interest-free flexible payment plans, and waive service initiation fees for closed commercial water accounts.

Section 2. Amendment and Reenactment.

Section 3 of Resolution No. 2572 and Resolution No. 2574 are amended as follows:

3. Additionally, the Board hereby authorizes and directs the General Manager to temporarily grant relief to District customers, as follows:

    a. Avoid shutting off water service for non-payment;

    b. Discontinue the issuance of door tags and associated fees for non- payment;

    c. Waive late charges for past due water and wastewater bills;

    d. Offer and execute interest-free flexible payment plans for customers with delinquent accounts stemming from hardship associated with COVID-19. The terms of such payment plans may be for up to 24 months with flexible amortization schedules to best address the unique challenges of customers. The applicable interest rate shall be zero percent (0.00%); and

    e. Waive the service initiation fee for closed commercial water accounts affected by hardship associated with COVID-19 once they are able to reopen and conduct business.

Section 3. Other.

Except as otherwise amended and stated herein, Resolution No. 2572 is reaffirmed and reenacted.

PASSED, APPROVED, AND ADOPTED on this 19th day of May 2020.

Jay Lewitt, President

ATTEST:

Charles Caspary, Secretary

APPROVED AS TO FORM:

Keith Lemieux, District Counsel

(SEAL)

May 19, 2020 LVMWD Regular Board Meeting

TO: Board of Directors

FROM: Facilities & Operations

Subject : Energy Storage and Resiliency Capability Feasibility Assessment: Award

SUMMARY:

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

Since 2017, changes in policy, regulations, technology and market dynamics have evolved significantly, improving the economics of BESS projects. As a result, staff requested a proposal from TerraVerde Energy to provide an investment-grade feasibility assessment of the technical and financial feasibility of implementing a BESS project in support of the District's resiliency goals to achieve additional energy cost-savings. The assessment would include critical load resiliency (backup power) using a microgrid design with an evaluation of additional solar generation systems, as applicable. The total cost to perform the assessment would be $59,925, consisting of $24,980 for JPA-owned facilities and $34,945 for LVMWD-only facilities.

RECOMMENDATION(S):

Authorize the General Manager to execute a Professional Services Agreement with TerraVerde Energy, in the amount of $59,925, to perform an investment-grade feasibility assessment on implementation of a battery energy storage system project.

FISCAL IMPACT:

Yes

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

The total cost of the work is $59,925, consisting of $24,980 to be allocated to the JPA and $34,945 to LVMWD. The cost of the assessment may be reimbursable by a contractor who will develop the BESS project, similar to the 4 MW solar generation project, which was 100% reimbursed by Borrego Solar.

DISCUSSION:

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

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

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

GOALS:

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

Construction of battery energy storage systems (BESSs) would not only provide the opportunity for cost-savings but also provide system reliability and resiliency for potential grid outages.

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

ATTACHMENTS:

TerraVerde Energy Proposal for JPA Facilities
TerraVerde Energy Proposal for LVMWD-only Facilities

TerraVerde ENERGY

May 12, 2020

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

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

Dear John,

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

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

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

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

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

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

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

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

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

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

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

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

[1.] Reference CPUC Decisions D.19-09-027:
http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M313/K975/313975481.PDF , and D.20-01-021:
http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M325/K979/325979689.PDF

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

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

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

Phase 1: Data Collection, Site Due Diligence, and Initial Project Evaluation
Phase 2: Project Feasibility Assessment and Cost-benefit Analysis
Phase 3: Financial Analysis and Summary of Results

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

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

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

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

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

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

Scope of Work:

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

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

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

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

Phase 2 – Project Feasibility Assessment and Cost-benefit Analysis

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

Phase 3 – Financial Analysis and Summary of Results

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

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

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

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

Project Milestones:

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

Project Schedule:
Phase 1 Tasks: 2 weeks
Phase 2 Tasks: 2 weeks
Phase 3 Tasks: 2 weeks

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

Sincerely,

Kevin Ross, VP Business Development
TerraVerde Energy, LLC
520 E. Avenida Pico #3793
San Clemente, CA 92674-9998 949-212-6555 Kevin.Ross@terraverde.energy

TerraVerde ENERGY

May 12, 2020

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

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

Dear John,

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

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

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

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

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

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

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

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

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

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

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

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

[1.] Reference CPUC Decisions D.19-09-027:
http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M313/K975/313975481.PDF , and D.20-01-021:
http://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M325/K979/325979689.PDF

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

- Provide resiliency for critical loads during PSPS events or other SCE grid outages using renewable energy resources, where feasible.
- Evaluate the District's operations (load profiles) to understand how battery storage systems may provide energy cost savings (demand charge reduction) on a site-by-site basis, including the addition of NEM solar projects where feasible to provide added savings and to support a backup power capability.
- Leverage SGIP incentives and projected demand reduction savings to offset the cost of battery storage and microgrid implementation to achieve operational resiliency where financially viable.

The proposed scope of analysis and research required to evaluate the technical and financial feasibility of implementing standalone BESS, Solar + BESS, and resiliency capabilities on a District-wide basis is described below:

Phase 1: Data Collection, Site Due Diligence, and Initial Project Evaluation
Phase 2: Project Feasibility Assessment and Cost-benefit Analysis
Phase 3: Financial Analysis and Summary of Results

Each phase consists of a group of tasks that must be completed to progress to the next phase.
Note: Tasks associated with follow-on project development (including oversight of a RFP process) and project implementation management services are not included in this proposal but can be considered by the District following review of the feasibility assessment summary findings and are available upon request.

As stated above, the BESS/resiliency feasibility assessment will cover all of the Districts operations (approximately 70 SCE meters), and will include a preliminary evaluation of new NEM solar PV systems to support considerations for renewable back-up power and to provide added energy cost savings. The solar PV feasibility assessments will also include a preliminary evaluation of floating solar at the District's Westlake Reservoir.

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

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

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

Scope of Work:

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

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

Phase 2 – Project Feasibility Assessment and Cost-benefit Analysis

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

Phase 3 – Financial Analysis and Summary of Results

27. Run financial models (review all assumptions with District) for the proposed projects to confirm economic benefits. Provide comparative financial analysis per Task 26 above (including the microgrid control system for solar + BESS projects).
28. Prepare a summary of feasibility assessment findings based on the technical and financial feasibility factors, and including: an overview of BESS equipment, O&M requirements, microgrid architecture, operation, features/benefits, and intended outcomes. And, provide suggested next steps.
29. Meet with the District to review the summary of findings and respond to any questions or concerns.

Fee Proposal:

TerraVerde's not-to-exceed (NTE) fixed-fee for the Scope of Work (Phases 1 thru 3) is based on TerraVerde's standard rate schedule and includes estimated expenses and ACWA member discount: **$34,945.**

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

Project Milestones:

Description of Billing Milestones & Deliverables	Task	% of Proposal
Completion of project kickoff meeting, data collection and data review/QC	Task 1 - 14	25%
Completion of initial modeling for new solar PV + BESS projects	Task 15 - 25	25%
Completion of financing analysis	Task 26 - 27	25%
Completion of summary findings report and deliver to District	Task 28	20%
Review summary of findings with the District Staff	Task 29	5%
Total:		100%

Project Schedule:

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

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

Sincerely,

Kevin Ross, VP Business Development
TerraVerde Energy, LLC
520 E. Avenida Pico #3793
San Clemente, CA 92674-9998 949-212-6555 Kevin.Ross@terraverde.energy

May 19, 2020 LVMWD Regular Board Meeting

TO: Board of Directors

FROM: Engineering and External Affairs

Subject : Mullholland Highway Bridge over Triunfo Creek Water Main Replacement Project: CEQA Determination and Call for Bids

SUMMARY:

In September 2019, the Los Angeles County Department of Public Works (LACDPW) informed District staff that they would be proceeding with construction of a permanent, replacement bridge for Mullholland Hwy over Triunfo Creek as early as January 2020. Staff immediately solicited proposals for the design of a 14-inch water main to be installed across the newly-proposed permanent bridge. The General Manager executed a professional services agreement with Cannon Corporation, in the amount of $19,967, for the engineering design and support services required during construction of the new bridge. The design and environmental review for the water main replacement is now complete, and the project is ready to be competitively bid.

RECOMMENDATION(S):

Find that the work is categorically exempt from the provisions of California Environmental Quality Act and authorize the issuance of a Call for Bids for the Mullholland Highway Bridge over Triunfo Creek Water Main Replacement Project.

FISCAL IMPACT:

No

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

There is no financial impact associated with a call for bids. Sufficient funds are available in the adopted Fiscal Year 2019-20 Budget for construction. The cost of the project is expected to

be reimbursed by CalOES/FEMA.

DISCUSSION:

On April 23, 2019, the Board declared an emergency to install a temporary pipeline across the temporary bridge that was constructed on Mulholland Highway near Troutdale Drive and Waring Drive in unincorporated Los Angeles County. The Mulholland Highway Bridge over Triunfo Creek catastrophically failed as a result of the November 2018 Woolsey Fire. The metal support structure of the bridge collapsed due to the intense heat of the fire. As a result of the bridge failure, the District's 12-inch steel water main, which was supported by the structure, was also damaged.

At the time of the declaration of emergency for the temporary pipeline, the Los Angeles County Department of Public Works (LACDPW) had informed the District that the permanent bridge would be five to seven years away due to environmental and other permitting delays. However, in September of 2019, LACDPW notified the District of its plans to proceed with the permanent bridge construction as early as January 2020. LVMWD staff immediately solicited quotes for the engineering design and construction support services for a 14-inch water main across the permanent bridge. The decision was made to upsize the water main across the bridge because the pre-existing 12-inch pipeline constituted a bottleneck for the system. The increase to a 14-inch water main will match the pipeline sizing on either side of the bridge, providing increased capacity to the area particularly under fire flow conditions.

Proposals were received from M6 Consulting, Inc., in the amount of $30,410, from AECOM, in the amount of $24,800, and from Cannon Corporation, in the amount of $19,967. The proposals were reviewed by staff and evaluated based on the proposed approach, project understanding and experience. Staff accepted the proposal from Cannon Corporation and executed a professional services agreement for design and support services during construction.

Cannon Corporation has completed the design plans and specifications for the construction of a new 14-inch water main across the bridge proposed by LACDPW. In an effort to coordinate construction of the bridge with the installation of the pipeline, staff has maintained communication with LACDPW and attended a pre-construction meeting for the bridge in January 2020. At this time, LACDPW's contractor has not mobilized on-site but foundation work is tentatively expected to begin on May 18, 2020.

Staff recommends proceeding the CEQA determination and call for bids to ensure the readiness of a contractor to construct the pipeline either concurrently with installation of the new bridge or shortly thereafter. Staff did explore the option of combining the work to install the water main together with construction of the new bridge; however, LACDPW representatives were not in favor of combining the work.

Following is the proposed bid schedule:

Approve Notice Inviting Sealed Proposals	May 19, 2020
1st Advertisement	May 28, 2020
2nd Advertisement	June 4, 2020
Mandatory Pre-bid Meeting	June 11, 2020

Bid Opening	July 9, 2020
Award of Contract	July 21, 2020

The work is categorically exempt from the provisions of California Environmental Quality Act (CEQA), pursuant to Section 15301(b) of the CEQA Guidelines because it involves replacement of existing facilities with no expansion of use. Attached is a Notice of Exemption that staff will complete and file with the County pending Board approval of the CEQA determination.
It is anticipated that the work required to construct the permanent water main across the bridge will be reimbursed by CalOES/FEMA through the Public Assistance Grant Program. Reimbursement of the work to install the temporary pipeline was already approved and provided by CalOES/FEMA.

GOALS:

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

Prepared by: Veronica Hurtado, Assistant Engineer

ATTACHMENTS:

CEQA Notice of Exemption
Notice Inviting Sealed Proposals

Print Form

Notice of Exemption

Appendix E

To: Office of Planning and Research

P.O. Box 3044, Room 113
Sacramento, CA 95812-3044

County Clerk
County of: Los Angeles
12400 Imperial Highway
Norwalk, CA 90650

From: (Public Agency): Las Virgenes Municipal Water District

4232 Las Virgenes Road
Calabasas, CA 91302

(Address)

Project Title: Triunfo Creek Bridge – Mulholland Hwy Water Main Replacement

Project Applicant: Las Virgenes Municipal Water District

Project Location - Specific: 30019-30045 Mulholland Hwy, bridge between Troutdale Dr. and Waring Dr.

Project Location - City: Agoura Hills Project Location - County: Los Angeles

Description of Nature, Purpose and Beneficiaries of Project:
Replacement of a permanent water main along a permanent bridge to be constructed by LA County. The previous bridge and water main failed as a result the November 2018 Woolsey Fire. The area is currently being serviced by temporary facilities.

Name of Public Agency Approving Project: Las Virgenes Municipal Water District

Name of Person or Agency Carrying Out Project: Las Virgenes Municipal Water District

Exempt Status: **(check one):**

- ☐ Ministerial (Sec. 21080(b)(1); 15268);
- ☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));
- ☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- ☒ Categorical Exemption. State type and section number: Existing Facilities, Section 15301 (b)
- ☐ Statutory Exemptions. State code number: _____

Reasons why project is exempt:
The project involves the replacement of a water main that was damaged during the Woolsey Fire and will be mounted to the permanent bridge being constructed by LA County.

Lead Agency
Contact Person: Veronica Hurtado Area Code/Telephone/Extension: (818) 251-2332

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a Notice of Exemption been filed by the public agency approving the project? ☐ Yes ☐ No

Signature: V Hurtado Date: 5/12/2020 Title: Assistant Engineer

☒Signed by Lead Agency ☐ Signed by Applicant

Authority cited: Sections 21083 and 21110, Public Resources Code.
Reference: Sections 21108, 21152, and 21152.1, Public Resources Code.

Date Received for filing at OPR: _____

NOTICE INVITING SEALED PROPOSALS (BIDS)

Triunfo Creek Bridge - Mulholland Hwy Water Main Replacement

NOTICE IS HEREBY GIVEN that the Board of Directors of Las Virgenes Municipal Water District (LVMWD) invites and will receive sealed proposals (bids) up to the hour of 3:00PM on July 8, 2020, for furnishing the work described in the contract documents. Precautions are being taken by LVMWD in response to the novel coronavirus and COVID-19 outbreak in order to protect employees, customers, and our partners. LVMWD is currently closed to public access. Until further notice, LVMWD is suspending in-person meetings relating to bids (including public bid openings, the hand-delivery of bids by company employees, and in-person pre-bid meetings) to reduce the number of people coming into LVMWD facilities.

This policy is effective, Monday, April 6, 2020, and remains in force until further notice. All bids must be sent by mail. Bidders must allow enough time for bids to be delivered to LVMWD by the due date. All submittals will be time stamped as soon as they are received. Bids received after the time stated in the Call for Bids will not be accepted and will be returned, unopened, to the bidder. The time shall be determined by the time on the receptionist telephone console in our Headquarters lobby.

Pre-bid meetings and other meetings associated with the bidding process will be held via telephone conference and/or through web enabled video conference. Details for these meetings will be provided on bid announcements specific to each project. Any questions related to this announcement, including requests for special accommodations to attend the meetings, can be directed to LVMWD Assistant Engineer, Veronica Hurtado, at vhurtado@lvmwd.com or (818) 251-2332.

A mandatory pre-bid meeting will be conducted at 9:00AM on June 11, 2020 via teleconference. A pre-recorded video of the job site will be made available to all in attendance at the pre-bid meeting. Please request the meeting link from the District Project Manager, Veronica Hurtado, well in advance of the meeting time. Attendance at the pre-bid conference is a condition precedent to submittal of the bid and the District will not consider a bid from any bidder not represented at the pre-bid conference.

A bid opening will also be available for public viewing through video teleconference at 9:00am on July 9, 2020. Requests for the meeting link can be made to the District Project Manager, Veronica Hurtado, before the bid deadline. A recording of the bid opening will be posted on the District's website at the following link - www.LVMWD.com/PublicWorksContracts.

Sets of contract documents may be downloaded for free by going to http://www.LVMWD.com/Ebidboard and following the links to this project.

In order to be placed on the plan holder's list, contractors shall register for free as a document holder for this project on Ebidboard by going to www.LVMWD.com/Ebidboard and following the links to this project. Addendum notifications will be issued through Ebidboard.com, but may also be provided by calling the District's Project Manager.

Although Ebidboard will fax and/or email all notifications to registered plan holders after the District uploads the information, Bidders are responsible for obtaining all addenda and updated contract documents.

Each bid must be on the District bid form and shall be sealed and filed with the secretary of the District at or before the time stated in the Notice.

No Contractor or Subcontractor may be listed on a bid proposal for a public works project submitted on or after March 1, 2015 unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. No Contractor or Subcontractor may be awarded a contract for public work on a public works project awarded on or after April 1, 2015 unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. Effective January 1, 2016, no Contractor or Subcontractor may perform on a contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. This project is subject to compliance monitoring and enforcement by the DIR.

All terms and conditions contained in the Specifications and Contract Documents shall become part of the contract. The Board of Directors of Las Virgenes Municipal Water District reserves the right to reject any and all bids and to waive any and all irregularities in any bid.

No bidder may withdraw his bid after the said time for bid openings until 60-days thereafter or until the District has made a final award to the successful bidder or has rejected all bids, whichever event first occurs.

The Board of Directors of the District reserves the right to select the schedule(s) under which the bids are to be compared and contract(s) awarded.

BY ORDER OF THE GOVERNING BODY OF
LAS VIRGENES MUNICIPAL WATER DISTRICT

_____ _____

Dated *Jay Lewitt, President*

May 19, 2020 LVMWD Regular Board Meeting

TO: Board of Directors

FROM: Engineering and External Affairs

Subject : Comprehensive Water Conservation Plan for Fiscal Years 2020-22

SUMMARY:

On June 12, 2018, staff presented the District's first Comprehensive Water Conservation Plan (CWCP) to the Board, which outlined a suite of conservation programs to be implemented over the following two years. The CWCP was developed to remain adaptable and intended to be updated every two years to reflect current conservation needs and regulatory requirements. While California has a long history of droughts and water regulations, *Making Conservation a California Way of Life* represents the most significant regulatory change for water conservation resulting from the most recent drought and will provide the regulatory framework for water efficiency planning for decades to come. As a result, new and emerging regulatory requirements will drive the District to remain focused on conservation efforts and water-use efficiency for years to come.

The attached CWCP for Fiscal Years 2020-22 provides a brief summary of the regulatory requirements emerging as part of *Making Conservation a California Way of Life,* including important actions and dates for implementation of the new requirements. The updated CWCP also provides an update on conservation efforts implemented since 2018. In the future, conservation staff proposes to alternate between providing a progress report and an updated CWCP for Board review each spring. Finally, the updated CWCP builds on the success of existing programs and provides descriptions of the water-use efficiency activities proposed for the next two years.

RECOMMENDATION(S):

Provide feedback on options for a Weather Based Irrigation Controller Cost Share Program, and receive and file the Comprehensive Water Conservation Plan for Fiscal Years 2020-22.

FISCAL IMPACT:

No

ITEM BUDGETED:

Yes

FINANCIAL IMPACT:

The cost to implement the actions described in the updated Comprehensive Water Conservation Plan is included in the proposed Fiscal Year 2020-22 Two-Year Budget Plan.

DISCUSSION:

Background:

Making Conservation a California Way of Life will have important implications for the District and require a sustained and focused effort for the District to meet new and emerging regulatory requirements. Of particular importance is the District's ability to meet state mandated water-use efficiency objectives, which will make conservation efforts an increasing necessity regardless of water availability or drought. The actions proposed as part of the updated CWCP are specifically identified to help the District target its greatest opportunity for conservation and outdoor water-use efficiency, while also providing a solid platform for the District to respond to additional regulatory and reporting requirements. To underscore the importance of these new regulations, the report contains an overview of the *Making Conservation a California Way of Life* framework with important actions and dates for future implementation.

The District has a long history of successful conservation programs, and the actions implemented in the CWCP have already begun to show positive results. The report provides updates on all of the District's water-use efficiency efforts implemented as part of the previous CWCP, which identified that a comprehensive reporting of performance will occur by no later than June 2021. This plan will establish an alternating process of performance reporting on and updating of the CWCP each spring. The largest and most successful CWCP program, the Smart Controller Give-Away Program, has already shown very encouraging results, which are discussed in some detail.

Finally, the updated CWCP describes the proposed conservation activities for Fiscal Years 2020-22. These activities are presented in draft form with staff recommendations that can be modified based on Board input and discussion. To highlight one of the recommendations, Section 4.1 – Weather Based Irrigation Controller Cost Share Program, there is a discussion of four different options that staff considered to build on the success of the current program. The four options are summarized below and discussed in greater detail in the report.

Option No. 1 – Continuation of Existing Program

The current program is specifically targeted to excessive and wasteful water-use customers by prioritizing outreach based on water use and limiting marketing efforts to the District's most wasteful customers. However, the program is open to participation by all District customers regardless of water use. The program has been well received by customers and resulted in significant water savings. Nevertheless, enrollment in the program has begun to plateau, which suggests that customers that wanted to participate in the program have already done so. While this approach for the program is likely to result in the greatest water savings, it is the most expensive option, and the focused marketing approach is yielding diminishing returns.

Option No. 2 – Modification of Existing Program

Staff also considered modifying the existing program to continue the giveaway program for wasteful water-use customers, while allowing participation by other customers at cost. This approach would create a two-tier system with the most wasteful customers receiving a giveaway, while other customers paying actual cost. This approach could be difficult to market and may frustrate customers that are required to pay due to the appearance of rewarding customers with wasteful water use. Also, as mentioned above, the program appears to have reached most of the wasteful water-use customers who want to participate.

This alternative would be less expensive overall per controller than the current program because some customers would be sharing in the cost. Also, it could be implemented at different scales based upon desired funding levels. However, customers who have to pay would be more likely to attempt the installation themselves. This could result in controllers not being properly set up and, therefore, reduce the opportunity to maximize irrigation efficiency.

Option No. 3 – Controller/Installation Cost Share (Recommended)

This alternative would provide an incentive to all District customers to install a smart irrigation controller to improve irrigation efficiency. The approach would continue to involve providing the controller together with installation services to ensure that the controllers will be installed and set up correctly. Customers would be required contribute toward the combined cost of the controller and installation services. With this alternative, a professional installation service would manage the day-to-day operations of the program including scheduling appointments, installing the controllers, purchasing controllers at a potentially discounted price and applying for a rebate from the Metropolitan Water District of Southern California on behalf of customer. In simple terms, the customer would received turn-key service in exchange for making a payment to partially offset the cost of the program.

This approach provides a moderate cost alternative that requires customers to share in the program costs. The District would subsidize the cost of each installation at a pre-defined level. This alternative would allow for easy marketing of the program for all interested customers, while still providing a turn-key service on behalf of the District. By requiring the professional installation as part of the program, the approach ensures that controllers would be set up correctly by a professional installation company, and customers would not be required to find an installer or to do the work themselves. All customers would be treated equally under the program, which eliminates concerns that arise with a two-tiered system. Finally, the incentive amount could be modulated up or down by the Board, as necessary, to control demand.

Option No. 4 – Controller Only Voucher/Rebate Program

This alternative would not include installation services, which would either need to be performed by the customer or a landscape professional of their choice. The alternative would only incentivize the purchase of a smart controller by providing it at a potentially discounted cost, utilizing the Metropolitan Water District of Southern California rebate and potentially an additional rebate from the District.

This alternative could result in the greatest number of controllers being distributed as it would constitute the lowest per controller option for the District. The program would also be very

easy to market since all customers would be eligible. However, there would be minimal assurance that the controllers would be installed and set up correctly. There would also be an administrative burden on District staff to verify and process vouchers/rebates to ensure that only one controller would be distributed to each household and that the individuals would be District Customers.

Recommendation of Option No. 3:

Based upon the above-described considerations, staff recommends Option No. 3 because it offers reasonable assurance that controllers will installed and set up correctly to maximize irrigation efficiency. The option also places the least burden on District resources since most of the program services will be managed by an outside service provider. The outside service would provide the greatest incentive to customers. To participate, the customer would only be required to pay the cost share and schedule an appointment for installation. Additionally, the program would provide a level benefit to all District customers.

GOALS:

Ensure Effective Utilization of the Public's Assets and Money

Prepared by: Dave Roberts, Resource Conservation Manager

ATTACHMENTS:

Comprehensive Water Conservation Plan for Fiscal Years 2020-22

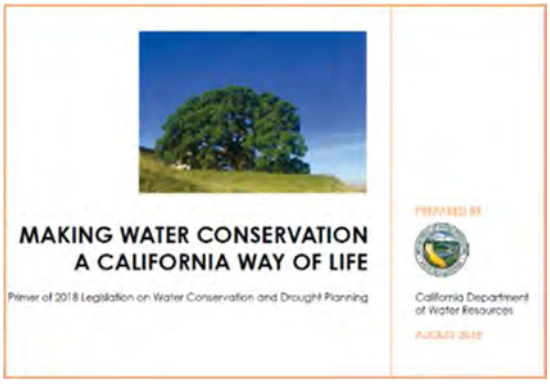
Comprehensive Water Conservation Plan
Las Virgenes Municipal Water District
Fiscal Years 2020-22

1. Introduction

The 2018-20 Comprehensive Water Conservation Plan outlined a number of water conservation programs aimed at reducing wasteful water use, helping customers stay within their water budgets and achieving new and emerging state water conservation regulations. In order to achieve those goals, the District launched several conservation efforts targeting our most wasteful water users and inefficient outdoor water use. This report provides an update of those efforts and what additional efforts are proposed as part of the updated Comprehensive Water Conservation Plan (CWCP). As a principle driver for these efforts, *Making Conservation a California Way of Life* is also summarized with key actions and dates that will form the framework of state water policy for the next decade.

2. Making Conservation a California Way of Life

In 2018, two important legislative actions were passed that require water agencies to implement additional conservation efforts. AB 1668 and SB 606 build on previous state efforts to make water conservation a way of life in California and create a new foundation for long-term improvements in water conservation and drought planning. These legislative actions will provide the long-term direction of state conservation efforts and will have important implications for the District as we implement conservation programs to achieve the state requirements.



SB 606 and AB 1668 establish guidelines for efficient water use and a framework for the implementation and oversight of the new standards, which must be in place by 2022. In addition to these legislative actions, system water loss legislation under SB-555 also requires urban retail water providers to achieve water loss standards for minimizing system water loss (i.e. pipeline leaks). Collectively these bills are anticipated to strengthen the state's water resiliency in the face of future water shortages with provisions that include:

- Establishing water use objectives and long-term standards for efficient water use that apply to urban retail water suppliers; comprised of indoor residential water use, outdoor residential water use, dedicated meters for commercial, industrial and institutional (CII) irrigation on landscapes over a certain size and water loss
- Providing incentives for water suppliers to recycle water for both potable and non-potable uses.

- Identifying small water suppliers and rural communities that may be at risk of drought and water shortage vulnerability and provide recommendations for drought planning
- Requirements for both urban and agricultural water conservation measures

In order to assist with the implementation of these directives, they have been collectively included into an implementation framework called *Making Conservation a California Way of Life*. The framework outlines the actions that state agencies will be taking to implement the legislation and their directives. It also lays out the timelines for each of these actions, which will have important implications for the District and our conservation efforts. Several important actions and their anticipated dates are summarized in Table 1. The framework also includes specific regulatory actions which could occur which are listed in Table 2. The state is proposing progressive regulatory actions for agencies not meeting performance measures starting as early as November 2023. Initial steps will ask agencies to provide more information on what they are doing to achieve regulatory objectives. The actions outlined in the 20-22 CWCP below will allow the District to clearly illustrate steps that have been taken in preparation for new and emerging regulations.

Table 1. Summary of Important Implementation Dates

Date	Actions
July 2020	Adopt Regulation for Water Loss Standard
October 2021	Complete Study on Feasibility of Indoor Water Use Objective
January 2021	Completion of State Developed Land Use Mapping of Landscaped Area
June 2022	Adoption of Water Use Standards and Performance Measures
November 2023	Water Suppliers Calculate Water Use Objectives
January 2024	Water Suppliers Submit Plan to Achieve Water Use Objectives
January 2027	Water Suppliers Need to Meet Water Use Objectives

Table 2. Progressive Enforcement of Water Use Objectives

Deadline	Description
On or after Nov 1, 2023	May Issue Informational Orders
On or after Nov 1, 2024	May Issue Written Notices
On or after Nov 1, 2025	May Issue Conservation Orders
On or after Nov 1, 2027	May Impose Civil Liability (fine) for a Violation of Regulation

2.1 Estimates of Future Compliance

The latest projection for potable water demand with the District's service area by the year 2027 is up to 22,500 acre-feet. This is based on historical use and accounts for additional demands from future development. It does not account for reductions that would result from conservation programs including those outlined in this CWCP. This estimate of projected water use will be revisited when the Urban Water Management Plan is updated for 2020. Staff also compared this projected water use to an initial estimate of water allocation/budget as part of the latest regulations outlined above. Based on this analysis, the projected water use will need to be reduced by as much as 3,000 acre-feet per year (to 19,500 acre-feet per year) in order to align with the state mandated budget by the year 2027. The efforts outlined in this CWCP along with other efforts (i.e. the installation of a Smart Meter/AMI System) and receiving "credits" for the full implementation of the Pure Water Program (potable reuse) are required in order to meet the mandates.

Anticipated reductions in water use are tabulated below:

Efforts associated with the 2018-20 CWCP:	**141**	**AF/Yr**
Efforts associated with the 2020-22 CWCP:	**130**	**AF/Yr**
SmartMeter/AMI System:	**1,000**	**AF/Yr**
Future CWCPs:	**229**	**AF/Yr**
Total (by 2027):	**1,500**	**AF/Yr**
"Credit" for Pure Water Program (by 2030):	**2,000**	**AF/Yr**
Total (with Pure Water Program credit)	**3,500**	**AF/Yr**

As indicated above, the conservation programs along with other programs that will reduce water use, are projected to save as much as 3,500 acre-feet per year. The District may be "shy" of the required reduction by the year 2027 but will be able to demonstrate to the State that it will slightly exceed the requirement once the PureWater Program is producing purified recycled water. The modest buffer of 500 acre-feet per year will ensure that the District will continue meeting the State mandates in future years. This is important as water use behavior can vary year to year despite differences in weather. It is also important to note that these are the best available estimates at this time and will need to be revisited as more up-to-date information becomes available.

3. Results of the 2018-2020 Comprehensive Water Conservation Plan

The 2018-2020 Comprehensive Water Conservation Plan outlined five different efforts to achieve water conservation objectives, which included:

- Weather based Irrigation Controller Giveaway Program
- High Water Use Account Review and One-on-One Consultations
- Rain Barrel Giveaway Program
- Development of a Landscape Initiative
- Improved Education and Outreach Efforts

Collectively, these efforts were anticipated to reduce water use by an estimated 421 acre-feet per year (a reduction of 69 acre-feet in the inefficient and excessive tiers and 352 acre-feet per year in the penalty tier). The plan also specifically identified that these indicators would be evaluated twelve months after full implementation, on or after June 30, 2021. This would provide enough time to see

changes over similar periods from year to year. Staff anticipates providing either the results of the previous conservation plan or an updated conservation plan to the Board of Directors every spring. However, some encouraging results have been seen during the period of implementation of the 2018-2020 Conservation Plan and are discussed below. Some programs such as the Weather Based Irrigation Controller Program (WBIC) provides an opportunity to show measurements in different water use before and after installation as well as comparisons of program participants compared to on-participants. Other programs are more difficult to directly measure benefit, as they do not have a direct or measurable connections to changes in people's behavior and or water use.

In recognition of this difficulty staff have added a new task to the 2020-2022 Conservation plan to allow for better tracking and reporting of conservation efforts and water use patterns. As an ongoing effort, staff will be providing greater detail on conservation efforts and water use patterns on a monthly basis while also providing annual reports and a two-year update to the Conservation Plan. Updates on each of the conservation efforts in the 2018-2020 Conservation Plan are included in the following sections.

3.1 Weather Based Irrigation Controller (WBIC) Giveaway and Installation Program

The District contracted with Rachio Inc. to provide a full service controller installation program that was launched in February of 2019. The program was intended to provide 2,000 smart controllers to customers including a free professional installation. The program was also specifically targeted to wasteful water use customers as defined by those customers that have exceeded 200% of their monthly water budget at least once since the inception of budget-based rates. While specifically intended to target these customers, other customers were allowed to participate in the program; however, marketing was solely targeted to wasteful water use customers. The program was limited to one controller per customer, but if a customer needed more than one controller due the size of their property, up to two controllers would be installed with the second controller purchased by the customer. This resulted in more controllers being installed on large properties with those customers sharing in the cost of the program.

The program was developed with a target of 80% of recipients being wasteful customers and 20% being all other customers in the District. In order to maintain this ratio, an email list was developed for all wasteful customers and prioritized based on how far out of budget customers' water usage was on an annual basis. Email marketing to those customers most out of budget was tiered, with initial marketing limited to only the highest tier. As the redemption rate diminished for that tier, email marketing was initiated for the next lower tier until all tiers had received an email message encouraging them to participate in the program. Once all of the tiers had been exhausted, an email list was developed for all of the wasteful customers that had not redeemed and they were notified of the program on a weekly or bi-weekly basis depending on the amount of customer interest. While these marketing efforts were underway all other customers were allowed to participate in the program if they had heard about the program through word-of-mouth (friends and neighbors).

This type of marketing effort had not been tried before and resulted in very surprising adherence to the originally intended ratio of wasteful to non-wasteful customers. As of March 17, 2020, just prior to suspending installations as a result of COVID-19 concerns, 1,746 controllers had been installed for wasteful water use customers and 393 controllers had been installed for non-wasteful customers. This reflected an 82% redemption by the targeted group of customers and an 18% redemption from non-targeted customers. This indicates that this type of marketing effort could be very effective at targeting wasteful water use customers while still allowing participation of all customers. As a result, no customer was refused the option to participate in the program.

Given the scale of this program, it was important for staff to provide the Board an indication of how much water had been conserved through the implementation to date. On February 18, 2020 staff provided a combined presentation with representatives from Rachio Inc. on estimated reductions in water use as a result of the program.

Figure 1. illustrates the redemption rate of controllers during the implementation of the program. Initial interest in the program was very strong with a rapid increase in redemptions. The redemption rate slowed after the initial surge, which is reflective of diminishing interest in the program from the initial tier of email marketing to customers most out of budget. Redemption rates then pick up again as progressive tiers of email marketing were released. Seasonality could also factor into redemption rates with diminished customer interest in the winter months. However, the curve has flattened out within recent months and redemption rates have flattened with fewer wasteful customers redeeming. This could indicate that the wasteful customers that were interested in the program have already redeemed and the remaining customers are less interested or are satisfied with their current irrigation system. While we could see some renewed interest as the weather warms and people begin to think about getting outside more to enjoy their gardens, it appears that the current marketing efforts have reached a point of diminishing returns.

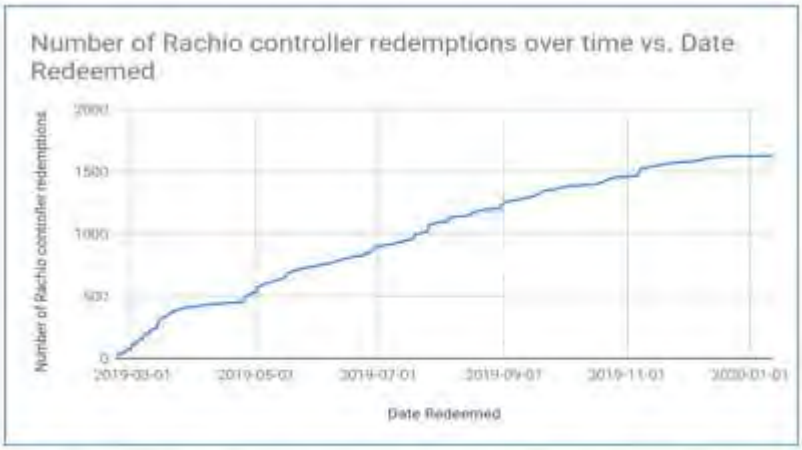


Figure 1. Graph illustrating the redemption rate for smart controllers

The following tables provide a comparison of water use between 2018 and 2019. The numbers that are included in the tables are based on actual water use information for those customers, adjusted for each account, to reflect only the periods of time when the controller was installed. So, if a customer installed their controller in May, water usage between the two years reflects only the water usage from May of the previous year. Two tables are provided for both targeted (wasteful) and non-targeted customers as a comparison between those customers that participated in the program and those that did not participate. It should be noted that in order to be certain the program has resulted in significant water savings, several years of information should be used to make sure there is a consistent water savings.

Tables 3 and 4 provide a comparison of water usage between targeted (wasteful) customers that participated in the program and those that did not participate in the program. "Over Budget" on these two tables refers to customers exceeding 200% of their budget, which classifies them as wasteful, rather than inefficient customers exceeding their budget. Water usage for targeted customers that did not install a controller shows an aggregate reduction in water usage between the two years of -13% (Table 3). While targeted customers that did install the controller show an aggregate reduction of water usage between the same period of 47%.

Table 3. Targeted Customers With No Controller Installed

Percent Over Budget						
	2018		2019		Change	% Change
Sites Over Budget	6,509	80.30%	6,082	75.10%	-427	-5%
Sites at Budget	0		0			
Sites Under Budget	1,593	19.70%	2,020	24.90%	427	5%
Total Sites	8,102		8,102			
Units of Water Used						
Over Budget	1,095,932		949,437		-146,495	-13%
Under Budget	151,345		240,994		89,640	59%

While we cannot say that the controllers were solely responsible for this difference, the change in water usage between the two groups is significant and since outdoor water use is such a large component of water us in the District, it is likely that the controllers were responsible for the vast majority of the difference (not differing weather between the two years). Additionally, there is a corresponding number of customers that drop below the wasteful classification with 21% of customers that participated in the program dropping from wasteful to inefficient or efficient. Also of note, are the changes in under budget water use between participants and non-participants. The change in under budget water use of customers who installed controllers was significantly higher than customers who did not install a controller. Note that one unit of Tables 5 and 6 provide the same information as the previous tables but for non-targeted customers which include both efficient (within budget) and inefficient (between 100 and 200% of budget). Similar to wasteful water use customers, non-targeted customers also showed both a decrease in over budget water use and a decrease in the number of customers over budget when they participated in the program. For those non-target customers that did not participate in the program, there was an aggregate reduction in over budget sites of -5% and a corresponding reduction

Table 4. Targeted Customers With a Controller Installed

Percent Over Budget						
	2018		2019		Change	% Change
Sites Over Budget	1,238	83.30%	925	62.20%	-313	-21%
Sites at Budget	1		0			
Sites Under Budget	247	16.60%	561	37.80%	314	21%
Total Sites	1,486		1,486			
Units of Water Used						
Over Budget	118,907		62,816		-56,091	-47%
Under Budget	11,025		22,373		11,348	103%

Table 5. Non-Targeted Customers With No Controller Installed

Percent Over Budget						
	2018		2019		Change	% Change
Sites Over Budget	2,075	26.10%	1,962	24.70%	-113	-5%
Sites at Budget	52		0			
Sites Under Budget	5,815	73.20%	5,980	75.30%	165	3%
Total Sites	7,942		7,942			
Units of Water Used						
Over Budget	92,426		81,971		-10,455	-11%
Under Budget	676,035		718,443		42,408	6%

in water use of eleven percent between the two years. However, when compared to customers that participated i n the program, there is a more Non-target customers that participated in the program saw an aggregate reduction in sites over budget of minus twelve percent and a reduction of over budget water use of forty-two percent. Similar to wasteful customers, non-target customers saw an increase in the amount of under budget water as compared to those customers who did not install a controller.

Table 6. Non-Targeted Customers With a Controller Installed						
Percent Over Budget						
	2018		2019		Change	% Change
Sites Over Budget	212	52.30%	162	40.00%	-50	-12%
Sites at Budget	0		0			
Sites Under Budget	193	47.70%	243	60.00%	50	12%
Total Sites	405		405			
Units of Water Used						
Over Budget	12,392		7,197		-5,195	-42%
Under Budget	15,544		21,382		5,838	38%

These are encouraging results and show that the installation of smart controllers, 1) reduce the number of customers over budget, 2) reduce the amount of water used over budget and 3) increase the amount of water use within budget. These results also indicate that a program that is available to all customers in the District could have similar results to a program targeted solely to wasteful water use customers.

Since the implementation of the program, approximately 141 acre feet of water have been conserved. This could also be considered an approximation of annual savings since the implementation of the program and analysis of the water savings were done almost exactly one year apart.

3.2 High Water Use Account Review and One-on-One Customer Consultations

Field Customer Service staff have done an excellent job providing one-on-one consultations with customers concerned with high water use. Since the initiation of these efforts in June 2018, 953 one-on-one consultations have been conducted. The 2018 Conservation Plan set a goal of providing detailed review of at least 200 accounts per year and at least 60 comprehensive one-on-one consultations per year.

The process of conducting the account reviews and consultations has been streamlined to allow for both of these processes to occur simultaneously. The on-site consultations now start with a review of account information prior to meeting with customers. Historic water usage is evaluated to see if there are any changes in water usage recently or if the customer is a new resident. The irrigated area of the property is also reviewed and brought to the appointment to review with the customer. While on site, staff go over historic water usage with the customer, check for leaks in the system, review the setting on the irrigation controller and review the District mapped irrigated area to confirm accuracy and modify if needed. Customers are also informed about ways to conserve water indoors. Future reports will look at whether these consultations are making a difference, and to what degree, with regard to reductions in water use.

3.3 Rain Barrel Giveaway Program

In 2018 the District partnered with a local rain barrel provider, Smith Pipe and Supply, to implement a rain barrel voucher program. Customers were informed to contact the District about their interest in the program and staff then verified their eligibility and provided them with a voucher for up to two free rain

barrels. Customers then brought the voucher to Smith Pipe and Supply to receive the barrels. The District was then invoiced by Smith Pipe and Supply for all rain barrels distributed in a month.

This program was literally an overwhelming success. Within hours of notifying customers on our conservation email list, the program was suspended due to overwhelming demand that far exceed the number of rain barrels available. Due to the program being suspended as a result of expense and staff resource available to administer the program, fewer than expected rain barrels were distributed. However, 327 rain barrels were distributed to the initial wave of respondents.

3.4 Development of Landscape Conversion Initiative

Staff performed a comprehensive review of landscape conversion programs throughout the region to see which were most successful and had the greatest longevity. While individual water agencies each implement various conservation programs they are often expensive, grant-funded, limited in scope and often short lived or sporadic in their implementation. Individually implemented programs are usually limited only to customers in a defined service area while neighbors who live relatively close, my not have certain programs available. This can be confusing to customers and may cause additional frustration with conservation efforts.

Additionally, these programs are not able to take advantage of the economies of scale available to partnerships. In addition to providing potential cost savings, regional conservation partnerships allow opportunities to more broadly advertise programs, develop shared training programs for landscapers and customers. Regional partnerships also allow for the opportunity to develop a network of resources such as outreach, different skill sets, equipment and an integrated network of demonstration and botanical gardens. Regional programs that are funded and implemented by numerous agencies appear to have the greatest success and longevity. Key to the success of a local conservation program will be the need to implement regional landscape conversion initiatives.

In an effort to begin developing broader regional partnerships, staff have begun to discuss the development of a regional conservation and landscape conversion program with the Mountains Restoration Trust, a local non-profit organization with extensive experience in community coordination and outreach. Discussions were focused on the potential to seek grant funding to initiate a coordination effort with other entities in the region of the Santa Monica Mountains. Since our initial discussions, the Mountains Restoration Trust has merged Tree People, with a larger non-profit organization with even more experience coordinating local communities. Staff continues to work with these organizations to develop a regional program. Implementation is not expected for at least another year.

3.5 Improved Education and Outreach Efforts

Over the past two years, External Affairs has put a strong focus on outreach and education to both schools and the community. In the Fall of 2019, we saw a dramatic increase in the number of tours given to schools and community groups, with a new focus on project-based tours. This means that now and moving forward, we not only share information on the inner workings of treatment processes, but we help facilitate applied learning using real time data and potential scenarios. This approach not only enhances awareness and understanding of the importance of water conservation and management, but exposes students to a potential future career in water.

Similarly, we've seen an increase in requests to provide an outreach booth at several community events, both new and continuing, across our service area. This has allowed for more personal interactions with our customers, which is a great opportunity to gauge their individual conservation habits and goals. "Conservation fatigue" is something that has come up often following years of drought messaging and the subsequent 2019 wet season, so we have focused conservation outreach on outdoor watering and Pure Water. The Rachio program has proven a big hit with customers, as it provides them with a free smart irrigation controller and the district with an opportunity for outreach regarding watering habits and rebates. Additional outreach also included regular print ads in local newspapers and publications, as well as several large banners on display along Las Virgenes Road during the fall, reminding customers to adjust their watering for the new season. We are looking to expand upon that outreach with radio ads moving forward.

Finally, one of our greatest tools for conservation messaging has been the students. In fall 2019, we partnered with Triunfo Water & Sanitation District and the Oak Park School District for the first time to provide classroom presentations specifically focused on water conservation and water reuse to hundreds of students across six schools. Not only does this expanded outreach help instill water saving behaviors in students at a young age, it also creates an informed child who will then go home and share that messaging with their parents. Similarly, we began to do the same with hands on water activities for LVUSD's Outdoor Education program prior to the COVID-19 concerns.

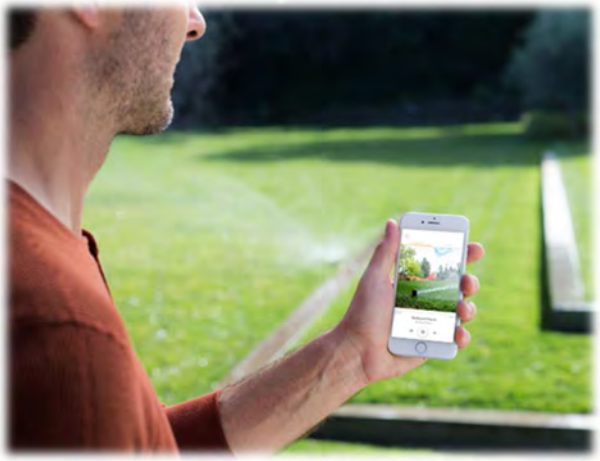
4. 2020-2022 Water Conservation Activities

The District has a history of successful conservation programs and, with the help of our customers, was able to achieve significant water conservation during the last drought, which illustrates that customers in our service area are able to achieve, or exceed, conservation levels that will be required by the state. However, our ability to meet new and emerging water conservation mandates will require a continued and focused effort to achieve required efficiency mandates. Wasteful water use and inefficient outdoor irrigation represent the greatest potential for success and continue to be the focus of the updated 20-22 CWCP. Much of these actions will be building on the success of previous efforts, while others have been modified from the previous plan based upon new understandings. Additional efforts have also been added to the previous CWCP to better address upcoming regulatory requirements. This updated CWCP includes seven efforts that will be implemented over the next two years which are listed below and discussed in greater detail in the following sections:

- Weather Based Irrigation Controller Cost Share Program
- Improved Tracking of Water Use and Conservation Effectiveness (New)
- High Water Use Account Review and One-on-One Customer Consultations
- Rain Barrel Incentive Program
- Regional Landscape Conversion and Conservation Initiative
- Water Loss Prevention Program (New)
- Education and Outreach Efforts

4.1 Weather Based Irrigation Controller Cost Share Program

Outdoor water use presents the largest single opportunity to conserve water in the District. Most of the excess water use that occurs in the District is the result of over irrigation. Estimates of water use indicate that approximately 70% of potable water use is for outdoor irrigation. Reducing excessive irrigation also provides the greatest opportunity to help customers be efficient, stay in budget and reduce the amount of penalties assessed for excessive water use. Consequently, reducing excessive irrigation also represents the greatest opportunity for the District to achieve state-mandated water allocations that will be part of *Making Conservation a California Way of Life*.



Water conservation results from the WBIC program, discussed earlier, showed that the installation of smart controllers can significantly reduce the amount of water used by customers for outdoor irrigation. Smart controllers have the potential to:

- Reduce the number of customers over-budget
- Reduce the amount of water used over-budget
- Increase water use within budget

Results from the first year of WBIC Give Away Program also indicate that a program available to all customers in the District could have similar results to a program targeted solely to wasteful water use customers. In order to continue to build on the success of this program staff reviewed four different approaches to continue the program out lined below.

<u>Option One – Continue with Existing Program</u>

This current program specifically targeted excessive and wasteful water use customers by prioritizing and limiting marketing efforts to the most wasteful customers. However, the program also allows for the participation of all District customers by allowing 20% of available controllers be available to all customers while 80% of controllers would be reserved for customers that have exceeded two hundred percent of their budgets. Currently, 82% of customers participating in the program are wasteful customers while 18% of program participants comprise all other water use types. However, participation of wasteful water use customers has plateaued with fewer wasteful customers participating each month. Which means that the current program is reaching saturation in this customer group. Most of the customers that wanted to participate in the program already have done so.

This program also is the most expensive of all of the alternatives since it includes a free controller and free installation with no cost share from customers. The current program has an average cost per controller and installation of $460. However, this program will also result in the highest level of estimated water savings per controller since it targets the most wasteful customers; however, it is also likely to result in the fewest number of controllers installed over a two-year period based upon current redemption rates. Which also means that maintaining the 80:20 ratio of participants could be

increasingly difficult to maintain as more non-target customers become aware of the program and fewer target customers participating.

Option Two - Modification of Existing Program

Staff also considered modifying the existing program to continue the giveaway program as is for wasteful water use customers while having all other customers either pay for all or some of the combined cost. This approach would create a two-tiered system with the most wasteful customers receiving a giveaway while other customers would have to pay. This would be difficult to market and possibly frustrate those customers that have to pay while appearing to reward customers with wasteful water use. Also, as mentioned above, the program appears to have reached most of the wasteful customers who want to participate.

This alternative would be less expensive per controller than the current program, since some customers would be covering and/or sharing the cost and could be implemented at different scales based upon desired funding levels. However, customers who have to pay would be more likely to do the installation themselves and seek a Metropolitan Water District Rebate. This could result in controllers not being properly set up which reduces the opportunity to maximize irrigation efficiency.

Option Three - Controller/Installation Cost Share (preferred option)

This alternative would provide an incentive for all District customers to install a smart irrigation controller to improve irrigation efficiency. This alternative would still combine the controller and the installation to provide confidence that the controllers will be installed and set up correctly. Customers would also be required to provide part of the combined cost of the controller and installation. Based upon consultation with Rachio Inc. and their experience implementing similar programs through the country, they recommend a customer cost share of around $99, which still incentivizes the program by minimizing customer need to find an installer and submit rebates. In this alternative, a professional installation service would manage the day-to-day operation of the program including scheduling appointments, installing the controller, purchasing controllers at a potentially discounted price and also filing for the Metropolitan Water District rebate on behalf of the customer. In other words, the customer has to simply pay for their cost share and everything else is completed for them.

This is a moderate cost alternative requiring customers to share program costs. The current program has an average cost per controller and installation of $460. However, the program targeted the highest water use customers who are more likely to use the sixteen zone controller and, when needed, the cost of installation of a second controller. Option 3 would allow for all customers to participate in the program which will likely increase the number of efficient and inefficient water use customers. This would reduce the number of sixteen zone controllers which are more expensive than the eight zone controllers. Additionally, the program would not cover the cost of a second controller installation. This could bring the average combined cost closer to $350. When combined with the customer cost share of $100 and the rebate from Metropolitan Water District of $80, the average cost to the District would be about $170. Based upon a $250,000 annual cost, the program would be able to distribute approximately 1,470 controllers per year for two years, resulting in approximately 2,940 controllers installed. Upon full implementation of this program combined with the previous giveaway program, about 25% of residential customers will have a Rachio controller installed.

This alternative would allow for easy marketing of the program for all interested customers while still providing a turn-key service on behalf of the District. By requiring the professional installation as part of the program, it assures that controllers will be set up correctly by a professional installation company and customers will not be inconvenienced by finding an installer or doing it themselves.

Option Four – Controller Only Voucher/Rebate Program

This alternative would not include installation services which would either need to be performed by the customer or a landscape professional of their choice. This alternative only incentivizes the purchase of a smart controller. Customers could potentially take advantage of a discounted rate on a controller available at a web portal specific to District customers who could receive a manufacturer discount negotiated with the manufacturer and the District. Customers could also take advantage of the Metropolitan rebate program. This alternative also includes a District voucher/rebate as an additional incentive.

This alternative could result in the greatest number of controllers being distributed as it is the lowest per controller option for the District. The program would also be very easy to market since all customers would be eligible. However, there would be minimal assurance that the controllers were installed and set up correctly. There would also be an administrative burden on District staff to verify and process vouchers/rebates to assure that only one controller is distributed to each household and that they are District customers.

Based upon the considerations above, staff are recommending Option Three. This option provides reasonable assurance controllers are installed and set up correctly to maximize irrigation efficiency. This option also places the least burden on District resources as all of the program services will principally be managed by an outside service. This outside service provides the most incentive to customers. All they would need to do is pay the cost share and schedule an appointment.

Program Specific Goals

- Reduce water waste resulting from over-irrigation
- Reduce the number of penalty paying customers
- Improve customer engagement and satisfaction
- Maximize the numbers of controllers installed and correctly programmed
- Minimize District administrative effort

Program Cost

Based upon the assumption of moving forward with Option 3 above, $250,000 has been budgeted per year in the proposed FY 20-22 budget. This funding would provide for distribution of approximately 1,470 controllers per year for two years, resulting in 2,940 controllers installed.

It is also important to note that approximately $88,000 in incentive funding could be available from the Metropolitan Water District of Southern California to reimburse District expenses for this program, depending on how the program is implemented. For example, the current program was eligible for

$172,840 in funding from this program since redemption of the Metropolitan rebate was not applied to the program.

Potential Water Savings

The previous conservation plan estimated that the current controller giveaway program would reduce irrigation by between 5,000 and 13,000 gallons per year per single family household. However, assuming total water use reductions for participating customers were the result of controller installations, it appears these estimates could be low. The average water use reduction for targeted customers in the current program was 23,936 gallons per controller installation. The total average water use reduction for non-targeted customers was 9,724 gallons per controller installed. It is also expected that Option Three will result in increased participation of efficient and inefficient customers relative to wasteful customers. Assuming 70% of participants are efficient and inefficient customers and 30% are wasteful, Option Three would result in an estimated 54,978 units of water per year per customer. This translates to approximately 126 acre feet per year.

4.2 Improved Tracking of Water Use and Conservation Program Effectiveness

Eagle Aerial Solutions has been contracted by the state to develop the statewide aerial mapping of irrigated areas to be used for development of water use objectives for retail water providers. This is the same company that completed the mapping of irrigated areas for the District which provided the District the opportunity to participate in the Department of Water Resources pilot program to validate the accuracy of the statewide mapping effort. The results of this effort have not been completed but should provide the District an opportunity to see early results of the statewide mapping effort and be better informed about how closely our mapping of irrigated areas compare to the state.

Eagle Aerial Solutions has developed a software program called WaterView to help water providers track water usage and assist with reporting which will be required as part of Making Conservation a California Way of Life. The software has been specifically developed, with input from member agencies of the California Water Efficiency Partnership, to track water use at both the parcel and district level. The software contains a suite of tools that will allow for more automated tracking of specific water conservation efforts, identification of specific customer types for outreach and focused conservation programs, real-time tracking of compliance with water use allocations and automated reporting.

Program Specific Goals

- Efficient tracking of customer water use
- Improved ability to track results of conservation programs
- Improved ability to measure water use against state water use objectives
- Efficient collection of information needed for regulatory reporting

Program Cost

The District has been able to take advantage of an early adopter program for WaterView which assures that the District will receive a discounted annual subscription fee at least 25% lower than regular pricing. The annual subscription fee for WaterView is $16,500 and is included in the proposed FY 20-22 budget.

Potential Water Saving

Water savings from the development and implementation of this software in conjunction with the other initiatives in this CWCP can be substantial but difficult to quantify at a program specific level.

4.3 High Water Use Account Review and One-on-One Customer Consultations

The Conservation Department is currently in the process of filling a vacant Conservation Specialist position. Once that position is filled, one of their principle responsibilities will be initiating proactive contacts with our most wasteful customers. Based upon a review of the account to evaluate accuracy of irrigated areas and historical water use, high water use accounts will be selected for personal contact and one-on-one consultations.

Field Customer Service currently performs site evaluations for customers who have contacted the District with high bill complaints to help them reduce their water use. The Conservation Specialist will build on the success of these efforts with proactive contact with our highest water users and those using the greatest volume of water in excess of their budget. Participants in the Weather Based Controller Program who continue to exceed their budgets with be prioritized for contact. By meeting with the property owners on-site, District staff will be able discuss water use with the customer to better determine how and where water is being used on the property and how water use can be reduced. Discussions will include proper irrigation scheduling and maintenance and could include an irrigation audit if deemed useful. Indoor water use will also be discussed so that the property owner can better understand how to stay within their total water budget.

Program Specific Goals

- Provide a detailed review of at least 200 accounts per year
- Provide at least 60 comprehensive one-on-one consultations with property owners per year (up to 150 depending on available staffing resources)

Program Cost

This program will be completed with existing staff and budgeted resources and will not require additional funding to complete.

Potential Water Savings

Some of the program elements, such as determining the accuracy of irrigated areas are administrative corrections to budgets that would not result in water savings. The one-on-one consultations could result in significant water savings based upon the issues identified and corrected by property owners. Up front estimation of water savings are difficult to determine with reasonable accuracy. However, water use before and after consultations could be performed to provide more accurate estimations of water savings that result from this program in future years.

4.4 Rain Barrel Incentive Program

Rain barrels have been a popular item during previous giveaway programs with District customers and we hope to build on the success of previous programs by maximizing the educational benefit of rain barrels. Rather than giving rain barrels away we are going to try a different approach and use them to incentivize gardening classes and tours of the Sustainability Garden. The principle benefit of rain barrels is to make customers more mindful of water usage in their yards. In order to maximize that benefit, we will be providing up to two rain barrels per household in attendance at educational events. This will be particularly beneficial for the garden tours given the educational installation of rain barrels and cisterns in the garden. These have been plumbed into the irrigation system of the garden to illustrate how rain water capture can be used to irrigate large trees in customer's yards or directly augment appropriate irrigation systems. It also provides the opportunity to show customers the benefits of a larger capture feature, such as cisterns and educate customers on how these features can irrigate a climate appropriate garden through the winter months.

Program Specific Goals

- Provide up to 100 rain barrels per year to customers free of charge over a two-year period
- Remind customers of the need to conserve water outdoors, especially in the winter months
- Encourage the use of native plants and climate appropriate landscaping
- Incentivize attendance at District educational events
- Provide attractive rain barrels that complement local residences and landscaping

Program Cost

The program is budgeted for $10,000 per year for two years ($20,000 for two years) plus in-house staff time with existing resources that is provided in the proposed FY20-22 operations budget.

Potential Water Savings

Each rain barrel can typically hold about 50 gallons of rainwater and depending upon the surface of the roof can usually fill up even during relatively small rain events. Conservatively assuming six rain events large enough to fill the barrels each year and complete use of the water between events, the program will save approximately 60,000 gallons of water per year. While the dollar amount invested will yield a relatively low water savings, the purpose of the program is aimed at raising awareness for efficient water use that will in turn contribute to the overall water savings from implementing the entire CWCP.

4.5 Regional Landscape Conversion and Conservation Initiative

The single greatest opportunity to conserve water is to educate customers about efficient outdoor water use and encourage the transition from high water demand landscaping to more efficient landscaping practices. Traditionally, this has been done by linking reduced water use to saving money. While this message is appealing to some, it has a limited audience and does not motivate all customers. Also affecting the decision to modify landscaping is fear of change, lack of inspiration, uncertainty about how it will look, cost of conversion and concern about their ability to convert their landscaping.

Addressing the concerns that customers have, in addition to the cost of outdoor water use could significantly broaden the appeal of conservation programs. Capitalizing on the District's location in the Santa Monica Mountains and the beauty of the local environment have a direct connection to native and climate appropriate landscapes that integrate with and compliment the local ecology. Making a connection to the ecosystem services that native landscapes provide could broaden the appeal of native gardens and inspire customers to convert to landscaping that provides food and habitat for local wildlife. Since native gardens provide these resources, they will attract beneficial wildlife such as birds and insects that provide natural pest control in native gardens. Additionally, native plants do not require fertilizers or pesticides, which reduces the need to use harmful chemicals that impact local watershed. The Las Viergenes-Triunfo Sustainability Garden provides a new educational resource to teach customer about climate appropriate landscaping and a first-hand opportunity to see how appealing these landscapes can be.

Efforts in the previous conservation plan focused primarily on reviewing other landscape conversion initiatives implemented throughout the region to identify opportunities to build on other programs successes and to determine which types of programs would be most likely to succeed in the District's service area. Numerous programs were identified, however most were focused around turf removal incentives which were in large part grant-funded initiatives tied to the Metropolitan Water District's turf removal program. Most of the more recognized, successful and longest lived programs have been implemented

through cooperative partnerships with other water purveyors or municipalities. Examples include the Waterwise partnerships in Ventura and Santa Barbara Counties.

Additionally, these programs are able to take advantage of the economies of scale available to partnerships. In addition to providing potential cost savings, regional conservation partnerships allow opportunities to more broadly advertise programs, develop shared training programs for landscaper's and customers. Regional partnerships also allow for the opportunity to develop a network of resources such as outreach, different skill sets, equipment and an integrated network of demonstration and botanical gardens. These partnerships also allow for the development of innovative programs that can be shared will all customers in a region. Programs such as the "Garden in a Box" discussed in the previous conservation plan are much more likely to succeed when they have a large enough customer base to support continued implementation.

Staff will continue to evaluate other regional opportunities, such as joining the Ventura County Waterwise efforts while also evaluating the opportunities to develop a regional program more specific to the Santa Monica Mountains. As part of this effort, the staff will continue to build on the partnership initiated with Tree People to seek grant funding for program development and to gage foster interest of local water purveyors and municipalities. It is anticipated that this process will take over a year to complete.

Compliment to this effort is the recent installation of the Las Virgenes Triunfo Pure Water Sustainability Garden; specifically designed with nature in mind to educate customers and visitors about the different planting types, irrigation demands and benefits to local wildlife and ecosystems. The Sustainability Garden will provide a first-hand opportunity for visitors to learn more about the benefits of climate appropriate landscaping and how they might be able to design their own landscape conversion projects. The garden will be an important tool for future educational events and tours to help advance the goals of this program.

Program Specific Goals

- Evaluate feasibility of a Santa Monica Mountains regional program
- Evaluate opportunities to partner with existing programs
- Broaden the appeal of native plants and climate appropriate landscaping utilizing social media, the District's website, and gardening classes
- Develop one additional demonstration garden by June 30, 2022

Program Cost

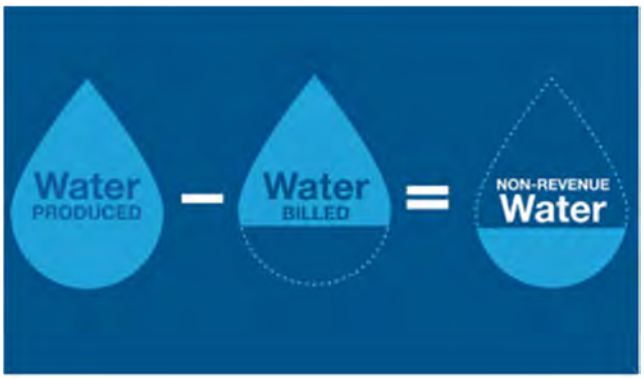
This program will be completed with existing staff and resources, while other funding sources such as grants are being sought out. The FY 20-22 budget includes $30,000 in outside service to assist in evaluating program options and developing regional partnerships.

Potential Water Saving

Water savings from the development and implementation of this Program in conjunction with the other initiatives in this CWCP, can be substantial but difficult to quantify at a program specific level.

4.6 Water Loss Prevention Program

The District completes a water loss audit every year which is then required to go through a third party validation process before being submitted to the Department of Water Resources. The purpose of the water loss audit is to determine the amount of water loss in the distribution system that is occurring either as a real loss, such as a leak, or an apparent loss, such as incorrect meter readings. This process provides the opportunity for water purveyors to better understand where water is being lost in the distribution system or if corrections need to made in how water distribution is being accounted.



The District has a relatively new distribution system and historically has very low water loss. However, SB 555 and *Making Conservation a California Way of Life* will require the District to take a closer look at water loss and be more proactive in addressing potential areas of concern and new regulatory requirements. In order to be prepared for this inevitability, Staff will be organizing a water loss prevention team that will draw on different areas of expertise in the District. Since water loss prevention covers such a wide range of issues the team will be comprised of staff from operations, customer service, finance and conservation. The initial focus of this effort will be the development of a Water Loss Prevention Program that will outline what actions will need to be taken to address the new regulations, identify proactive measures to document the Districts efforts to minimize water loss and development of a timeline of when these actions will be taken. The water loss prevention team will then be responsible for implementing the program, tracking district efforts and achieving regulatory requirements.

Program Specific Goals

- Identify areas to reduce system water loss and prioritize implementation
- Improve the District's water loss audit score
- Reduce system water loss by 4 acre feet per year
- Identify potential implications of new and emerging regulations and plan for compliance
- Develop a District Water Loss Prevention Plan that identifies specific actions and timelines to achieve the goals above

Program Cost

This program will be completed primarily with existing staff and resources and will not require additional funding to complete.

Potential Water Saving

By addressing both real and apparent water loss it is estimated that this program can save 4 acre feet per year or about one percent reduction in water loss per year. The District does not have high system water loss so incremental improvements will be needed particularly with apparent water loss. Implementation of the AMI/AMR system will significantly improve the estimations of apparent water loss due to customer meter reading inaccuracies in older meters, which could improve the amount of water savings estimated here.

4.7 Education and Outreach Efforts

Conservation efforts moving forward will largely focus on addressing our customers' "conservation fatigue" by taking a more creative approach and emphasizing water efficiency. A large part of that outreach will consist of tours at our Sustainability Garden outside of the Las Virgenes-Triunfo Pure Water Demonstration Facility. The purpose of this garden is to demonstrate to the public how they can take their conservation efforts in a new, beautiful direction by replacing their thirsty lawns with climate appropriate and low-water plants. The crux of this outreach method is the demonstration aspect, as opposed to just continually telling our customers the same things.

Additionally, this creative approach spurred the birth of the "Water Warriors." In fall 2019, we found much success with and recognition of our Hidden Hills Parade float themed "Conservation Water Warriors". The concept consisted of not just a parade float, but a narrative outfitted with characters that represent each of LVMWD's services and how we work to fight climate change with conservation, water recycling, wastewater treatment, and of course drinking water. Moving forward, we seek to extend this concept into print, with a children's comic book.

Finally, we will be ramping up public tours (when circumstances allow) adding a possible virtual tour of the Pure Water Demo Facility. We're also looking at the possibility of offering all of our tours in the virtual space, adhering to social distancing guidelines that may persist for the rest of the year. Community events will also continue to grow as one of our main outreach efforts, probably beginning again sometime in 2021.

Program Specific Goals

- Improve customer understating of water use efficiency
- Include a broader range of outreach topics to appeal to a broader audience
- Develop more video based outreach for web site and social media applications
- Develop outreach material for one-on-one consultations
- Develop an advertising campaign that identifies seasonal water use concerns to be targeted

Program Cost

This program will be completed primarily with existing staff and resources and will not require additional funding to complete.

Potential Water Saving

Water savings from the development and implementation of this Program in conjunction with the other initiatives in this Conservation Plan can be substantial but difficult to quantify at a program specific level.

5.0 Two-Year Water Conservation Targets for 2020 - 2022

This CWCP will be implemented over the period beginning July 1, 2020 through June 30, 2022. Adjustments to the Plan may be made as improvements are identified. The overarching targets for this Conservation Plan, to be calculated twelve months after full implementation, on or after June 30, 2023 are as follows:

- Reduce water use in the inefficient and excessive tiers (which includes all water use for single family households above 100% of water budgets) by 25% based on a 12-month rolling average when compared to the baseline annual average between April 2018 and March 2020
- Reduce water use that is 200% above water budgets by at least 50% based on a 12-month rolling average when compared to the baseline annual average between April 2018 and March 2020

These are ambitious goals originally estimated as part of the 18-20 CWCP and continue to be target of this CWCP and future plans moving forward. Based upon the results of programs implemented as part of that plan, the 20-22 CWCP is estimated to conserve 130 acre-feet per year or 260 acre-feet over the two years of the plan. This translates to a 2,600 acre-foot water savings over a 20 year period. Based on the capital investments for the WBIC, Rain Barrel, and the other initiatives as described, and accounting for $88,000 in incentive funding from Metropolitan Water District, the dollar per acre-foot of water saved is estimated at $190 when not accounting for internal staff time that is already included in the annual operating budget.

ITEM 10A

INFORMATION ONLY

May 19, 2020 LVMWD Regular Board Meeting

TO: Board of Directors

FROM: Finance & Administration

Subject : Collection and Write-Off of Aged Accounts Receivables

SUMMARY:

On January 7, 2020, Director Charles Caspary requested a future agenda item for a description of the District's practices for collection and write-off of aged accounts receivables. The District has established procedures to collect, and potentially ultimately write off, uncollected debt. The majority of the amounts owed and uncollected stem from customer accounts that are left unpaid when services are discontinued. Also, the District encounters additional uncollected receivables when tenants leasing office space fail to pay. This report provides a summary of the District's procedures to manage aged receivables.

FISCAL IMPACT:

No

ITEM BUDGETED:

No

DISCUSSION:

The District actively seeks to collect all outstanding debt to ensure that payment is received for services delivered. For active accounts, the discontinuation of water service, though temporary suspended due to COVID-19, is an effective means to ensure that unpaid balances are paid. As a result, collection efforts are generally limited to closing bills for customers who relocate outside the District's service area. The District requires that unpaid balances for customers who relocate within the service area be paid before new service is initiated.

Following is a summary of the District's process for management of aged receivables:

Collection Process:

Seven days after the due date of a closing bill, Collection Letter No. 1 is mailed to the customer, and a late fee is assessed to the account. If an email address is available, an email is also sent to the customer advising of the outstanding balance due. If there is no response within 14 days, Collection Letter No. 2 is sent, advising the customer that their account remains past due and that further action will be taken. Over the next 30-day period, skip tracing steps are taken to locate the customer and, if the account remains unpaid, Collection Letter No. 3 is sent advising the customer that their account has been referred to a credit reporting agency and that their credit may be negatively affected if payment is not received.

Write-Off Process:

Bad debt is currently written off after the third collection notice has been sent to a customer and prior to referring the account to the District's collection agency. The process is run once a month by customer service staff. Unfortunately, the amount of write-offs is not clearly broken out in the District's Comprehensive Annual Financial Report (CAFR), but staff spoke with the District's independent auditors about breaking this amount out in the future as part of Note 4, Accounts Receivables. For reference, the total amount of write-off for Fiscal Year 2018-19 was $310,986.89, which correlated to 0.48% of total water and sanitation sales (99.52% collected).

GOALS:

Ensure Effective Utilization of the Public's Assets and Money

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