

CRESCENTA VALLEY WATER DISTRICT

**2700 Foothill Boulevard
La Crescenta, California**

**Agenda for the
Regular Meeting of the Board of Directors
of the Crescenta Valley Water District
to be held on Tuesday, March 8, 2022, at 7:00 p.m.**

Posted: Friday, March 4, 2022, at 2:30 p.m.

AUDIO & VIDEO CONFERENCING NOTICE

[This meeting will be held by audio & video conference only.]

Under AB 361 and District Resolution No. 772, the District will continue to hold Board and Committee meetings by teleconference, due to the continuing State of Emergency for COVID-19 and the ongoing imminent risks to the health or safety of the attendees from COVID-19.

Any member of the public may participate using a touchtone phone. You may select any of the following phone numbers (there are more than one for increased reliability during this time of increased phone traffic)

(669) 900-6833

(346) 248-7799

(929) 205-6099

(253) 215-8782

(301) 715-8592

(312) 626-6799

Then, enter Access Code: 822 6521 8973

Those members of the public who are able to and would like to additionally participate through computer may access the Zoom audio & video conferencing tool available at the following link:

<https://us02web.zoom.us/j/82265218973>

Public comment may be made either by emailing comments ahead of the meeting or by speaking over the phone. Emailed comments will be sent to the Board of Directors prior to the meeting and posted on the District's website. Comments may be sent to Christy Colby, Regulatory and Public Affairs Manager, at (818) 248-3925 or customerservice@cvwd.com by 3pm on March 8, 2022.

Any person may make a request for a disability-related modification or accommodation needed for that person to be able to participate in the public meeting by contacting the District by phone or in writing at the above email address. Requests must specify the nature of the disability and the type of accommodation requested. A telephone number or other contact information should be included so that District staff may discuss appropriate arrangements. Persons requesting a disability-related accommodation should make the request with adequate time before the meeting for the District to provide the requested accommodation.

Any written materials distributed to the Board in connection with this agenda will be made available at the same time for public inspection at the District office located at the above address and posted on the District's website.

Call to Order and Determination of Quorum

Pledge of Allegiance

Adoption of Agenda

Public Comments

At this time, the public shall have an opportunity to comment on any non-agenda item relevant to the subject matter jurisdiction of the Board. This opportunity is non-transferable, and speakers are limited to one three-minute (3) comment. Under the provisions of the Brown Act, the Board is prohibited from taking action on items not listed on the agenda, except under certain circumstances.

Foothill Municipal Water District Report

1. Report on activities at Foothill Municipal Water District.

Consent Calendar

1. Consideration and approval of the Minutes of the Regular Board Meeting on February 8, 2022.
2. Ratification of Disbursements for January 2022.
3. Consideration and approval for continuing to hold meetings by teleconference.
4. Consideration of attendance at the 2022 ACWA Spring Conference to be held May 3-5, 2022 in Sacramento, CA.

Action Calendar

The public shall have an opportunity to comment on any action item as each item is considered by the Board. This opportunity is non-transferable, and speakers are limited to one two-minute (2) comment.

1. **Ballot for the Local Agency Formation Committee (LAFCO) Special District LAFCO Alternate Member and Voting Member** – Consideration and motion to cast the District's ballot for the Special District LAFCO Voting Member and Special District Alternate Member.
2. **8-inch Water Main Replacement on the 3200 block of Alabama St., 4700 & 4800 blocks of Cheryl Ave., Project E-1034**
 - a) Consideration and motion to authorize the General Manager to award a contract to the lowest responsible bidder, Robert Brkich Construction Inc. (Brkich), for the construction of 1,760 lineal feet of pipeline replacement on the 3200 block of Alabama St. and 4700 & 4800 blocks of Cheryl Ave. at a cost of \$447,750 and establish a contingency amount of \$44,775 (10% of contract) to cover the cost of unforeseen or additional work.
 - b) Consideration and motion to authorize the General Manager to enter into an agreement with Cannon Corp. (Cannon) for construction management and inspection services for the pipeline replacement project at a cost not-to-exceed \$105,300.
3. **Replacement of Supervisory Control and Data Acquisition (SCADA) System, Project E-939**
 - a) Consideration and motion to authorize the General Manager to award a contract to Apex Manufacturing Services for SCADA programming and integration at a cost of \$334,460 and establish a contingency amount of \$50,169 (15% of contract) to cover the cost of unforeseen or additional work.

- b) Consideration and motion to waive the Bid Procurement and Purchasing Policy per Article 18.01 of CVWD's Rules and Regulations and allow the General Manager to select and negotiate with vendors for the purchase of equipment, materials and supplies for the replacement of the SCADA system at a cost of \$285,000 and establish a contingency amount of \$42,750 (15% of contract) to cover the cost of unforeseen or additional work

Information Items

Written Communications to District/Board of Directors

General Manager's Report

Attorney Report

Reports of Committees

- Engineering Committee
- Finance Committee
- Employee Relations Committee
- Policy Committee
- Community Relations/Water Conservation Committee
- Emergency Planning Committee
- Technology Committee

Directors' Oral Reports – Reports on issues, meetings, or activities attended by Directors.

Board Members' Request for Future Agenda Items

Closed Session - none

Adjournment



CRESCENTA VALLEY WATER DISTRICT REGULAR MEETING, BOARD OF DIRECTORS February 8, 2022

Pursuant to the order of the Board of Directors of the Crescenta Valley Water District made at the Adjourned Regular Meeting on January 25, 2022, a Regular Meeting was held on February 8, 2022, at 7:00 p.m. through audio and video conference. A call-in number was clearly noted on the meeting Agenda, posted in accordance with the Brown Act, due to the COVID-19 pandemic, with President James D. Bodnar presiding.

At roll call, the following Directors and staff members were online:

Directors:

**James D. Bodnar
Kerry D. Erickson
Ken R. Putnam
Sharon S. Raghavachary
Judy L. Tejeda**

Attorney:

Thomas Bunn

General Manager:

Nem Ochoa

Director of Finance & Administration: James Lee

Director of Engineering & Operations: David Gould

Staff Members:

**Arturo Montes, Finance & Administration Manager
Christy Colby, Regulatory & Public Affairs Manager
Kellen Boyce, System Operations Manager
Tessa Allmon, Customer Service Representative
Adam Sutphin, Analyst
Darlene Telles, Operations and Maintenance Manager
Pam Leddy, Administrative Assistant**

Guests:

**Gema Ptasinski, Clifton Larsen Allen, LLP
Sophia Kuo, Clifton Larsen Allen, LLP**

Public Participation:

Frank Colcord

PLEDGE OF ALLEGIANCE

Director Putnam opened the meeting by leading the Directors and staff in reciting the Pledge of Allegiance.

ADOPTION OF AGENDA

It was moved by Director Raghavachary, seconded by Director Erickson, and carried by a 5-0 roll call vote that the Agenda for the Regular Meeting of February 8, 2022, be adopted as presented.

AYES: **Director Bodnar**
 Director Erickson
 Director Putnam
 Director Raghavachary
 Director Tejeda

NOES: **None**

PUBLIC COMMENTS – None

FOOTHILL MUNICIPAL WATER DISTRICT REPORT – Mr. Colcord reported that Foothill Municipal Water District (FMWD) is currently going through a redistricting process for Board representation. Mr. Colcord stated that FMWD's Water Conservation Rebate Program is offering a smart irrigation controller with installation at no charge.

CONSENT CALENDAR

It was moved by Director Tejeda, seconded by Director Raghavachary, and carried by a 5-0 roll call vote to approve the Minutes of the Regular Board Meeting held on January 25, 2022, through audio and video conference as amended, and to reaffirm Resolution No. 772 to find that (1) Los Angeles County officials have imposed or recommended measures to promote social distancing; and (2) meeting in person would present imminent risks to the health and safety of attendees.

AYES: **Director Bodnar**
 Director Erickson
 Director Putnam
 Director Raghavachary
 Director Tejeda

NOES: **None**

ACTION CALENDAR

Acceptance of Audited Financial Statements for FY 2020-21 – Mr. Montes presented the final draft of the Fiscal Year 2020-21 Audited Financial Statements provided by Clifton Larsen Allen (CLA). Ms. Ptasinski of CLA provided an overview of the audit process. Ms. Kuo of CLA stated that CVWD has received an "unmodified opinion" from Clifton Larsen Allen LLP, the highest level of assurance a CPA firm can provide for a financial statement audit.

Following discussion:

It was moved by Director Tejeda, seconded by Director Erickson, and carried by a 5-0 roll call vote to accept the Audited Financial Statements for Fiscal Year 2020-21.

AYES: Director Bodnar
Director Erickson
Director Putnam
Director Raghavachary
Director Tejeda

NOES: None

Discuss the District's Second Quarter Budget Report on revenues and expenditures for the fiscal year ending June 30, 2022 – Mr. Lee presented a summary of the District's Second Quarter Budget Report revenues and expenditures for the fiscal year ending June 30, 2022. Mr. Lee provided detailed information on revenues and expenses and noted over/under variances for each of the departments, including measures staff is considering in advance of potential revenue target revisions.

Installation of a New Fire Service for Clark Magnet High School, Project D-21-G2 – Mr. Yared provided background information for the installation of a new fire service for Clark Magnet High School with an Engineer's Estimation of \$151,000. Mr. Yared stated that prior to awarding the contract for construction services, staff will approach Glendale Unified School District (GUSD) with a request for reimbursement of all modeling and design costs so far. Mr. Yared shared that GUSD will be informed of all monthly progress payments and any change orders quotes that arise in order to expedite future reimbursements.

Following discussion:

It was moved by Director Erickson, seconded by Director Tejeda, and carried by a 5-0 roll call vote to authorize the General Manager to advertise for bids for said project with an Engineer's Estimate of \$151,000.

AYES: Director Bodnar
Director Erickson
Director Putnam
Director Raghavachary
Director Tejeda

NOES: None

Update on FMWD proposed redistricting – Mr. Ochoa stated that Foothill Municipal Water District (FMWD) had completed a redistricting study which recommends that three divisional boundaries change so that the deviation between the voting population of each the five divisions within its service area is less than 10%. Mr. Ochoa shared that after the FMWD Board of Directors adopts the changes after two public hearings, the changed boundaries will be submitted to the Los Angeles County Registrar Recorder's office by April 17, 2022.

INFORMATION ITEMS – None

WRITTEN COMMUNICATIONS TO DISTRICT – None

REPORTS OF PERSONNEL – No report

GENERAL MANAGER – Mr. Ochoa stated that an All-Hands Strategic Planning Meeting was held in which each of the managers provided departmental goals for the upcoming year. The Strategic Plan draft will be circulated through committees before being presented to the Board and considered for adoption. Ms. Colby provided highlights of the Water Conservation & Public Outreach Report, and Ms. Telles presented highlights of the Maintenance & Operations Report for January 2022. Mr. Gould stated that 88.3 MG of water was produced during January 2022, representing a 63%/37% split in terms of groundwater/imported water production. Mr. Gould provided highlights of the January 2022 Engineering Report.

ATTORNEY – No report

REPORTS OF PERSONNEL – None

REPORTS OF COMMITTEES

Engineering Committee – Director Erickson reported that the Committee had not met; however, an audio/video conference meeting is scheduled for February 15, 2022.

Finance Committee – Director Bodnar reported that the Committee had met on February 2, 2021. An audio/video conference will be scheduled as needed.

Employee Relations Committee – Director Tejeda reported that the Committee had not met; however, an audio/video conference meeting will be scheduled as needed.

Policy Committee – Director Bodnar reported that the Committee had not met; however, an audio/video conference meeting will be scheduled as needed.

Community Relations/Water Conservation Committee – Director Tejeda reported that the Committee had not met; however, an audio/video conference meeting will be scheduled as needed.

Emergency Planning Committee – Director Putnam reported that the Committee had not met; however, an audio/video conference meeting will be scheduled as needed.

Executive Committee – Director Bodnar reported that the Committee met on February 8, 2021. An audio/video conference meeting will be scheduled as needed.

Technology Committee – Director Raghavachary reported that the Committee had not met; however, an audio/video conference meeting is scheduled for February 10, 2021.

DIRECTORS' ORAL REPORTS

Director Erickson – No report

Director Bodnar – Reported that he had completed the Ethics Training class on January 27, 2022

Director Tejeda – No report

Director Putnam – No report

Director Raghavachary – No report

BOARD MEMBERS REQUESTS FOR FUTURE AGENDA ITEMS – None

CLOSED SESSION – None

ADJOURNMENT

There being no other business to come before the Board, at 8:09 p.m., the meeting was adjourned to February 22, 2022, at 7:00 p.m.

APPROVED

James D. Bodnar
President

James Lee
Director of Finance & Administration

CASH DISBURSEMENTS LIST

JANUARY 2022



<u>Check#</u>	<u>Check Date</u>	<u>Payable To</u>	<u>Description</u>	<u>Water Amount</u>	<u>Wastewater Amount</u>
0	1/31/2022	CalPERS	PERS Contributions - January 2022	22,726.65	12,685.50
0	1/27/2022	Los Angeles County Public Works	Excavation permits - January 2022	1,148.00	
0	1/27/2022	U.S. Bank	Bond payment - January 2022	46,520.00	
43691	1/11/2022	ADS, LLC	Sewer flow monitoring & wastewater sampling - December 2021		1,130.00
43692	1/11/2022	Affordable Generator Services, Inc.	Unit #35 - Emergency Generator - replace 4 battery terminals	771.90	
43693	1/11/2022	Akel Engineering Group, Inc.	M-1007 - perform fire flow analysis for Clark Magnet	1,270.00	
43694	1/11/2022	All American Landscape, Co.	Office - monthly landscape maintenance - January 2022	255.50	94.50
43695	1/11/2022	Alliance Outreach, LLC	District Logo artwork & design	600.00	
43696	1/11/2022	American Tire Depot	Unit #43 - replace 4 tires	682.57	418.35
43697	1/11/2022	Apex Manufacturing Solutions	E-939 - support services - Oct/Nov/Dec 2021	2,510.91	
43698	1/11/2022	Aqua - Metric Sales, Co.	E-1035 - New 3/4" & 1" water meters (220 total)	83,399.15	
43699	1/11/2022	ARC	Monthly MPS Billing - December 2021	147.01	49.00
43700	1/11/2022	AT&T	Voice communication - December 2021	525.92	413.21
43701	1/11/2022	Regino Avalos	Landscape maintenance - December 2021	1,024.03	330.97
43702	1/11/2022	Bridgmore Solutions, Inc.	Consulting services for Employee training/development - December 2021	1,660.00	340.00
43703	1/11/2022	Cannon	E-977 - design services - December 2021	7,308.50	
43704	1/11/2022	CCS Interactive, Inc.	Monthly website hosting - January 2022	127.50	42.50
43705	1/11/2022	Costco	Misc. supplies (Costco) - December 2021	48.48	42.99
43706	8/10/4944	City of Los Angeles	Capital & O&M portions of Assc. - January 2022		220,998.00
43707	1/11/2022	CJC Maintenance Services	Janitorial service - January 2022	494.00	156.00
43708	1/11/2022	Clifton Larson Allen	June 2021 Audit	4,465.00	5,035.00
43709	1/11/2022	Consolidated Electrical Distributors, Inc.	E-939 - Misc. equipment for Well 1 & 11	13,166.57	1,661.85
43710	1/11/2022	Eurofins Eaton Analytical, Inc.	Water analysis - December 2021	795.00	
43711	8/10/4944	Golden Bell Products, Inc.	Stock - lift station degreaser - December 2021		1,226.40
43712	1/11/2022	Grace Environmental Services	Well #2 - monitoring assistance - November 2021	3,123.25	
43713	8/10/4944	Grainger	Misc. safety equipment - December 2021		60.18
43714	1/11/2022	Great America Leasing Corp.	Kyocera copiers lease - January 2022	1,185.10	1,138.61
43715	1/11/2022	Gsolutionz Professional Services	Voice communication - January 2022	185.62	145.83
43716	8/10/4944	Haaker Equipment Company	Unit #53 - repair hydraulic leak		1,083.36
43717	1/11/2022	Hach Company	Misc. supplies - December 2021	1,277.06	

43718	1/11/2022	Highroad Information Technology	Managed services & agreement renewals - January 2022	10,080.35	2,064.65
43719	1/11/2022	Wendy Holloway	Mileage reimbursement - July to December 2021	24.47	12.05
43720	1/11/2022	Home Depot Credit Services	Glenwood - misc. supplies - December 2022	67.78	60.09
43721	1/11/2022	J. De Sigio Construction, Inc.	2426 Carol Park Place - 4" main leak repair	2,619.00	
43722	1/11/2022	John Robinson Consulting, Inc.	M-965 - Grant Assistance - December 2021	1,200.00	
43723	1/11/2022	KR Nida Companies	Unit #49 - replace antenna	117.57	72.05
43724	1/11/2022	LA County Tax Collector	Property taxes - July 2021 to Jun 2022	7,665.95	2,555.27
43725	1/11/2022	Lagerlof, LLP	Legal services - December 2021	3,571.10	783.90
43726	1/11/2022	Liebert Cassidy Whitmore	Legal services - November 2021	3,143.06	689.94
43727	1/11/2022	LJ's Access Systems, Inc.	Annual Preventative Maintenance - January 2022	639.00	261.00
43728	1/11/2022	Logan Supply Co., Inc.	Misc. supplies - December 2021	122.46	127.45
43729	1/11/2022	Mc Fence Co.	Mills & Oak Creek - install privacy slats on fences	2,790.00	
43730	1/11/2022	Northern Safety Co., Inc.	Misc. supplies - December 2021	138.50	9.35
43731	1/11/2022	Office Depot	Misc. supplies - December 2021	414.12	346.15
43732	1/11/2022	One Ring Networks, Inc.	Office/Glenwood - data communication - January 2022	1,012.50	337.50
43733	1/11/2022	O'Reilly Auto Parts	Misc. parts - December 2021	138.68	84.99
43734	1/11/2022	Pace Analytical Services, LLC	Water analysis - December 2021	1,280.00	
43735	1/11/2022	Paper Cuts, Inc.	Paper shredding - December 2021	2.60	2.40
43736	1/11/2022	Public Water Agencies Group	Emergency Preparedness Program - January 2022 & Quarterly Assessment	919.38	919.37
43737	1/11/2022	Robert Brkich Const. Corp.	E-1002 - Pipeline replacement - progress payment #3	54,207.47	
43738	1/11/2022	Alex Sandoval	Grade D3 exam prep	249.99	
43739	1/11/2022	Sawyer Petroleum	Diesel fuel - December 2021	2,526.87	671.70
43740	1/11/2022	Spectrum Business	Glenwood, Lowell, Mills, Office - data communication - January 2022	532.91	187.22
43741	1/11/2022	Spectrum Business	Office - voice communication - January 2022	226.05	177.60
43742	1/11/2022	Star Ford	Unit #45 - Turbo hose replaced and reprogrammed	340.13	208.46
43743	8/10/4944	Steven Engineering, Inc.	S-962 - La Granada Lift Station - UPS battery		864.10
43744	1/11/2022	SWRCB Accounting Office	Water System Annual Fees - July 2021 through June 2022	37,850.24	
43745	1/11/2022	Tetra Tech, Inc.	E-1033 & E-1034 - design services for pipeline replacement - December 2021	19,517.75	
43746	1/11/2022	The Gas Company	Glenwood - gas purchased - December 2021	734.23	231.85
43747	1/11/2022	Ultra Welding, Inc.	2652 Manhattan & 2515 Mary - weld 1" couplings	625.00	
43748	1/11/2022	Underground Service Alert	Underground notifications - December 2021	188.50	88.69
43749	1/11/2022	UniFirst Corporation	Uniform rental - December 2021	493.33	147.35
43750	1/11/2022	Univar Solutions USA, Inc.	Sodium hypochloride - Glenwood (482 gal.) & Mills (547 gal.)	3,034.30	
43751	1/11/2022	Vision Service Plan Co.	Group Vision - January 2022	203.49	135.66
43752	1/11/2022	Western Water Works	Fire hydrant repair kits - December 2021	2,093.20	
43753	1/25/2022	ACWA Joint Powers Ins. Authority	Group Health - January 2022	39,453.60	25,816.62
43754	1/25/2022	Aflac	Employee paid insurance - December 2021 & January 2022	2,641.24	
43755	1/25/2022	Alliance Outreach, LLC	Graphic design service for bronze time capsule plaque	134.00	66.00
43756	1/25/2022	Maritess Allmon	Mileage reimbursement - December 2021	49.30	24.28
43757	1/25/2022	American Innotek, Inc.	Misc. supplies - December 2021		768.92

43758	1/25/2022	Apex Manufacturing Solutions	E-939 - SCADA support - Jan, Feb, Mar 2022	31,955.00	
43759	1/25/2022	AT&T Mobility	FirstNet cell phone charges - December 2022	219.06	65.43
43760	1/25/2022	AT&T Mobility	Cell phone charges - December 2021	1,070.03	319.61
43761	1/25/2022	Regino Avalos	Oak Creek Reservoir - site cleanup and tree trimming	625.00	
43762	1/25/2022	Costco	Misc. supplies - December 2021	119.67	110.46
43763	1/25/2022	City of Glendale Water & Power	Power purchased - December 2021	30,375.79	8,536.19
43764	1/25/2022	City of Los Angeles Sanitation	Sewerage Facilities charge - Nov/Dec 2021		8,536.19
43765	1/25/2022	Civiltec Engineering, Inc.	E-1022 - design services - December 2021	330.00	
43766	1/25/2022	Clifton Larson Allen	Progress billing for June 30, 2021 audit	3,500.00	
43767	1/25/2022	Consolidated Electrical Distributors, Inc.	E-939 SCADA returned equipment for Well 8 & 11	-504.60	1,348.25
43768	1/25/2022	Foothill Municipal Water	Water delivery - December 2021	212,605.53	
43769	1/25/2022	Grace Environmental Services	Well #2 - monitoring assistance - December 2021	3,878.13	
43770	1/25/2022	Grainger	Misc. supplies - December 2021	24.40	
43771	1/25/2022	Harper & Associates Eng., Inc.	E-1036 - Edmund #2 Rehab - consulting services - November 2021	1,080.00	
43772	1/25/2022	Jude Herrera	Mileage reimbursement - December 2021	40.28	19.84
43773	1/25/2022	InfoSend, Inc.	Printing & postage for billing - December 2021	907.37	871.77
43774	1/25/2022	Angela Kotso	Refund check - 3333 Community	40.43	
43775	1/25/2022	LA Dept Water and Power	Power purchased - January 2022	55.35	
43776	1/25/2022	Lincoln Financial Group	Life & Disability Insurance - January 2022	795.20	530.13
43777	1/25/2022	Michael K. Nunley & Associates, Inc.	D-21-G2 - design services for GUSD pressure reducing station	20,948.06	
43778	1/25/2022	Paveco Construction, Inc.	Paving various locations - December 2021	17,139.60	
43779	1/25/2022	Peerless Materials Company	Misc. supplies - December 2021	314.64	327.47
43780	1/25/2022	Prohealth Glendale Medical Group	COVID testing, new patient - December 2021	705.01	235.00
43781	1/25/2022	Robert Brkich Const. Corp.	E-1022 - pipeline replacement - final retention payment	26,270.15	
43782	1/25/2022	Shell	Gas purchased - December 2021	1,604.47	479.25
43783	1/25/2022	Spectrum Business	Office/Glenwood - wireless connections - January 2022	1,048.50	349.50
43784	1/25/2022	Spectrum Business	Office - data communication - January 2022	114.30	40.16
43785	1/25/2022	Springbrook Finance Holdings, Inc.	E-1035 - AMI services - December 2021	760.50	
43786	1/25/2022	State Water Resource Control Brd.	Annual permit fee - July 2021 through June 2022	763.00	
43787	1/25/2022	Adam Sutphin	Mileage reimbursement - December 2021	54.78	26.97
43788	1/25/2022	Vulcan Materials Company	Mixed crushed base - December 2021	380.00	
43789	1/25/2022	Waste Management	Glenwood - disposal service - December 2021	1,065.74	336.54
43790	1/25/2022	Wells Fargo Card Services	Colby - monthly email charges, Career Development Program supplies	783.94	371.16
43791	1/25/2022	Wells Fargo Card Services	Gould - New chlorine pump	2,020.87	
43792	1/25/2022	Wells Fargo Card Services	Holloway - LCID permit, Greenbook Standard Specs. Book	588.13	86.29
43793	1/25/2022	Wells Fargo Card Services	Lee - monthly teleconferencing, job posting, COVID rapid tests	970.64	410.10
43794	1/25/2022	Wells Fargo Card Services	Ochoa - Career Development Program, professional development	230.46	110.02
43795	1/25/2022	Wells Fargo Card Services	Telles - Chlorine pump, professional development, training classes	1,634.71	197.87
43796	1/25/2022	Westlake Ace Hardware	Misc. hardware - December 2021	160.38	109.60
43797	1/25/2022	Your Membership.Com, Inc.	Engineering Manager - Job posting	267.33	131.67

43798	1/27/2022	Steven Aintablian	High School Career Development and Leadership Scholarship	500.00
43799	1/27/2022	Jacob Batterson	High School Career Development and Leadership Scholarship	500.00
43800	1/27/2022	Vela Benedicto	High School Career Development and Leadership Scholarship	500.00
43801	1/27/2022	Haley Kim	High School Career Development and Leadership Scholarship	500.00
43802	1/27/2022	Debayon Roy	High School Career Development and Leadership Scholarship	500.00
43803	1/27/2022	Isabella Torres	High School Career Development and Leadership Scholarship	500.00

Subtotals	741,681.04	<u>295,630.83</u>
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Total Disbursements for January 2022	<u><u>1,037,311.87</u></u>
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Payroll Report

Directors	1,260.00
Office Regular Payroll	143,189.00
Office OT	1,221.00
Plant Regular Payroll	86,673.00
Plant OT & Standby	10,864.00
Employer Payroll Taxes	19,381.00
Payroll Service Charges	<u>942.00</u>

Total Payroll for January 2022	<u><u>263,530.00</u></u>
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CRESCENTA VALLEY WATER DISTRICT

BOARD OF DIRECTORS – STAFF REPORT

To: Honorable President and Members of the Board of Directors
From: Thomas Bunn – General Counsel
Subject: **Approve continuation of remote meetings as described in AB 361 and make required findings**

DISCUSSION :

At the September 28, 2021 Board meeting, pursuant to AB 361, the Board of Directors adopted Resolution No. 772, which authorized the Board to continue to have remote meetings based upon the continued state of emergency for COVID-19, and made findings that (1) Los Angeles County officials have imposed or recommended measures to promote social distancing; and (2) meeting in person would present imminent risks to the health and safety of attendees. In order to continue to have remote meetings, AB 361 requires that the Board reaffirm one or both of those findings within 30 days after the first remote meeting, and every 30 days thereafter, provided that a state of emergency continues to be in place.

At the time this report was prepared, there is a continued state of emergency for COVID-19. This item is on the agenda for the Board to consider whether to reaffirm the resolution and make the required findings to continue to have remote meetings for an additional 30 days. The resolution authorizes the Board to extend the resolution by motion.

FINANCIAL CONSIDERATIONS

None.

RECOMMENDATION

The Board of Directors reaffirm Resolution No. 772 and find that (1) Los Angeles County officials have imposed or recommended measures to promote social distancing; and (2) meeting in person would present imminent risks to the health and safety of attendees.

PRELIMINARY AGENDA

ACWA JPIA - MONDAY, MAY 2

8:30 - 10:00 AM

- ACWA JPIA Program Committee

10:15 - 11:15 AM

- ACWA JPIA Executive Committee

1:30 - 4:00 PM

- ACWA JPIA Board of Directors

4:00 - 5:00 PM

- ACWA JPIA Town Hall

5:00 - 6:00 PM

- ACWA JPIA Reception

TUESDAY, MAY 3

8:00 AM - 9:45 AM

- Agriculture Committee

8:00 AM - 6:00 PM

- Registration

8:30 AM - Noon

- ACWA JPIA Seminars

10:00 - 11:45 AM

- Groundwater Committee
- Energy Committee

11:00 AM - Noon

- Outreach Task Force

Noon - 2:00 PM

- Committee Lunch Break

1:00 - 2:45 PM

- Legal Affairs Committee
- Local Government Committee
- Finance Committee
- Water Management Committee

1:00 - 3:00 PM

- ACWA JPIA: Sexual Harassment Prevention for Board Members & Managers (AB 1825)

3:00 - 4:45 PM

- Communications Committee
- Federal Affairs Committee
- Membership Committee
- Water Quality Committee

5:00 - 6:30 PM

- Welcome Reception in the Exhibit Hall

WEDNESDAY, MAY 4

7:30 AM - 5 PM

- Registration

8:00 - 9:45 AM

- Opening Breakfast
(Ticket Required)

8:30 AM - 6:00 PM

- Connect in the Exhibit Hall

10:00 - 11:00 AM

- Attorneys Program
- Finance Program
- Region Forum
- Statewide Forum
- Water Industry Trends Program

11:15 AM - 12:15 PM

- Roundtable Talks

12:30 PM - 1:30 PM

- Networking Lunch in the Exhibit Hall (Ticket Required)

1:45 - 2:45 PM

- Attorney Program
- Communications Committee Program
- Finance Program
- Statewide Forum

3:00 - 3:30 PM

- Ice Cream Break in the Exhibit Hall

3:30 - 4:45 PM

- Regions 1-10 Membership Meetings

5:00 - 6:00 PM

- ACWA Reception in the Exhibit Hall

6:00 - 7:00 PM

- Women in Water Hosted Reception

THURSDAY, MAY 5

7:30 AM - 2:00 PM

- Registration

8:00 AM - 9:15 AM

- Exhibitor Demonstrations
- Networking Continental Breakfast in the Exhibit Hall (Ticket Required)

8:00 AM - Noon

- Connect in the Exhibit Hall

8:30 - 10:45 AM

- Ethics Training (AB 1234) - Limited Seating

9:30 - 11:00 AM

- Attorneys Program
- **NEW!** Innovation Program
- Region Forum
- Statewide Forum
- Water Industry Trends Program

11:15 - 11:45 AM

- Prize Drawings in the Exhibit Hall

Noon - 2:00 PM

- General Session Luncheon (Ticket Required)

2:15 - 3:15 PM

- Attorneys Program
- Finance Program
- Town Hall
- Water Industry Trends Program

3:30 - 4:30 PM

- Energy Committee Program
- Federal Forum
- Region Forum
- Water Industry Trends Program

4:45 PM

- Closing Reception

Last modified: February 16, 2022

Registration required to attend any part of ACWA's Spring Conference & Exhibition, including Tuesday May 3 Committee Meetings. See www.acwa.com for health & safety attendance requirements.

QUESTIONS?

Email us at events@acwa.com

Registration Cancellation Deadline: April 22, 2022 4:30 p.m. (PT)

All conference programs are subject to change without notice.

REGISTRATION, MEALS AND HOTEL PRICING SHEET



REGISTER ONLINE

Register online by **April 22, 2022** at www.acwa.com to take advantage of the advance pricing.



REGISTER ON SOMEONE'S BEHALF

Select from a list of people affiliated with your company in your account. If the registrant is not listed, you will need to create a Portal profile for the registrant before registering.

GROUP SAVINGS! Register 5 individuals from the same organization, receive a 6th registration free!*

(* Subject to terms and conditions. Contact Teresa Taylor at TeresaT@acwa.com for more information) before registering.

REGISTRATION OPTIONS <i>Advantage pricing applies to ACWA public agency members, associates & affiliates. Standard pricing applies to non-members of ACWA.</i>	ADVANCE DEADLINE: 4/22/22		ONSITE	
	ADVANTAGE	STANDARD	ADVANTAGE	STANDARD
Full Conference Registration & Meals Package Includes access to all conference programs, meal functions, exhibit hall and access to On-Demand Conference Recordings after the live conference.	\$775	N/A	N/A	N/A
Full Conference Registration Only (meals sold separately) On-Demand Conference Recordings NOT included but may be purchased separately.	\$620	\$930	\$650	\$975
Tuesday Committee Meetings Only (complimentary - must register to attend)	\$0	\$0	\$0	\$0
One-Day Conference Registration (meals sold separately) Wednesday, May 4: Includes access to Welcome Reception in the Exhibit Hall on Tuesday night and access to the Exhibit Hall and all conference programs on Wednesday only Thursday, May 5: Includes access to the Exhibit Hall, all conference programs and the Closing Reception on Thursday only.	\$370	\$555	\$390	\$585
Guest Conference Registration (meals sold separately) Guest registration is not available to anyone with a professional reason to attend.	\$75	\$75	\$75	\$75
VIRTUAL OPTION: On-Demand Conference Recordings Only Includes on-demand access to all recorded sessions after the live conference.	\$220	\$330	\$220	\$330
MEAL FUNCTIONS	ADVANCE		ONSITE	
Wednesday Opening Breakfast - May 4	\$50		\$55	
Wednesday Networking Luncheon - May 4	\$50		\$55	
Thursday Continental Breakfast in Exhibit Hall - May 5	\$40		\$45	
Thursday Luncheon - May 5	\$55		\$60	

HOTEL INFORMATION

You must be registered for the ACWA conference in order to receive hotel reservation information and conference special room rate. **Conference special rate is available February 22 - April 11**, based on availability.

HOTEL & ROOM RATES

Hyatt Regency Sacramento, 1209 L St, Sacramento
Single/Double \$219 per night*

Sheraton Grand Sacramento, 1230 J St, Sacramento
Single/Double \$217 per night*

* Subject to applicable state/local taxes & fees

HEALTH & SAFETY

Please review [ACWA's Health & Safety Information](#) and prepare the required Covid vaccination/negative test documentation and mask before arrival.

IMPORTANT DATES

The conference hotel room block opens on February 22.

Deadline for group rate is April 11, 2022

For those **registering for conference prior to February 22**, information on how to reserve your hotel room will be provided via e-mail on February 22.

For those registering for conference from **February 22 to April 11**, your **confirmation e-mail** will include the information on how to reserve your hotel room and an opportunity to receive a conference special hotel rate.

CRESCENTA VALLEY WATER DISTRICT

BOARD OF DIRECTORS - STAFF REPORT

Action Item No. 1
March 8, 2022

To: Honorable President and Members of the Board of Directors
From: Nem Ochoa – General Manager
Subject: **Ballot for LAFCO Voting Member and Special District Alternate Member**

ACTION ITEM:

Nomination for Special District LAFCO Voting Member and Special District LAFCO Alternate Member – Consideration and motion to cast the District's ballot for the Special District LAFCO Voting Member and Special District LAFCO Alternate Member.

BACKGROUND:

At the January 25, 2022 Board meeting, the Board supported Director Sharon S. Raghavachary's nomination as a candidate for the Local Area Formation Commission (LAFCO) Special District Voting Member.

LAFCO has retained Mr. William Kruse of Lagerlof, LLP to conduct the election for the position. Mr. Kruse has informed the District that the three nominees for Special District LAFCO Voting Member are Director Sharon S. Raghavachary of the Crescenta Valley Water District, Board of Trustee Member, Steven Appleton of the Greater Los Angeles County Vector Control District, and Director E.G. "Jerry" Gladbach of the Santa Clarita Valley Water District. The two nominees for Special District LAFCO Alternate Member are Director Melvin L. Matthews of the Foothill Municipal Water District and Board of Trustee Member, Barú Sanchez of the Greater Los Angeles County Vector Control District.

Included in this package are the ballot forms and the resumes for each nominee. Ballots must be received at the offices of Lagerlof, LLP no later than 5:00 pm on April 22, 2022.

Submitted by:



Nem Ochoa
General Manager

Attachment(s):

1. Ballot, Instructions, and Candidacies for LAFCO Voting Member and Special District Alternate

g:\management\board meeting staff reports\2022\03-08 board memo - Ballot for LAFCO Independent Special District Alternate and Voting Member.docx



MEMORANDUM

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

FROM: WILLIAM F. KRUSE

RE: BALLOT; SPECIAL DISTRICT LAFCO REPRESENTATIVE

DATE : February 23, 2022

Enclosed is the Ballot and the supplementary materials submitted for each of the candidates for Special District LAFCO **VOTING MEMBER** and for Special District LAFCO **ALTERNATE MEMBER** for the term expiring in May 2022. Nominations closed as of 5:00 p.m. on February 18, 2022.

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

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

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

The candidates receiving the highest number of votes will be declared the special district **voting member** and **alternate member** to LAFCO.

Ballots must be returned by 5:00 p.m. on April 22, 2022.

WFK/bb
Enclosures

cc: Paul Novak, w/enc.

G:\LAFCO 2022\BALLOT - letter 2022.docx

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

Lagerlof.com
Email: wkruse@lagerlof.com

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

BALLOT

SPECIAL DISTRICT LAFCO **VOTING MEMBER**

Please vote for no more than one candidate.

☐

STEVEN APPLETON

Occupation: Board of Trustee Member

Sponsor: Greater Los Angeles County Vector Control District

☐

E. G. "JERRY" GLADBACH

Occupation: Water District Director

Sponsor: Santa Clarita Valley Water Agency

☐

SHARON S. RAGHAVACHARY

Occupation: Water District Director

Sponsor: Crescenta Valley Water District

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

To: Independent Special District Selection Committee

From: GREATER LOS ANGELES COUNTY VECTOR CONTROL DISTRICT

Date: FEBRUARY 18, 2022

Name of Candidate: STEVEN APPLETON

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

Elective office: BOARD OF TRUSTEE, LOS ANGELES CITY

Agency: GREATER LOS ANGELES COUNTY VECTOR CONTROL DISTRICT

Type of Agency: SPECIAL DISTRICT

Term Expires: JANUARY 6, 2025

Residence Address: 2825 BENEDICT STREET

LOS ANGELES, CA 90039

Telephone: 310-740-7294

PLEASE ATTACH RESUME OR CANDIDATE STATEMENT (limit one page)

GREATER LOS ANGELES COUNTY VECTOR CONTROL DISTRICT

(Name of Agency)

By: Mary-Joy Coburn

Its: Mary-Joy Coburn, Communications Director / Board Liaison



Steven Appleton

A citizen public servant with technical knowledge, interdisciplinary skill and a collaborative approach.

Mr. Appleton is the past President of the Greater Los Angeles County Vector Control District (2020), where he continues to serve as Trustee for the City of Los Angeles. Appointed in 2011, he has encouraged collaboration among public agencies in the planning of parklands, such as by assuring a place at the table for vector control experts in the design of engineered wetlands. He is a Board Member on the Los Angeles County Second District Consolidated Oversight Board and has served in a variety of capacities on watershed issues, including as a Technical Stakeholder to the yearly "State of the Watershed" report for the Los Angeles Region by the Council on Watershed Health.

Steve balances his role as a citizen public servant with his career in public art and education. He has taught at local institutions, including Otis College of Art and Design, USC, and California State University, Northridge. He recently founded the Water Institute of Science Policy that collaborates with California State University Northridge's Institute for Sustainability at California and Center for the Geospatial Science and Technology (CGST) in the creation of community service and educational programming.

As a public artist, he has created permanent and temporary public artworks in Los Angeles, Seattle, Denver, Brazil, Denmark, and Finland. Americans for the Arts recognized his work "FaceTime" with a national award in 2007. Most recently, he collaborated with Artichoke Dance Company in a three-day series performances, sculptures and participatory workshops called "Future Currents," sponsored by the Soraya Performing Arts Center. His public art projects have often included internship opportunities for local youth, such as his Metro Green Line project in Watts.

His seasonal business LA River Kayak Safari, has been the leading vendor of kayaking in the Los Angeles river since 2013, bringing more than 12,000 people on a unique tour of the naturalized section of the river in Elysian Valley. His group has broadened the audience for nature recreation by sponsoring more than 20% of its offerings for at-risk youth and underserved communities. As part of the yearly permitting for this business, Appleton is in dialog with US Army Corp of Engineers and regional Park Authorities.

Appleton received his Bachelor of Arts in Sculpture at the University of California, Santa Cruz and studied for his Master of Fine Arts at University of Southern California. He is a resident of the "Frogtown" district of Los Angeles, where he lives with his wife Agnieszka and son Janis.

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

To: Independent Special District Selection Committee

From: Santa Clarita Valley Water Agency Board of Directors

Date: February 1, 2022

Name of Candidate: E. G. "Jerry" Gladbach

Santa Clarita Valley Water Agency is pleased to nominate
Jerry Gladbach as a candidate for appointment as special district **voting member** to the Los Angeles Local Agency Formation Commission. The nominee is an elected official or a member of the board of an independent special district appointed for a fixed term. For your consideration, we submit the following additional information together with a resume of the candidate's qualifications.

Elective office: Division 2 Director

Agency: Santa Clarita Valley Water Agency

Type of Agency: Special Act Water Agency

Term Expires: January 2023

Residence Address: 27491 Hillcrest Place, Valencia, CA 91354

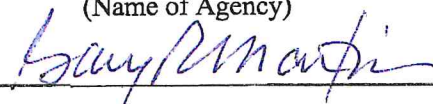
Telephone: (661) 297-2200

PLEASE ATTACH RESUME OR CANDIDATE STATEMENT (limit one page)

Santa Clarita Valley Water Agency

(Name of Agency)

By:



Its:

President

E.G. "Jerry" Gladbach

27491 Hillcrest Place / Valencia, CA 91354
Phone: (661) 297-2200 / Email: ejglad@aol.com



EXPERIENCE / COMMITMENT / DEDICATION

I would be honored to continue serving you on the Local Agency Formation Commission for Los Angeles County. As Chair of Los Angeles LAFCO I have urged the Commission to become more customer oriented. If reelected I would also be able to continue representing Los Angeles County on the California Association of Local Agency Formation Commissions' Board of Directors, even though I am not a member of the CALAFCO Board. Recognizing that Special Districts are an important segment of government in California, I will represent your concerns at LAFCO for Los Angeles County and CALAFCO.

LAFCO

Chair	2006 – present
First Vice-Chair	2005 – 2006
Commissioner	2002 – present
Alternate Commissioner	2001 – 2002

California Association of LAFCOs

President	2011 – 2012
Vice President	2010 – 2011
Treasurer	2008 – 2010
Secretary	2006 – 2008
Chair, CALAFCO Conference Committee	2008
Member, Board of Directors	2005 – 2013

Association of California Water Agencies (ACWA)

President	2004 – 2005
Vice President	2002 – 2003
Region Chair	1998 – 2001
Board of Directors	1998 – present

ACWA – Joint Powers Insurance Authority

President	2010 – present
Executive Committee	2002 – 2003, 2006 – present
Board of Directors	2002 – present

Santa Clarita Valley Water Agency/Castaic Lake Water Agency

Board of Directors	1985 – present
President	1987 – 1990
Vice President	2021– present
Chair, Public Outreach and Legislative Committee	2021– present
Chair, Water Resources Committee	2003 – 2017
Chair, Finance, Administration, PR Committee	1991 – 2002

CALAFCO's "Lifetime Achievement" Award 2021

CALAFCO's "Outstanding Commissioner" Award 2013

Water Education Foundation, Board of Directors 1987 – 2009

Member of the Special District Leadership Foundation Task Force that developed the Leadership Series of Classes 2002– 2004

Los Angeles Department of Water and Power

Leadership in Engineering, Management, Environmental Planning / retired after 35 years

Past Member, United States EPA's Groundwater Task Force

Provided technical assistance to U.S. Commission on Water Quality

Past Member, Advisory Committee, CalPoly State University,

Civil and Environmental Engineering

Professional Engineer, Registered in California

Fellow/Life Member, American Society of Civil Engineers

Master of Science Degree in Civil Engineering / Water Resources

PERSONAL

Married with 3 children, and 6 grandchildren, I have lived in the Santa Clarita Valley for over 50 years and have been devoted to community service for that entire period.

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

To: Independent Special District Selection Committee

From: President James D. Bodnar and Member of the Board of Directors

Date: January 25, 2022

Name of Candidate: Sharon S. Raghavachary

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

Elective office: Director of the Board of Directors of

Agency: Crescenta Valley Water District

Type of Agency: Water and Sewer District

Term Expires: December 2024

Residence Address: 2209 Maurice Avenue

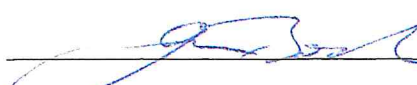
La Crescenta, CA 91214

Telephone: 818 541-9071

PLEASE ATTACH RESUME OR CANDIDATE STATEMENT (limit one page)

Crescenta Valley Water District

(Name of Agency)

By: 

Its: Chairman of the Board of Directors

Sharon S. Raghavachary



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

Ms. Raghavachary has been a member of the Crescenta Valley Water District Board of Directors since June of 2019 and served as President in 2021.

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

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

Ms. Raghavachary has teenage twins, a boy, and a girl, who attend Clark Magnet High School and Crescenta Valley High School.

BALLOT

SPECIAL DISTRICT LAFCO **ALTERNATE MEMBER**

Please vote for no more than one candidate.

☐

MELVIN L. MATTHEWS

Occupation: Water District Director
Sponsor: Foothill Municipal Water District

☐

BARU SANCHEZ

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

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

To: Independent Special District Selection Committee

From: Foothill Municipal Water District

Date: 1/27/2022

Name of Candidate: Melvin L. Matthews

Foothill Municipal Water District is pleased to nominate
Melvin L. Matthews as a candidate for appointment as special district
alternate member to the Los Angeles Local Agency Formation Commission. The nominee is an elected
official or a member of the board of an independent special district appointed for a fixed term. For your
consideration, we submit the following additional information together with a resume of the candidate's
qualifications.

Elective office: FMWD Director, Division 2

Agency: Foothill Municipal Water District

Type of Agency: Special District

Term Expires: 12/6/22

Residence Address: 2121 Glen Springs Road Pasadena, CA 91107-1015

Telephone: Phone: 626-794-4167, Mobile: 626-622-9137

PLEASE ATTACH RESUME OR CANDIDATE STATEMENT (limit one page)

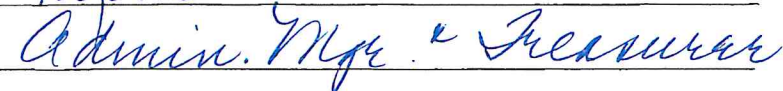
Foothill Municipal Water District

(Name of Agency)

By:



Its:





Melvin L. Matthews
2121 Glen Springs Road
Pasadena, CA 91107-1015
Phone: 626-794-4167
Mobile: 626-622-9137
E-mail: melmatthews@outlook.com

Mel is the general manager of the Kinneloa Irrigation District, a water company serving the Kinneloa Ranch area east of Altadena and portions of the City of Pasadena. He has served in this position for 18 years. Before becoming general manager, he was elected to the Board of Directors of the Kinneloa Irrigation District in 1997 and served as chairman of the board or treasurer for seven years.

Mel is also concurrently serving as a director and vice-president on the board of the Foothill Municipal Water District. FWMD is a member of the Metropolitan Water District of Southern California and provides supplemental imported water to eight local water agencies. He also serves on the finance committee which oversees the financial matters of the district including the preparation of the budget.

Mel is also the Special District Alternate Director on the Board of the Local Agency Formation Commission of Los Angeles County.

Previously, Mel was in the cable television business for 32 years as founder and president of KTS Corporation and later with Charter Communications serving as the director of government and community relations after selling his cable systems to Charter in 1993.

Mel is a graduate of the University of California at Berkeley with a BS in Chemical Engineering. He has also earned a MBA in Operations Management from the Anderson Graduate School of Business at UCLA. He was born in Pasadena and still lives there with his wife, Donna. They have six children and 12 grandchildren.

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

To: Independent Special District Selection Committee

From: GREATER LOS ANGELES COUNTY VECTOR CONTROL DISTRICT

Date: FEBRUARY 18, 2022

Name of Candidate: BARU SANCHEZ

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

Elective office: BOARD OF TRUSTEE, CUDAHY

Agency: GREATER LOS ANGELES COUNTY VECTOR CONTROL DISTRICT

Type of Agency: SPECIAL DISTRICT

Term Expires: JANUARY 2, 2023

Residence Address: 4414 HARTLE AVENUE

CUDAHY, CA 90201

Telephone: 323-203-6306

PLEASE ATTACH RESUME OR CANDIDATE STATEMENT (limit one page)

GREATER LOS ANGELES COUNTY VECTOR CONTROL DISTRICT

(Name of Agency)

By: Mary-Joy Coburn
MARY-JOY COBURN

Its: COMMUNICATIONS DIRECTOR / BOARD LIAISON

GREATER LOS ANGELES COUNTY VECTOR CONTROL DISTRICT

12545 Florence Avenue, Santa Fe Springs, CA 90670

Office (562) 944-9656 | Fax (562) 944-7976

Email: info@GLAmosquito.org | Website: www.GLAmosquito.org

For your consideration for the LAFCO Alternate Seat: Trustee Baru Sanchez



Mister Baru Sanchez is a Board of Trustee Member for the Greater Los Angeles County Vector Control District. He began his service in 2015 and has also previously served as the President of the Board from 2018 - 2019.

He is a former Council Member and Mayor for the City of Cudahy from 2013 - 2018.

Trustee Sanchez currently works for a top 20 CPA firm as the IT SOX Manager, and he has been a Certified Public Accountant (CPA) for almost 10 years.

Photo Credit: OC Register

CRESCENTA VALLEY WATER DISTRICT

BOARD OF DIRECTORS - STAFF REPORT

Action Item No. 2

March 8, 2022

To: Honorable President and Members of the Board of Directors
From: Brook Yared, M.S., P.E. – Engineering Manager
Subject: Award of Contract – Water Main Replacement on the 3200 block of Alabama St., 4700 & 4800 blocks of Cheryl Ave., Project E-1034

ACTION ITEM:

8-inch Water Main Replacement on the 3200 block of Alabama St., 4700 & 4800 blocks of Cheryl Ave., Project E-1034

- a. Consideration and motion to authorize the General Manager to award a contract to the lowest responsible bidder, Robert Brkich Construction Inc. (Brkich), for the construction of 1,760 lineal feet of pipeline replacement on the 3200 block of Alabama St. and 4700 & 4800 blocks of Cheryl Ave. at a cost of \$447,750 and establish a contingency amount of \$44,775 (10% of contract) to cover the cost of unforeseen or additional work.
- b. Consideration and motion to authorize the General Manager to enter into an agreement with Cannon Corp. (Cannon) for construction management and inspection services for the pipeline replacement project at a cost not-to-exceed \$105,300.

BACKGROUND:

Staff and Tetra tech, Inc. have completed the design of the project, and plans have been submitted to the City of Glendale for excavation permit review and approval. Staff has also applied for a Department of Drinking Water Waiver permit since a portion of the project will cross or run parallel to sanitary sewer pipe with less than the minimum 10-foot separation requirement. Staff anticipates receiving permit approvals prior to the start of construction.

DISCUSSION:

On November 09, 2021, the Board authorized the General Manager to advertise for bids for the subject project. A mandatory pre-bid meeting was held on February 23, 2022, and was attended by six (6) contractors. CVWD specifications indicate that only contractors who attend this meeting are allowed to bid on the project.

On March 1, 2022, at 2:00 PM, the District opened and read the following bid proposals:

	<u>Bidder</u>	<u>Total Bid Amount</u>
Low	Brkich Construction	\$447,750
2	T.E. Roberts, Inc.	\$527,535
3	Carney Engineering	\$547,500
4	J.A. Salazar	\$639,950

Staff has reviewed the bids received and determined that Robert Brkich Construction, Inc. of Monrovia, CA was the lowest responsible bidder for the project. The engineer's estimate was \$578,375 and the low bid was \$447,750 or 23% less than the engineer's estimate.

Staff has worked with Brkich Construction on a number of previous pipeline projects including the pipeline projects on the 4800 Block of Glenwood Ave, 2800 Block of Stevens St, and 2700 Block of Paraiso Way. Brkich is also currently underway with construction on this year's first pipeline replacement project on the 2800-3100 blocks of Los Olivos Lane.

Construction Management & Inspection Services:

Staff requested a proposal from Cannon to provide construction management and inspection support (CM&I) services for this project. The proposal was based on the proposed construction schedule and CVWD's need for full-time inspection services. Cannon's proposed fee for the project is \$105,300, which covers the construction period from April 2022 to July 2022. Cannon also pointed out that they do not charge their clients a fee for travel time.

RECOMMENDATION:

It is staff's recommendation to award the contract for the subject project to the lowest responsible bidder, Robert Brkich Construction, Inc. at a cost of \$447,750 and establish a 10% contingency fund of \$44,775. It is also staff's recommendation to award a contract to Cannon at a cost not-to exceed \$105,300 for CM&I services.

A pre-construction meeting will be set as soon as the contract is awarded, the agreement is signed, permits have been established, and insurance documents have been delivered. Mrs. Christina Kopelman will be the project manager and Cannon will provide field inspection. Staff will also hold a community meeting for the residents in the area. The Community Meeting announcement with the dates and times will be sent to the residents and posted on CVWD's website, www.cvwd.com.

ENVIRONMENTAL REVIEW:

This project was previously approved to be exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15301 of the CEQA Guidelines. This exemption covers the repair of existing facilities involving negligible or no expansion of existing use.

FUNDING AVAILABILITY:

Funding remaining in this year's CIP budget is the result of a reduction in the scope of work under this project. There are sufficient funds available in the following account for the project:

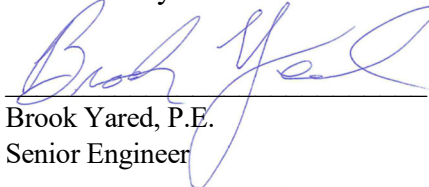
Account Description	Amount
FY 21/22 Water CIP– Water Distribution Pipeline Replacement	\$2,600,000
Project E-1033 Total Cost Estimate	<\$1,503,676>
E-1034 – 4800 Blocks of Cheryl Ave. 3200 block of Alabama Street - Contractor Bid	(\$447,750)
E-1034 - 10% Contingency for cost of unforeseen or additional work	(\$44,775)
E-1034 - Cannon - Construction Management & Inspection	(\$105,300)
E-1034 - Additional costs such as material purchased by CVWD, soils engineer, and CVWD labor costs	(\$266,225)
Total Cost Estimate	(\$864,050)
Amount Remaining in Water CIP – Distribution System – Annual Pipeline Replacement	<u>\$232,274</u>

Prepared by:



Christina Kopelman
Assistant Engineer

Submitted by:



Brook Yared, P.E.
Senior Engineer

Attachments:

1. Bid Summary
2. Project Location Map

CRESCENTA VALLEY WATER DISTRICT

Title: Construction of 8-inch Water Main on the 4800 block of Cheryl and the
3200 block of Alabama Street

BID LOCATION:

CVWD's Office

E-Job No: E-1034

TIME: 2:00 PM

Engineer's Estimate: \$578,375

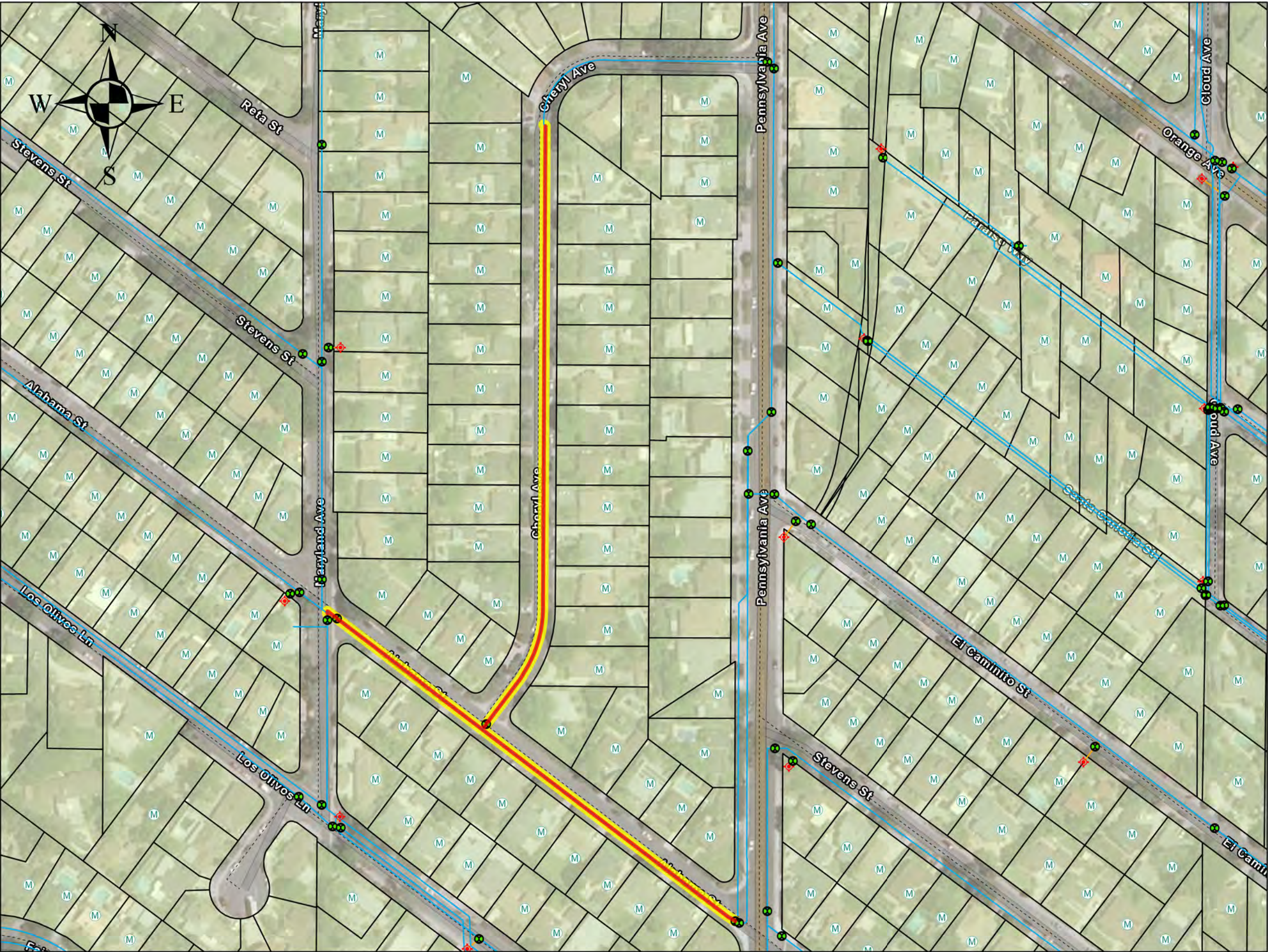
DATE: 3/1/22

Project Manager: Christina Kopelman

BY: CK

CHECKED: DSG

ITEM	DESCRIPTION	QUANTITY	Engineers Estimate		Brkich Construction		TE Roberts		Carney Engineering		JA Salazar		Dominguez General		E&R Construction	
			UNIT	AMOUNT	UNIT	AMOUNT	UNIT	AMOUNT	UNIT	AMOUNT	UNIT	AMOUNT	UNIT	AMOUNT	UNIT	AMOUNT
1	Excavation and Backfill (pipeline, laterals & appurtenances)	2,600 LF	\$65.00	\$169,000.00	\$42.00	\$109,200.00	\$48.00	\$124,800.00	\$74.00	\$192,400.00	\$18.00	\$46,800.00		\$0.00		\$0.00
2	Trench Resurfacing	7,650 SF	\$15.00	\$114,750.00	\$16.00	\$122,400.00	\$10.00	\$76,500.00	\$13.00	\$99,450.00	\$11.00	\$84,150.00		\$0.00		\$0.00
3	Install 8" CML & CMC Steel Water Pipeline and appurtenant Construction	1,750 LF	\$55.00	\$96,250.00	\$39.00	\$68,250.00	\$67.00	\$117,250.00	\$64.00	\$112,000.00	\$130.00	\$227,500.00		\$0.00		\$0.00
4	Install 6" Fire Hydrant Assemblies	6 EA	\$6,000.00	\$36,000.00	\$3,400.00	\$20,400.00	\$4,959.00	\$29,754.00	\$4,250.00	\$25,500.00	\$19,000.00	\$114,000.00		\$0.00		\$0.00
5	New 1" Services	45 EA	\$3,300.00	\$148,500.00	\$2,700.00	\$121,500.00	\$3,712.00	\$167,040.00	\$2,350.00	\$105,750.00	\$3,500.00	\$157,500.00		\$0.00		\$0.00
6	New 2" Blow off Assembly	1 EA	\$3,100.00	\$3,100.00	\$3,500.00	\$3,500.00	\$9,178.00	\$9,178.00	\$6,900.00	\$6,900.00	\$6,500.00	\$6,500.00		\$0.00		\$0.00
7	Provide Traffic Control	1 LS	\$10,775.00	\$10,775.00	\$2,500.00	\$2,500.00	\$3,013.00	\$3,013.00	\$5,500.00	\$5,500.00	\$3,500.00	\$3,500.00		\$0.00		\$0.00
8	Additive amount of replacement of existing shutdown valve if required	2 EA	\$3,500.00		\$3,500.00		\$6,434.00		\$4,600.00		\$5,000.00			\$0.00		\$0.00
			EE	\$578,375.00	LOW	\$447,750.00	2ND	\$527,535.00	3RD	\$547,500.00	4TH	\$639,950.00	5TH	\$0.00	6TH	\$0.00



Legend

- Existing System:
- wsvalve
 - whyd
 - wmain
 - wlatline
 - GIS_Services
 - Service_Area
 - StreetCenterline
- 4-inch main to be replaced with 8-inch CMLxCMC steel main.

Total Length - 1,760 ft
Diameter New Pipeline - 8-inch
Material - CMLxCMC, 10 ga. Steel

Year 2 - FY 21/22
Project 2
Pipeline Replacement



Crescenta Valley Water District

CRESCENTA VALLEY WATER DISTRICT

BOARD OF DIRECTORS - STAFF REPORT

Action Item No. 3

March 8, 2022

To: Honorable President and Members of the Board of Directors

From: David S. Gould, P.E. – Director of Engineering & Operations

Subject: Replacement of Supervisory Control and Data Acquisition (SCADA) System, Project E-939

ACTION ITEM

Replacement of Supervisory Control and Data Acquisition (SCADA) System, Project E-939:

- a) Consideration and motion to authorize the General Manager to award a contract to Apex Manufacturing Services for SCADA programming and integration at a cost of \$334,460 and establish a contingency amount of \$50,169 (15% of contract) to cover the cost of unforeseen or additional work.
- b) Consideration and motion to waive the Bid Procurement and Purchasing Policy per Article 18.01 of CVWD's Rules and Regulations and allow the General Manager to select and negotiate with vendors for the purchase of equipment, materials and supplies for the replacement of the SCADA system at a cost of \$285,000 and establish a contingency amount of \$42,750 (15% of contract) to cover the cost of unforeseen or additional work

BACKGROUND:

CVWD has an existing SCADA system with Programing Logic Controllers (PLCs) and Remote Terminal Units (RTUs) that are installed at each of the District's facilities. These components fulfill critical operational functions including (but not limited to):

- Transmitting data that provides real-time status on the water distribution system
- Allowing for remote control of the water system (e.g., booster pumps and wells)
- Detecting when operational thresholds or designated operational settings are met
- Notifying key operations staff through system alarms when water system parameters are exceeded or when a shutdown occurs due to a power failure

Staff had included this project as part of the FY 21/22 CIP program to upgrade the SCADA system with newer equipment and programing based on industry standards, which is "open source". Once the project is complete, future SCADA maintenance and upgrades can be repaired and/or replaced by a variety of consultants and contractors, as opposed to proprietary programming by a single consultant, which creates time and cost inefficiencies and encourages competitive pricing. The upgrade will also fully integrate system data into the existing monitoring screens located on the main computers at the Glenwood Plant.

Staff discussed this item in detail at the July 27, 2021, Board Meeting (see attached staff report). It was recommended to move forward with a pilot program at Well 8 and Well 14. The pilot program was utilizing a collaborative workplan between Apex Manufacturing Services (APEX) on the design, and CVWD performing various parts of the installation.

DISCUSSION:

Staff initiated the pilot project in September 2021 and the workplan included the following:

- Building and installing new equipment
- Re-designing the SCADA open-source programing based on current and future operating conditions
- Documenting standard programing in an understandable and easy-to-use format
- Integrating the data into the existing SCADA system

The pilot conversion of SCADA upgrades was successfully completed in December 2021, which included on-site installation of the equipment and integration into the system.

The main goal of the pilot project at the two sites was to work through the details on all equipment, programing, and the integration into Wonderware (SCADA monitoring software); to gain a better understanding of the process with respect to time and costs. The budget estimate for the pilot project was \$35,000 and the final costs were recorded at \$38,500.

Next Steps:

The next step will be to take this information from the pilot program and provide an estimate of the costs and time frame to complete the remaining upgrades to the new system. Staff reviewed the remaining 25 sites with respect to new equipment needed, APEX programing, integration time, and CVWD staff time to complete the project which is shown below.

Task	No. of Sites	Avg. cost/site	Estimate of Cost	Comments
Equipment, Materials & Supplies	25	\$11,400	\$285,000	<u>Example:</u> Well Sites about \$7,000/ea. & Larger sites like Glenwood are about \$25,000/ea.
APEX - Programing & Integration	25	\$13,378	\$334,460	<u>Example:</u> Well Sites about 80 hours/ea.& Larger sites like Glenwood are about 160 hours/ea.
CVWD	25	\$1,846	\$46,140	<u>Example:</u> Well Sites about 40 hours/ea. & Larger sites like Glenwood are about 80 hours/ea.
Subtotal			\$665,600	
Contingency		15%	\$99,840	Used a 15% contingency due to potential supply chain delays and unforeseen cost increases
Total			\$765,440	

Staff reviewed the overall project schedule to complete the upgrades relative to this year and next fiscal year CIP budgets. After discussion with the SCADA team, it was estimated that it will take about 14 to 16 months to complete the entire project. The project costs will fall within FY 21/22 & FY 22/23, and the final project close-out will be completed in FY 23/24.

The table below shows the breakdown of costs per fiscal year budget. Staff is planning to order most of the equipment for the sites before the end of FY 21/22 since the vendors for the equipment have indicated that there may be some savings with a large equipment order. Also, staff is aware of and will need to accommodate long lead times for the equipment, which have been estimated to be 10 to 12 weeks.

Task	% Complete	FY 21/22	% Complete	FY 22/23	% Complete	FY 23/24	Total
Equipment, Materials & Supplies	80%	\$228,000	20%	\$57,000	0%	\$-	\$285,000
APEX - Programing & Integration	25%	\$83,615	70%	\$234,122	5%	\$16,723	\$334,460
CVWD	25%	\$11,535	70%	\$32,298	5%	\$2,307	\$46,140
Subtotal		\$323,150		\$323,420		\$19,030	\$665,000
15% Contingency		\$48,472		\$48,513		\$2,854	\$99,840
Total		\$371,622		\$371,933		\$21,884	\$765,440

RECOMMENDATION:

Staff discussed this item with the Engineering Committee on March 3, 2022, and it was recommended by the Committee to increase the contingency from 10% to 15% due to supply chain issues and unforeseen cost increases in equipment. It is staff's recommendation to authorize the General Manager to award a contract to Apex Manufacturing Services for SCADA programming and integration and to authorize the General Manager to select and negotiate with vendors for the purchase of equipment, materials and supplies for the replacement of the SCADA system.

Prepared by:



David S. Gould, P.E.
Director of Engineering & Operations

Submitted by:



Nem Ochoa
General Manager

Attachment:

1. Board memo dated July 27, 2021
2. Apex Manufacturing Solutions Proposal dated February 25, 2022

g:\engineering committee\2022 ec memo\03-03-22 ecm memo - scada upgrade v4.docx

CRESCENTA VALLEY WATER DISTRICT

STAFF REPORT

Action Item No. 4

July 27, 2021

To: Honorable President and Members of the Board of Directors

From: David S. Gould, P.E. – Director of Engineering

Subject: **Award of Contract – Pilot Program for the Replacement of Supervisory Control and Data Acquisition (SCADA) System, Project E-939**

ACTION ITEM:

Pilot Program for the Replacement of Supervisory Control and Data Acquisition (SCADA) System, Project E-939 – Consideration and motion to authorize the General Manager to enter into an agreement with Apex Manufacturing Services (APEX) to provide SCADA programming and integration services for the said project at the cost of \$21,180 and establish a contingency amount of \$2,120 (10% of contract) to cover the cost of unforeseen or additional work and to find said project exempt from the provisions of the California Environmental Quality Act (CEQA).

BACKGROUND:

CVWD has an existing SCADA system with Programming Logic Controllers (PLCs) and Remote Terminal Units (RTUs) installed at each of the District's facilities. These components control the processes at each of the District's sites and communicates with the central control room at Glenwood. This communication facilitates control of assets such as booster pumps, reservoirs, wells, and transmits system parameters such as flow rate, pressure, water level, and temperature back to the central control room. The SCADA system at Glenwood also sends alarm information to the System Operators in the event operational setpoints are exceeded.

The existing hardware installed at CVWD's sites was commissioned in 1996 by Tesco Controls Inc (Tesco). At that time, Tesco was responsible for all aspects of the commissioning process, including providing the required hardware and software and integration services. This was very common during the development of SCADA equipment in the 1990s. Although the RTUs in the field have remained largely unchanged since initial commissioning, Staff has worked with Tesco to update the programs and add functionality as required through the years. However, since the programming software is proprietary, all such modifications require the support of Tesco personnel. When these updates are required, they are typically both costly and time-consuming.

As these devices were commissioned 25 years ago, they are at or beyond the end of their serviceable life. Intermittent hardware failures have resulted in increased labor costs and a reduction in the operational resiliency of the system overall. Additionally, in recent years support and repair of these devices have become increasingly expensive. These trends are expected to continue in the future. The existing Tesco RTU architecture is outdated and must be modernized to support current and future District requirements.

In 2018 CVWD initiated a system-wide SCADA review to identify a strategy for upgrading the current hardware and software to a modern version that applies best management principles and includes the following:

- An incremental approach to commissioning the new system such that it minimizes downtime and other impacts on daily operations.
- An extensible solution that can support District needs today and into the future.
- Open architecture for programming and integration that a variety of consultants and vendors can support.
- Easy integration with the existing software (Wonderware) that is used at the central Glenwood site.
- Utilization of "off-the-shelf" hardware components and coordination with strategic suppliers to ensure quick resolution times.
- Implementation of enhanced remote support and development capabilities.

As a result of the system-wide review project, CVWD identified the Allen Bradley (AB) CompactLogix series of programmable controllers as the basis for CVWD's future control system. AB is a long-standing leader in industrial automation, and the CompactLogix platform is a highly scalable solution that will support sites ranging from very simple analysis-only sites to the most complex site, including active devices such as pumps and valves.

CVWD has an existing relationship with the AB distributor for Southern California, Royal Industrial Solutions, and already has been using AB equipment for the motor control centers at Eagle Canyon, Oak Creek, Well 16, and Well 2 sites. Leveraging this existing relationship will help CVWD reduce overall project cost and increase the reliability of the upgrades to the SCADA system.

AB also provides an extensive list of hardware equipment and software applications that can be integrated seamlessly into CVWD's SCADA system. Finally, AB boasts one of the largest networks of integration vendors in the world.

CVWD staff has been working closely with Apex Manufacturing Solutions (APEX) since the original system review project to support the addition of new AB equipment. This equipment currently operates in parallel with the existing Tesco equipment and is used to accomplish the following very limited tasks:

- Collect data at specific sites not available via the existing Tesco architecture
- Reset telemetry hardware when required
- Support the future control of the sodium hypochlorite and liquid ammonia injection pumps required for chloramination

As part of the FY 21/22 CIP program, it is Engineering and Operation's goal to upgrade the SCADA system with newer equipment and programming based on industry standards, which can be repaired and/or replaced by a variety of consultants and contractors. This will also include integrating the data into the existing monitoring screens located at the operation control center at the Glenwood Plant.

DISCUSSION:

As part of the planning process, staff reviewed several options and project schedules to accomplish the goal of upgrading CVWD's SCADA system by December 2022. Options identified included:

- 1) Work directly with APEX to develop an overall SCADA system design with CVWD crews installing replacement hardware.
- 2) Employ a consulting firm to develop the overall SCADA system design and a contractor to install the replacement hardware.
- 3) Employ a single contractor to execute both the overall design phase and the hardware installation phase.
- 4) Execute a pilot project at two (2) simple sites to better understand the details of equipment, programming, integration requirements, and project costs.

Both Options 1 and 4 could potentially be executed within the schedule identified above. These options would result in the CVWD team having a strong engagement or pride of ownership with the development of the upgraded SCADA system and leverage existing vendor and contractor relationships.

However, there is concern that CVWD's lack of experience in this type of project would impact the project. The most likely impacts of this lack of experience are overlooked design requirements and increasing required commissioning time. APEX has completed projects similar in both type and scale previously, and a strategic partnership between CVWD and APEX will help mitigate the risk of overlooked design requirements.

A thorough discovery and design phase would be executed and result in a clear design specification document. Careful scheduling and control of CVWD personnel priorities would serve to combat the likelihood of project schedule setbacks.

Staff's initial review of the scope of work to execute Option 2 concluded that it would be improbable to complete the project within the schedule identified above. Option 2 is also likely to be the costliest of the identified options since the CVWD team will not be as closely involved with the design process as they would in Options 1 and 4.

Staff's review of Option 3 indicated that it could possibly be completed within the schedule identified above. However, project completion would be dependent upon careful selection of a contractor and careful management of the execution of the contract. Option 3 is likely to be somewhat less expensive than Option 2 but significantly more expensive than Option 1 or 4. Similar to Option 2, Option 3 is likely to result in lower sense of ownership among the CVWD team.

Option 4 bears many of the same benefits as Option 1 and provides additional project clarity at a fairly low cost. By moving forward with the two (2) pilot sites, the lower-level requirements for each site will be better identified, and the cost would be more closely understood.

These sites would serve to develop a template process that would be easily deployed to other sites as we moved towards the future. This template would include both programming components and installation guidelines, which would be carefully documented.

Option 4:

After careful consideration, it is the recommendation of CVWD staff that the District initiates Option 4 (Pilot Program). Well 8 and Well 14 have been identified as the most suitable pilot sites. These sites are simple while also containing all of the primary requirements for data communications at any site. Also, the programming and integration into the SCADA server could be used as a template for the other well and booster pump stations sites.

The proposed tasks will include working through the details on equipment, programming, and integrating into Wonderware (SCADA monitoring software) to better understand the process with respect to time and project costs. Staff requested a quote from APEX for the programming, integration (See Attachment), and purchase of new equipment from Royal Industrial Solution, supplier of A/B equipment. The preliminary estimated cost for the pilot program will be \$35,000 as shown in the detailed cost breakdown below, and this project would be wrapped into the overall SCADA system project.

Description	Quantity	Unit Cost	Total Cost
Point IO Communication & Base Module	2	\$ 780.00	\$ 1,560.00
Analog Input Module	4	\$ 350.00	\$ 1,400.00
Discrete Input/Output Modules	2	\$ 360.00	\$ 720.00
Distribution Modules	4	\$ 85.00	\$ 340.00
Analog Input Signal Conditioner	1	\$ 250.00	\$ 250.00
7-inch HMI Panel/Screen & Cover	2	\$ 1,350.00	\$ 2,700.00
Back Panel	2	\$ 250.00	\$ 500.00
UPS	2	\$ 650.00	\$ 1,300.00
Misc	1	\$ 1,290.00	\$ 1,290.00
Equipment sub-total			\$ 10,060.00
Programming & Integration	1	\$ 21,180.00	\$ 21,180.00
Contingency		10%	\$ 2,120.00
Programming/Integration - Subtotal			\$ 23,300.00
Field Installation by CVWD	32	\$ 51.25	\$ 1,640.00
Total			\$ 35,000.00

Overall Project Budget:

For Budget FY 21/22, the Board approved a budgeted amount of \$374,000 for the SCADA system upgrades, and a portion of the overall cost will be included in FY 22/23 CIP Budget. The pilot program will allow staff to review the work and prepare an updated and detailed budget for review at future Engineering Committee for any budget and/or project schedule adjustments.

ENVIRONMENTAL REVIEW:

This project is exempt from the California Environmental Quality Act (CEQA) pursuant to Section 15301 of the CEQA Guidelines. This exemption covers the repair of existing facilities involving negligible or no expansion of existing use.

RECOMMENDATION:

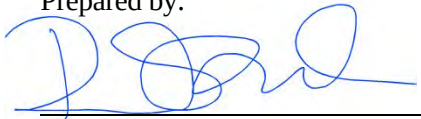
It is Staff's recommendation to authorize the General Manager to enter into an agreement with APEX to proceed with the SCADA Replacement Pilot Program at the cost of \$21,180 and establish a contingency amount of \$2,120 (10% of contract) to cover the cost of unforeseen or additional work. This action item was reviewed with the Engineering Committee, and the Committee concurred with Staff's recommendation.

FUNDING AVAILABILITY:

There are sufficient funds available in the following account for the project:

Account Description	Amount
FY 21/22 Water CIP – Technology – SCADA Replacement	\$374,00
APEX Contract w/10% Contingency	<23,300>
Estimate of CVWD field crews and Equipment	<\$11,700>
Pilot Program Total	<\$35,000>
Amount Remaining in Water CIP – Technology - SCADA Replacement	\$339,000

Prepared by:



David S. Gould, P.E.
Director of Engineering

Submitted by:



Nem Ochoa
General Manager

Attachments:

1. Proposal from APEX dated 7/5/21

**Apex Manufacturing Solutions**

300 E. Mallard Drive
Suite #300
Boise, Idaho 83706
Phone: 208.344.5535

www.apexmfgsolutions.com

Date:	25 February 2022		
Customer:	Crescenta Valley Water District		
Customer Contact:	David Gould	Phone:	(818) 248-3925
Project:	CVWD0033 – Tesco RTU Replacement		
Apex Contact:	Donald Helvie	Phone:	(208) 344-5535 Ext. 212 (Office) (208) 921-4107 (Cell)

SERVICE SUMMARY

Thank you for the opportunity to submit this proposal to the Crescenta Valley Water District (CVWD). This proposal is a Time and Materials (T&M) estimate for Apex to coordinate the replacement of twenty-five (25) Tesco Remote Terminal Units (RTU). These RTUs will be replaced with units based upon Allen Bradley processors and will be integrated with the existing Aveva InTouch-based Supervisory Control And Data Acquisition (SCADA) system. This project will rely heavily upon techniques and standards developed during the pilot phase. This pilot project resulted in the elimination of Tesco RTU at Well 8 and Well 14.

Apex is pleased to offer our knowledge and expertise and we are dedicated to providing you with the resources, talent, and skill needed to ensure your success with this project. Upon your approval, we will engage with you and others on your team and work to ensure we meet your expectations. Thank you again for this opportunity and please do not hesitate to contact me if you have further questions or comments.

Regards,

Donald Helvie
Senior Systems Engineer
Mobile: (208) 921-4107
Office: (208) 344-5535 Ext 212
don.helvie@apexmfgsolutions.com





Tesco RTU Replacement

Apex Project Number CVWD0033
25 February 2022

Project Description

The Crescent Valley Water District (CVWD) employs several Tesco processor-based RTUs to collect field condition indications and control field devices critical to the operation of the water supply system. Some of these RTU's were commissioned as much as 25 years ago. The age of these devices combined with their proprietary nature makes support as well as development efforts both difficult and expensive.

In the latter part of 2021 Apex and CVWD completed a Tesco RTU replacement pilot project. The objective of this project was to replace the Tesco RTU's at Well 8 and Well 14 with Allen Bradley-based RTUs. These RTUs utilized the previously developed design and were integrated with the existing SCADA system requiring minimal modification. All functional aspects of these sites were retained including active device control, process monitoring, and condition historization.

As in the pilot project, Allen Bradley (AB) processors will be used as the core of the replacement system at each site. Techniques and standards developed during the pilot phase and earlier projects will be utilized to reduce required development and to maintain consistency. A phased approach will be utilized to allow the remainder of the system to continue to operate while each site is upgraded. This approach will be combined with careful planning and communication to reduce downtime and possible impact upon end customers.

Although the primary objectives of this project do not include upgrading or modifying the existing SCADA application, modifications will be made as required. These modifications will also conform to previously developed design standards.

AB processors were previously commissioned at several of these sites as a part of radio network stabilization efforts. Where possible, the function of these processors will be expanded rather than commissioning new processors resulting in significant hardware savings. Additional hardware savings will be realized by retrofitting existing control cabinets rather than replacing them.

Carefully developed documentation regarding each site will be provided. This documentation will include a clear description of normal site operation as well as a comprehensive list of field devices. Detailed electrical schematics will support both efficient troubleshooting as well as future expansion.

At the conclusion of this project, all control and monitoring functions will be migrated away from Tesco processors and to Allen Bradley processors. All replaced Tesco hardware will be removed.

This project will include both onsite and remote activities. This proposal includes having an Apex resource on site for up to fourteen (14) five-day work weeks. Due to previous investment in system components supporting remote access and the ready availability of local electrical support, much of the programming and integration work will be performed remotely.

Project Constraints & Assumptions

This proposal incorporates the following project constraints and/or assumptions. Additional constraints or assumptions may be included within Work Packages described in Appendix A.

- Work will be performed both onsite and remotely. Full remote access via TeamViewer is assumed to be available.
- Although downtime is expected to be brief, downtime will be required. This downtime will be carefully coordinated to minimize impact.
- All hardware will be acquired, installed, and commissioned by customer personnel
- All hardware to be decommissioned will be disconnected and removed by customer personnel
- RTU backplanes will be built according to the previously developed design by customer personnel.
- This project will utilize existing program constructs such as graphic interfaces, Rockwell UDTs and AOIs where possible. These objects may require enhancements that will result in the creation of newer versions.
- Proposal assumes the customer will be responsible for the following unless it is explicitly included as part of a work package:
 - Supply all required project hardware, tools and software licensing
 - Server and/or workstation configuration or maintenance (e.g. OS loading, network configuration, etc.)
 - Installation, mounting or wiring of equipment of hardware of any kind, including electrical, mechanical, chemical, network, etc.
- Customer shall ensure that qualified and appropriate staff are readily available to support Apex with all aspects of the project's design, development, testing and deployment
- Apex will provide branded development toolkits required for project execution that are not intended for delivery to customer as part of the project deliverables (e.g. Rockwell or Siemens development software, Wonderware development software, etc.) unless otherwise specified within the proposal.
- Prior to system start-up or commissioning, the client shall confirm that:
 - Client-owned equipment, hardware and software is properly installed, mounted, and wired according to the manufacturers' specifications and conforms to applicable trade and safety codes.
 - In the case of equipment and hardware, client shall ensure the appropriate technical support staff (electrical, mechanical, maintenance, etc.) are available to quickly resolve installation, mechanical, or electrical errors.
 - In the case of software, client shall ensure that appropriate information technology resource(s) are readily available to resolve any installation or infrastructure issues, and that all software applications are appropriately licensed.
- On-site time or return visits outside of those defined in this document due to lack of client system readiness, unavailability of support resources, etc. are subject to additional charges at our standard service and travel rates.

Project Risks

All projects include some element of risk, and most can either be mitigated or managed. Apex feels that the following risk factors are present in this project and believes it is important to bring these to the attention of the Crescenta Valley Water District. Where possible, Apex has included suggested means to mitigate these risks.

Identified risks for this project include:

- Although many control components will be upgraded during this project, some existing components will continue to be utilized. These components include sensors, drives, contactors, relays, and soft-start devices. Although every effort will be made to support these devices it is possible that some may not be compatible with the new architecture.
- This project will include system modifications at several levels including hardware, communication, control, and applications. During this process, equipment downtime will be required.
- The existing documentation (operational guidelines as well as electrical schematics) is outdated and in some cases non-existent.

Mitigation of these risks is best accomplished via the following practices:

- Frequent communication such as status review meetings and passdown documents
- The development and documentation of design and test plans
- A careful phased implementation plan including clearly identified fallback positions at each stage
- Clearly communicated schedule events for equipment downtime and production startup

Apex believes that these techniques will help to minimize detrimental impacts upon production activities and increase the overall success of the project.

Project Costing

Project costing is summarized in the following tables. Apex's standard terms & conditions are attached in Appendix "C" below.

Services						Cost
<i>RTU Replacement</i>						\$ 278,160.00
<i>- Quoted on a time & materials (T&M) basis</i>						
- Onsite Hours	696	Hrs. @	\$ 160.00	Hr. =	\$ 111,360.00	
- Offsite Hours	995	Hrs. @	\$ 160.00	Hr. =	\$ 159,200.00	
- PM Time	40	Hrs. @	\$ 190.00	Hr. =	\$ 7,600.00	
Subtotal Services Cost						\$ 278,160.00
Travel & Living Expenses (Estimated)						Cost
<i>RTU Replacement (14 Scheduled Trips)</i>						\$ 56,300.00
Subtotal Travel & Living Expenses						\$ 56,300.00
Total Project Cost						\$ 334,460.00

Project Payment Milestones:

- Client will be invoiced monthly for Services and Travel Expenses

Appendix A – Scope Of Work Details

RTU Upgrade Tasks (To be completed for each site)

- Activities to be completed prior to commissioning
 - Development of the following artifacts
 - Control Sequence Functional Description (CSFD)
 - HMI screen design
 - Electrical schematics for replaced components
 - Alarm listing
 - Test plan development
 - Field device monitoring
 - Field device control
 - Site-to-site communication
 - Site-to-central station communication
 - Alarm notification & callout
- RTU commissioning activities
 - Oversee RTU electrical / mechanical installation
 - PLC commissioning, programming, and testing
 - IO Checkout
 - HMI commissioning, programming, and testing
 - Site-to-site communication configuration and testing as required
 - Site-to-central station communication and testing
 - SCADA integration
 - InTouch application
 - Commission tags as required
 - Modify windows as required
 - Remove Tesco components
 - Remove obsolete tags
 - Alarm configuration
 - Aveva Historian
 - Commission tags as required
 - Remove obsolete tags
 - Alarm callout (TopView) integration & testing

Site and components to be upgraded

- **Mills Booster Pump Station**
 - Discharge Pump A (Non-reversing single speed)
 - Discharge Pump B (VFD)
 - Discharge Flow Meter & Totalizer
 - Discharge Pressure Transmitter
 - Reservoir Level Transmitter
 - Well 1
 - Well pump (Non-reversing single speed)
 - Well Level Transmitter
 - Discharge Pressure Transmitter
 - Discharge Flow Meter & Totalizer
 - Analyzers
 - pH (qty 2)
 - Residual Chlorine
 - Nitrate

- o LAS Injection Skid
 - Tank Level Transmitter
 - Dosing Pumps (Qty 2)
 - o NaOCl Injection Skid
 - Tank Level Transmitter
 - Dosing Pumps (Qty 2)
- **Ordunio Booster Pump Station**
 - o Discharge Pumps (qty 2 non-reversing single speed)
 - o Discharge Flow Meter & Totalizer
 - o Discharge Pressure Transmitter
 - o Reservoir Level Transmitter
 - o Analyzers
 - pH
 - Residual Chlorine
 - Nitrate
 - o Altitude valve position indication
 - o Well 2
 - Well pump (Non-reversing single speed)
 - Well Level Transmitter
 - Discharge Pressure Transmitter
 - Discharge Flow Meter & Totalizer
 - o LAS Injection Skid
 - Tank Level Transmitter
 - Dosing Pumps (Qty 2)
 - o NaOCl Injection Skid
 - Tank Level Transmitter
 - Dosing Pumps (Qty 2)
 - o APT nitrate plant is excluded from this project
- **Encinal Booster Pump Station**
 - o Discharge Pumps (qty 4 non-reversing single speed)
 - o Discharge Flow Meter & Totalizer
 - o Discharge Pressure Transmitter
 - o Reservoir Level Transmitter
 - o Analyzers
 - pH (qty 2)
 - Residual Chlorine (qty 2)
 - Nitrate (qty 2)
- **Ramsdell Blending Station & Flow Control**
 - o Pressure Meter
 - o Flow Meter & Totalizer
 - o Modulating Flow Valve
- **Well No. 5**
 - o Well pump (Non-reversing single speed)
 - o Well Level Transmitter
 - o Discharge Pressure Transmitter

- o Discharge Flow Meter & Totalizer
 - o Analyzers
 - pH
 - Residual Chlorine
 - Nitrate
 - o NaOCl Injection Skid
 - Tank Level Transmitter
 - Dosing Pumps (Qty 2)
- **Williams Booster Pump Station**
 - o Discharge Pumps (qty 4 non-reversing single speed)
 - o Discharge Flow Meter & Totalizer (Qty 2)
 - o Discharge Pressure Transmitter
 - o Reservoir Level Transmitter
 - o Analyzers
 - pH
 - Residual Chlorine (qty 3)
 - Nitrate (qty 2)
 - o Altitude Valve Position
 - o Pressure Relief Valve Position (Qty 2)
 - o NaOCl Injection Skid
 - Tank Level Transmitter
 - Dosing Pump
 - o NH3 Injection Skid
 - Tank Level Transmitter
 - Dosing Pump
- **Well No. 7**
 - o Well pump (Non-reversing single speed)
 - o Well Level Transmitter
 - o Discharge Pressure Transmitter
 - o Discharge Flow Meter & Totalizer
- **Well No. 9**
 - o Well pump (Non-reversing single speed)
 - o Well Level Transmitter
 - o Discharge Pressure Transmitter
 - o Discharge Flow Meter & Totalizer
- **Paschall Booster Pump Station**
 - o Discharge Pumps (qty 3 non-reversing single speed)
 - o Discharge Flow Meter & Totalizer (Qty 4)
 - o Discharge Pressure Transmitter
- **Well No. 11**
 - o Discharge Pump (non-reversing single speed)
 - o Discharge Flow Meter & Totalizer
 - o Discharge Pressure Transmitter
 - o Reservoir Level Transmitter

- o Analyzers
 - pH
 - Residual Chlorine
 - o NaOCl Injection Skid
 - Tank Level Transmitter
 - Dosing Pump
- **Rosemont Booster Pump Station**
 - o Discharge Pump (non-reversing single speed)
 - o Discharge Flow Meter & Totalizer
 - o Discharge Pressure Transmitter
 - o Reservoir Level Transmitter
 - o Analyzers
 - pH
 - Residual Chlorine
 - o Altitude Valve Position
 - o Pressure Relief Valve Position (Qty 2)
- **Oak Creek Booster Pump Station**
 - o Discharge Pumps (qty 4 non-reversing single speed)
 - o Discharge Flow Meter & Totalizer
 - o Discharge Pressure Transmitter
 - o Reservoir Level Transmitter
 - o Analyzers
 - pH
 - Residual Chlorine
 - Nitrate
 - o NaOCl Injection Skid
 - Tank Level Transmitter
 - Dosing Pump
- **Eagle Canyon Booster Pump Station**
 - o Discharge Pumps (qty 2 non-reversing single speed)
 - o Discharge Flow Meter & Totalizer
 - o Discharge Pressure Transmitter
 - o Reservoir Level Transmitter
 - o Analyzers
 - pH
 - Residual Chlorine
 - o Seismic Valve Position
- **Markridge Booster Pump Station**
 - o Discharge Pumps (qty 5 non-reversing single speed)
 - o Discharge Flow Meter & Totalizer (Qty 5)
 - o Discharge Pressure Transmitter (Qty 3)
 - o Reservoir Level Transmitter
 - o Analyzers
 - pH
 - Residual Chlorine

- Seismic Valve Position (Qty 2)
 - Pressure Relief Valve Position (Qty 2)
- **Goss Canyon Booster Pump Station**
 - Discharge Pumps (non-reversing single speed)
 - Discharge Flow Meter & Totalizer
 - Discharge Pressure Transmitter
 - Reservoir Level Transmitter
 - Seismic Valve Position (Qty 4)
- **Cresta Heights Booster Pump Station**
 - Discharge Pumps (Qty 2 non-reversing single speed)
 - Discharge Flow Meter & Totalizer (Qty 2)
 - Discharge Pressure Transmitter
 - Reservoir Level Transmitter
 - Analyzers
 - pH
 - Residual Chlorine
 - Seismic Valve Position (Qty 2)
 - Pressure Relief Valve Position (Qty 2)
- **Edmund #1 Booster Pump Station**
 - Discharge Pumps (qty 2 non-reversing single speed)
 - Discharge Flow Meter & Totalizer (Qty 2)
 - Discharge Pressure Transmitter
 - Reservoir Level Transmitter
 - Seismic Valve Position
 - Altitude Valve Position
 - Pressure Relief Valve Position (Qty 2)
 - Analyzers
 - pH
 - Residual Chlorine
- **Edmund #2 Booster Pump Station**
 - Discharge Pumps (qty 2 non-reversing single speed)
 - Discharge Flow Meter & Totalizer
 - Discharge Pressure Transmitter
 - Reservoir Level Transmitter
 - Analyzers
 - pH
 - Residual Chlorine
- **Glenwood Booster Pump Station**
 - Discharge Pumps (qty 2 VFD, qty 1 non-reversing single speed)
 - Discharge Flow Meter & Totalizer
 - Discharge Pressure Transmitter
 - Forebay Level Transmitter
 - Pressure Relief Valve Position
 - Air Compressor Run Status

- o Analyzers
 - pH (qty 3)
 - Residual Chlorine (qty 2)
 - NO3
- o Well 6
 - Discharge Pump (non-reversing single speed)
 - Discharge Flow Meter & Totalizer
 - Discharge Pressure Transmitter
 - Well Level
- o Well 10
 - Discharge Pump (non-reversing single speed)
 - Discharge Flow Meter & Totalizer
 - Discharge Pressure Transmitter
 - Well Level
- o Well 12
 - Discharge Pump (non-reversing single speed)
 - Discharge Flow Meter & Totalizer
 - Discharge Pressure Transmitter
 - Well Level
- o Well 15
 - Discharge Pump (non-reversing single speed)
 - Discharge Flow Meter & Totalizer
 - Discharge Pressure Transmitter
 - Well Level
- o Emergency Generator Transfer Switch Status
- o NaOCl Injection Skid
 - Tank Level Transmitter
 - Dosing Pump
- o NH3 Injection Skid
 - Tank Level Transmitter
 - Dosing Pump
- **Pickens Canyon Tunnel & Reservoir**
 - o Flow Meter & Totalizer
 - o Reservoir Level Transmitter
 - o Analyzers
 - pH (qty 3)
 - Residual Chlorine (qty 3)
 - o NaOCl Injection Skid
 - Tank Level Transmitter
 - Dosing Pump
 - o NH3 Injection Skid
 - Tank Level Transmitter
 - Dosing Pump
- **Glendale/CVWD Interconnection**
 - o Discharge Flow Meter & Totalizer (Qty 3)
 - o Discharge Pressure Transmitter (Qty 2)
 - o Modulating Valves (Qty 2)

- **Shields Reservoir**
 - Reservoir Level Transmitter
 - Analyzers
 - pH
 - Residual Chlorine
 - Seismic Valve Position
- **Dunsmore Reservoir**
 - Reservoir Level Transmitter
 - Analyzers
 - pH
 - Residual Chlorine
 - Seismic Valve Position

Nitrate Treatment Removal Plant

The nitrate treatment equipment located at the Glenwood facility may be upgraded as a part of this project. Although functional requirements are not completely clear 120 hours have been allocated to this upgrade.

Power Monitors

Power monitors exist at a few of the sites today and may be added at other sites as required. These devices are assumed to be Ethernet IP compatible devices requiring no field IO to support integration. These devices will be commissioned in locations already hosting Allen Bradley processors.

Seismic Valves

Several of the sites have previously commissioned seismic valves. These seismic valves provide position feedback and in some cases a test command. The locations of these devices will be identified during the design stage for each site to ensure that sufficient field IO is commissioned to support these devices.

Appendix B – Apex Manufacturing Solutions

We know that you have choices when it comes to systems integrators. Here are a few important facts that we think you should know about Apex.

Headquartered in Boise, Idaho, Apex is a privately owned, independent industrial automation and manufacturing services company. Since 2005, Apex has been dedicated to a few simple principles; provide an environment where it is fun to be part of the team, promote a culture of learning and opportunity, and do great work for our customers. Apex's core values are what enable our success and all Apexer's proudly believe the following:

- Integrity - We believe that integrity is anchored in honesty, trust and accountability.
- A Growth Mindset – We believe that continued success requires that we embrace change and growth, both personally and as a business.
- Expertise – We believe that customers deserve high quality, superior results that provide lasting value.
- Relationships – We believe that we must be clear about objectives; that all relationships must be mutually beneficial and are worthy of generous sharing without thought of return. That we will speak up if things are not going well and that we will fiercely support and protect these hard won connections with others.
- Sustainability – We recognize that success requires energy and enthusiasm; that we must be ready to collaborate and build on the momentum of success. That it's not about complying with what is minimally acceptable but about pushing for what is *totally awesome*.



As a third-party certified women owned business, Apex recognizes the commitment to supplier diversity that is embraced by corporations and government agencies today, and we can help add diversity to your supply chain.



Apex is a recognized Wonderware Endorsed System Integrator (ESI) Partner. The ESI Partner recognition is reserved for partners that Wonderware considers as "best-in-class". Of the thousands of integrators around the globe, less than 30 are recognized as "Endorsed". This means that Wonderware recognizes Apex's technical excellence and demonstrated ability to successfully deliver Wonderware-based solutions.



Apex is a Rockwell Recognized System Integrator. This factory recognition is reserved for partners that Rockwell considers as "best-in-class". This means that Rockwell recognizes Apex's proven technical excellence and demonstrated ability to successfully deliver automation and information solutions to manufacturing companies globally.



In 2018 Apex was recognized as one of the Best Places to Work in Idaho! Receiving an Honorable Mention Recognition, The Best Places to Work in Idaho winners, as chosen by their own employees, have demonstrated exceptional performance in the areas of Compensation and Benefits, Employee Growth and Development, Work-Life Balance, Workplace Environment and Company Management. Apex is proud to receive this public recognition of our commitment to our core values and to our employees!

Appendix C – Apex Standard Terms & Conditions

- 1. Agreement.** These Terms and Conditions, along with the attached proposal, constitute the entire integrated agreement between Apex Manufacturing Solutions (“Apex”) and Customer for the services, deliverables and project. These terms supersede all previous and contemporaneous agreements, proposals and representations, written or oral, concerning such matters. Any additional, conflicting or inconsistent Customer terms (whether set forth in a request for proposals, purchase order or acknowledgement or in any other document) are expressly rejected by Apex and are not a part of the agreement for the project.
- 2. Payment Terms.** Customer shall pay Apex within 15 days of the date of each invoice. If Customer fails to pay Apex by the required due date, unpaid invoiced amounts are subject to a late charge calculated at 1.5%, compounded monthly.
- 3. Travel and Living Expenses.** Travel and living expenses associated with the project shall be billed at actual cost, plus a 10% administrative fee.
- 4. Scope Changes.** During the course of the project, either Customer or Apex may request changes to the scope of the work. Such changes will be effective if the other party agrees to the change in writing or through its actions. If the agreed change results in greater or lesser cost, Apex’s compensation for the work will be adjusted accordingly.
- 5. Warranties.** For a period of one year, Apex warrants to Customer that all services will be performed in a workmanlike manner consistent with current and generally recognized standards in the industry. In no event will Apex be responsible for (a) any modifications to any services or deliverables made by anyone other than Apex; (b) damages caused by misuse, improper operation or improper or insufficient maintenance of any services or deliverables; (c) normal wear and tear; (d) any data loss or corruption or personal information data breach; or (e) any alleged defects in any services or deliverables that arise from Apex’s compliance with designs or other criteria or requirements provided by or through Customer. Deliverables not created by Apex are warranted only to the extent of the express written warranties of the manufacturer(s) of such items delivered to Customer by Apex as a part of the project. APEX MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, AND ANY OTHER WARRANTIES (INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY, TITLE/AGAINST INFRINGEMENT AND FITNESS FOR A PARTICULAR PURPOSE) ARE EXPRESSLY DISCLAIMED TO THE FULLEST EXTENT PERMITTED BY LAW.
- 6. Remedies.** In the event Customer believes Apex owes a warranty obligation applicable to the services or deliverables, or has otherwise failed to comply with any other contract obligation, it must notify Apex in writing within 20 days of its discovery of such obligation and in no event later than 90 days after completion of the applicable services or deliverables. If Apex owes a warranty obligation, it will promptly commence to remedy and cure such default upon receipt of such notice from Customer at Apex’s own cost and expense or, at Apex’s option, will refund to Customer the portion of the compensation paid for any defective services or deliverables. Such performance by Apex is Customer’s sole and exclusive remedy in the event of a warranty obligation of Apex or any other failure of Apex to comply with its contract obligations.
- 7. Intellectual Property Rights.** Apex retains all rights, title and interest in its services and deliverables, including patents and copyrights; however, upon payment of the agreed compensation to Apex, Customer will be deemed to have been granted a non-exclusive, non-transferable, royalty-free, perpetual license to use the services and deliverables for the purposes contemplated in the proposal, except that third-party “shrink-wrapped” software or “off-the-shelf” hardware provided through Apex will be subject to Customer’s compliance, at its own costs, with all applicable manufacturer licensing requirements. Customer may not sell, sublicense, assign or transfer its license to the services and deliverables provided by Apex without the prior written consent of Apex, nor may Customer reverse engineer or make derivative works from the services or deliverables.

- 8. Force Majeure.** In the event that performance of the services and/or delivery to Customer of the deliverables is delayed by circumstances beyond the reasonable control of Apex (including without limitation changes to the scope of work, delays by Customer in providing information to Apex, fire, natural disasters, civil disturbances, acts of governmental authorities, labor disputes, unavailability of materials or shipping delays), Apex will promptly notify Customer of such circumstances in writing and Apex will be granted an equitable extension of the time to meet its obligations under the proposal.
- 9. Limitation of Liability.** In no event shall Apex be liable for any incidental, special, punitive or consequential damages of any kind, including without limitation loss of use, productivity, reputation, financing, business opportunities or profits. MOREOVER, TO THE FULLEST EXTENT PERMITTED BY LAW, REGARDLESS OF THE THEORY OF LIABILITY (INCLUDING WITHOUT LIMITATION BREACH OF CONTRACT OR WARRANTY, NEGLIGENCE OR STRICT LIABILITY), IN NO EVENT WILL APEX'S TOTAL AGGREGATE LIABILITY RELATED TO THE SERVICES, DELIVERABLES OR PROPOSAL EXCEED THE AMOUNT OF COMPENSATION PAID BY CUSTOMER TO APEX FOR THE PROJECT.
- 10. Apex Status.** Apex is an independent contractor of Customer and will have sole charge over, and be solely responsible for, (a) the payment of its employees and subcontractors and (b) the means, methods, techniques and sequences used in the performance of the services and the creation of its deliverables. Both Apex and Customer assume that the industrial exemption applies to all services and the proposal, and Customer acknowledges that individuals not licensed as professional engineers may execute some or all of the services and create some or all of the deliverables.
- 11. Non-Solicitation.** To the fullest extent permitted by law, during the course of the Project and for one year thereafter, Customer agrees that it will not hire or retain, or offer to hire or retain, any of Apex's employees that have been involved in performing the scope of work, nor will Customer otherwise induce or seek to induce, directly or indirectly, any such Apex employees to leave Apex's employment.
- 12. Dispute Resolution.** In the event Apex and Customer cannot resolve any claim or dispute between them arising out of or related to the proposal or the scope of work through direct negotiations, such dispute shall be subject to arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association. Such arbitration proceedings will be held in Boise, Idaho before a single arbitrator with experience in resolving disputes arising from information technology services. The prevailing party (as determined by the arbitrator) will be entitled to recover from the other party all costs incurred in resolving the dispute, including reasonable attorneys' and expert fees and the costs of arbitration. The arbitrator's award shall be final and may be entered as a judgment in any court with jurisdiction.
- 13. Suspension and Termination.** If Customer fails to comply with its obligations under the proposal or these Terms and Conditions (including without limitation the full and timely payment to Apex), Apex may, in addition to charging the late charge discussed in Section 2, provide written notice of such default to Customer and may thereafter suspend further performance until such default is cured by Customer. When such default is cured by Customer, the amount to be paid for the scope of work will be equitably increased to account for Apex's damages arising from such suspension (including without limitation demobilization and remobilization expenses and increased costs of performance), and the time for Apex to complete the scope of work will be equitably extended to account for such suspension. If Customer fails to cure such default within 30 days of its receipt of such notice from Apex, Apex may terminate its agreement with Customer by providing written notice to Customer, and in such an event, Customer will pay Apex for all portions of the scope of work performed (in whole or in part) through the date of such termination, Apex's demobilization expenses and other reasonable termination costs, the amount of expected overhead and profit Apex would have earned on the cancelled portions of the scope of work if not for Customer's default, and any collection costs incurred by Apex in obtaining payment for its services and deliverables from Customer.

14. Assignment. Neither Customer nor Apex may assign its respective rights and obligations under their agreement without the written consent of the other party. However, Apex may subcontract or delegate its work obligations to other persons or entities, but will nonetheless be responsible to Customer for the performance of the work as required by the proposal. Both Customer and Apex agree that there are no third-party beneficiaries to their agreement.

15. Choice of Law. The proposal and these Terms and Conditions will be governed by the laws of Idaho and of the United States of America (including the Federal Arbitration Act, 9 U.S.C. § 1, et seq. with respect to the parties' agreement to arbitrate any dispute arising out of or related to the proposal or the scope of work), without regard to rules governing choice or conflict of laws. Customer and Apex agree that the proposal is predominately for the performance of services, not for the sale of goods, and further agree that the United Nations Convention on Contracts for the International Sale of Goods will not apply to their agreement.

16. Savings Clause and Waiver. If any term of the proposal or these Terms and Conditions is found to be unenforceable, the remaining terms will remain in effect. The failure of either Apex or Customer to exercise any rights under their agreement will not be deemed a waiver of such right except as agreed in writing or as otherwise set forth in these Terms and Conditions.

CRESCENTA VALLEY WATER DISTRICT

General Manager Report

To: Honorable President and Members of the Board of Directors
From: Nem Ochoa, General Manager
Subject: **General Manager Report**

GM Report
March 8, 2022

General Managers Report Topics:

- GM Activities

The following are some highlights in this month's report:

- Employee Spotlight of the Month
- Cost-Efficiency Measures
- Water Conservation & Public Outreach
- Finance and Administration Report
- Water Production, Hydrology Report, Engineering Projects

STAFFING

Six (6) employees have work anniversaries in March: **Wendy Holloway – 40 years**, Raymond Dodge – 29 years, Pam Leddy – 20 years, Christy Colby – 19 years, Siaki Mortenson – 6 years, Tessa Allmon – 4 years.

As of March 4th the District has gone 63 days without a lost time accident.

GENERAL MANAGER ACTIVITIES

Meetings:

Managers Meetings	- February 21 st , February 28 th
Interview Panel (Interagency)	- March 2 nd
Engineering Committee Meeting	- March 3 rd
Events Committee Meeting	- March 3 rd
Managers Team Building	- March 7 th

Submitted by:



Nem Ochoa
General Manager

CRESCENTA VALLEY WATER DISTRICT

BOARD OF DIRECTORS - STAFF REPORT

March 8, 2022
Staff Report

To: Honorable President and Members of the Board of Directors
From: Christy J. Colby
Subject: **Water Conservation and Public Outreach Update**

Monitoring Report Submitted to State for February 2022:

Production Numbers

➤ Total Water Production February 2022:	286.5 AF
➤ Total Water Production February 2013:	275.3 AF
➤ Total Water Production February 2021:	286.6 AF

Compliance Reporting

➤ Days of outdoor Irrigation Allowed:	3
➤ Number of Water Waste Complaints:	1
➤ Number of Follow-ups:	1
➤ Number of Warnings:	0
➤ Number of Penalties:	0

Voluntary Water Reduction Goal, 25% from 2020 Usage

➤ Percent Reduction from 2013	-4.1%
➤ Percent Reduction from 2020	.03%

Public Outreach for February 2022

W

- Face Book Posts, 2
 - Post of the Rainbow outside of the office, most liked post (Picture courtesy of Arturo Montes)
 - We now have a total of 64 followers
- CV Weekly
 - No ads this month
- Website
 - 2,540 website Visits, Most popular day, Feb. 28th
 - Visits by Referral: Google 1,031 Bing 190 Yahoo 35
- Constant Contact
 - No Emails sent in February
- Everbridge
 - No Messages sent in February



Crescenta Valley Water District – Finance, Administration & Public Outreach Report for < January 2022 >

Customer Service & Administration Activity

**Service
Requests**
86

**Meter
Downloads**
39

**New
Sign-Ons**
43

**Closed
Accounts**
25

**Meter
Re-Reads**
192

**Fire
Flows**
7

**Backflow
Connection Tests**
29



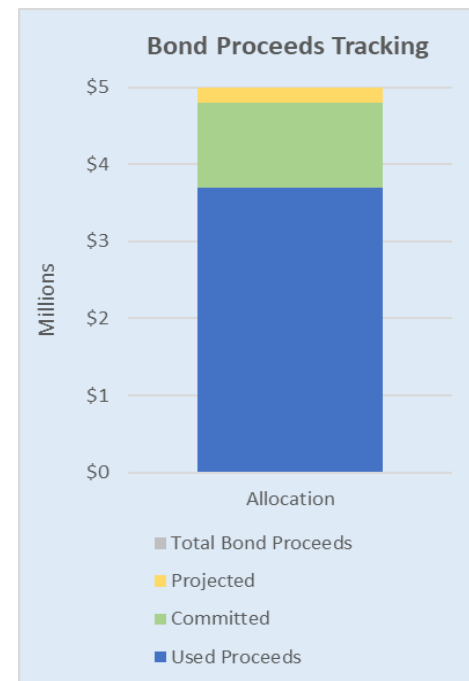
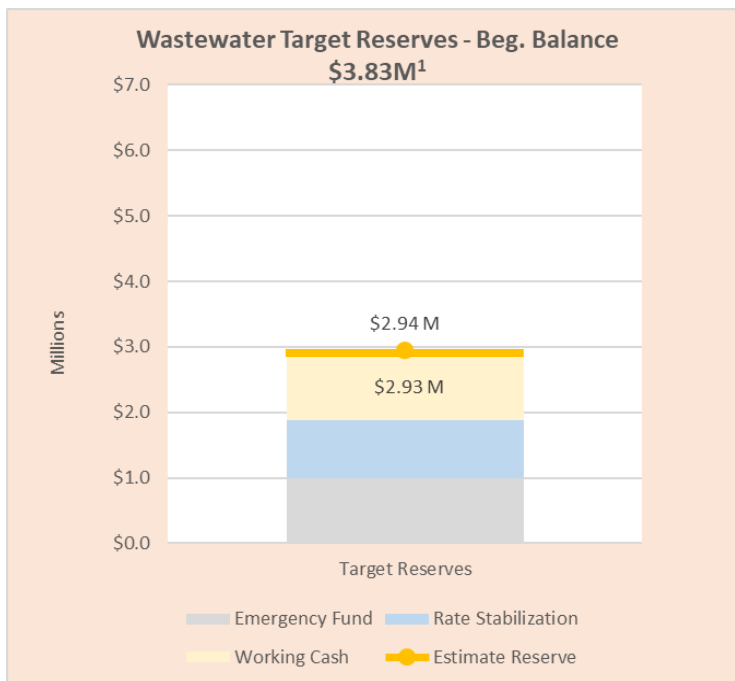
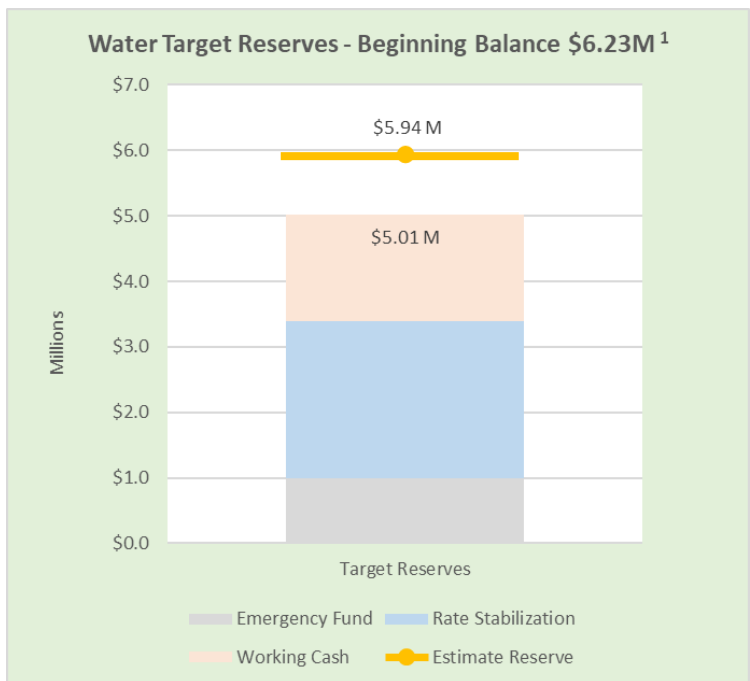
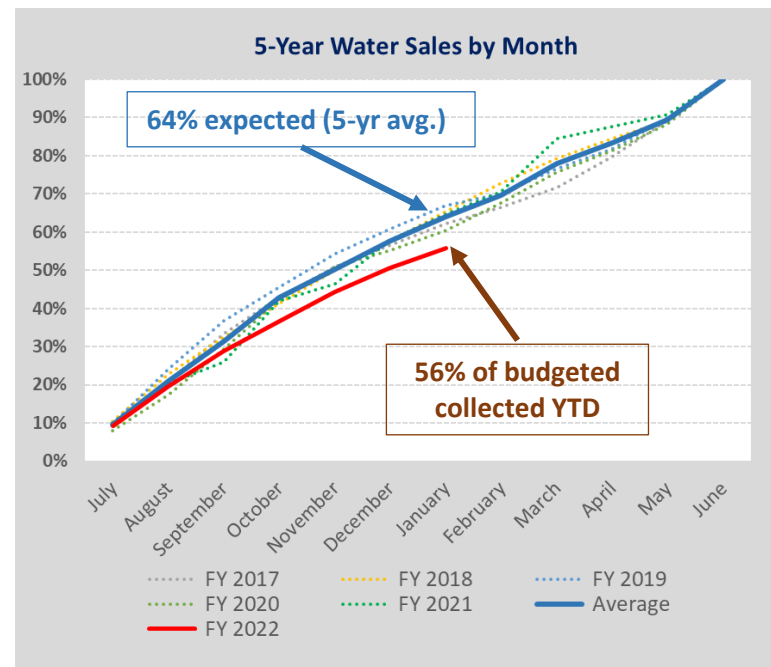
Crescenta Valley Water District – Finance, Administration & Public Outreach Report for < January 2022 >

Water Fund - revenues & operating expenses

Proj. Revenue	\$13,489,957		Proj. Expense	\$9,753,686	
Budget	\$14,298,014	94%	Budget	\$9,983,578	98%

Wastewater Fund - revenues & operating expenses

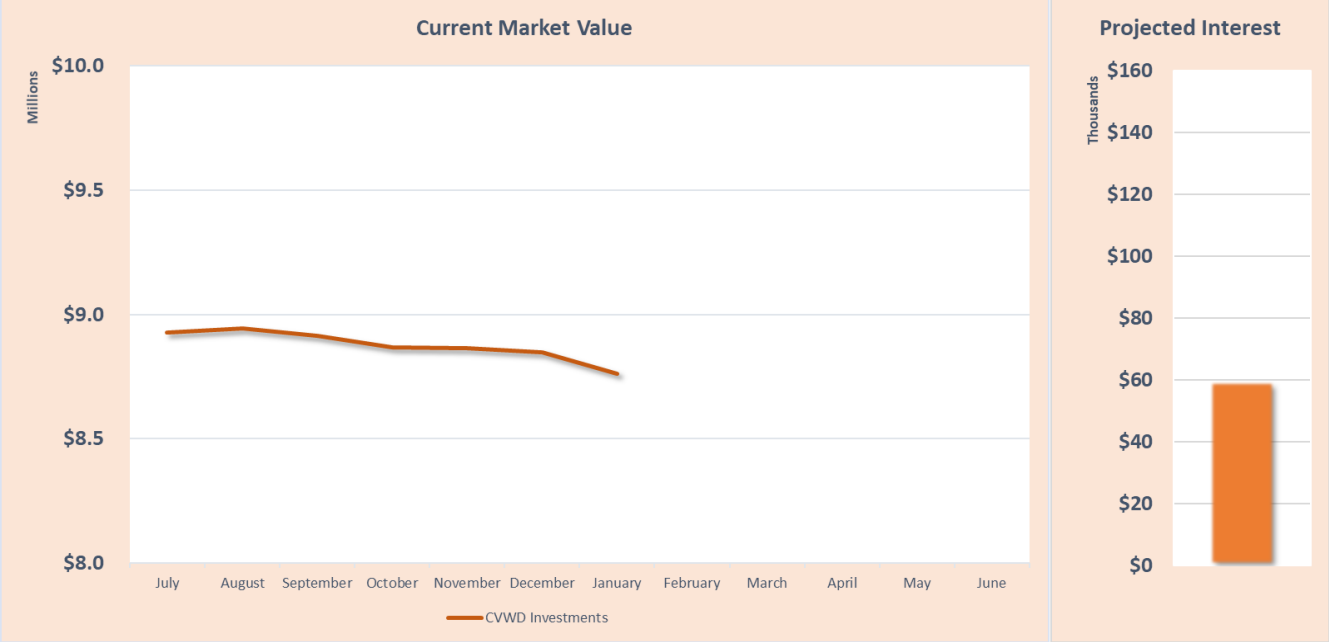
Proj. Revenue	\$3,584,350		Proj. Expense	\$4,234,633	
Budget	\$3,556,467	101%	Budget	\$4,133,647	102%



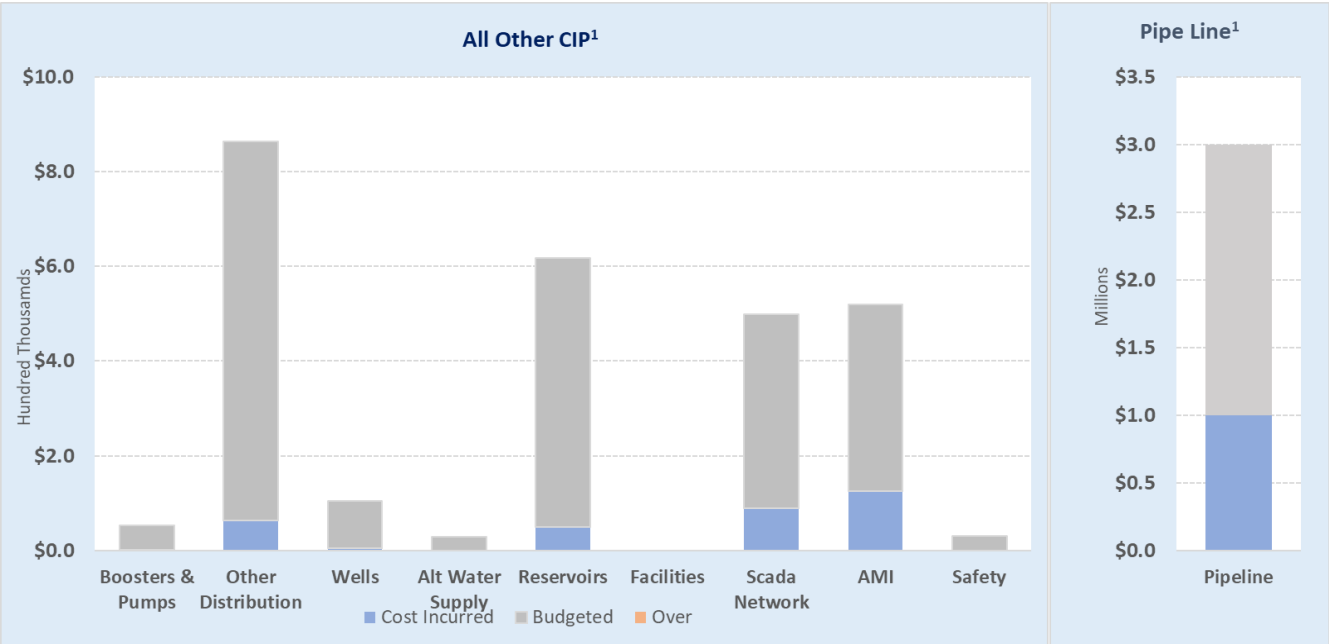
1. CVWD Reserve Policy adopted on 7/28/20



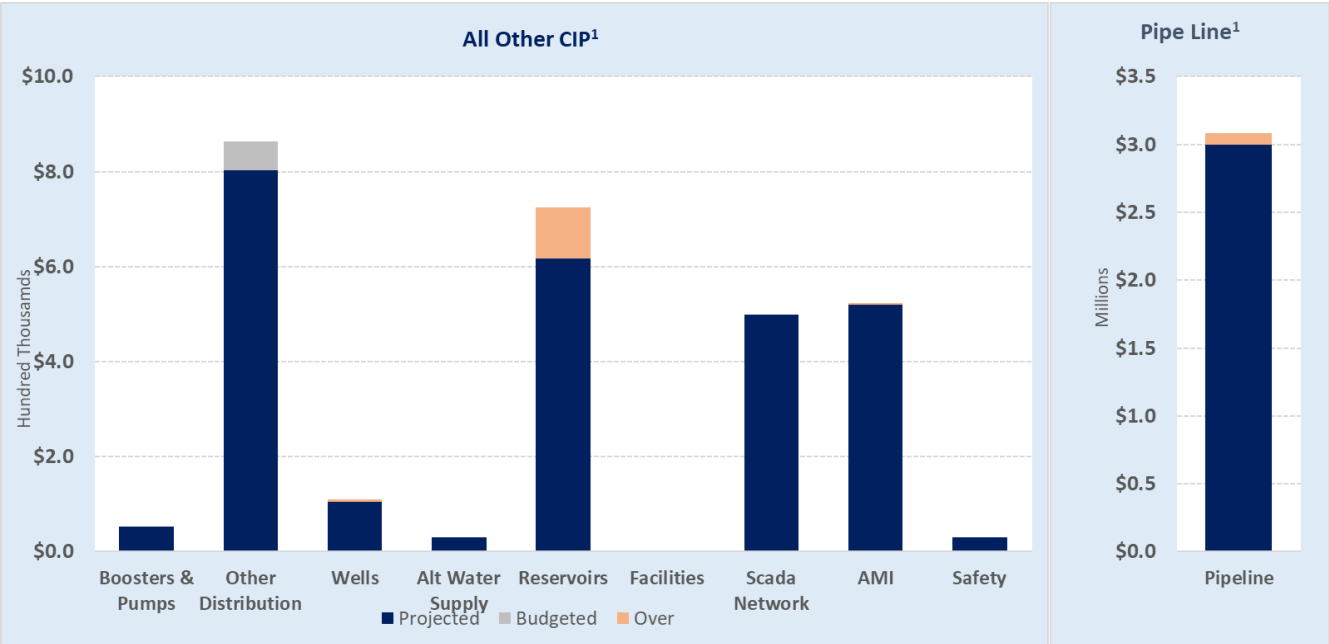
CVWD
Investments



CIP Costs
Incurred to
Date



CIP
Projected
vs.
Budgeted



1. Pipelines CIP reported separately to preserve scale of the graph

Engineering Report

March 8, 2022
Staff Report

To: Honorable President and Members of the Board of Directors
From: David S. Gould, P.E. – Director of Engineering & Operations
Subject: Engineering Report – February 2022

1. Water Production Report

- February 1 – 28 – Water production – 58%/42% split – 93.6 MG for the month
- Average use 6.0% less than 2021 and 4.9% greater than 5-yr average

2. Rainfall Update

- 0.14” for February 2022
- Rainfall Total for Rainfall Year 2021/22 – 14.63”

3. Report on Engineering

• **FY 21/22 Capital Improvement Projects**

- Ramsdell Mixing Station/Pressure Reducing Station - Under Review
- FY 21/22 – Pipeline Replacement Program
 - Project 1 – 2800 to 3100 Blocks of Los Olivos – Start Construction - 3/7/22
 - Project 2 – 4700 & 4800 Blocks of Cheryl – See Staff Report
- Edmund #2 Reservoir Rehabilitation – Under Construction – Re-coating work
- Well 9 Rehabilitation – No Report
- Booster Pump 26 at Cresta Heights Rehabilitation – No Report
- SCADA Radio Communications Network – Working on Request for Quote
- SCADA System Upgrades – See Staff Report
- Conversion to Chloramination – No Report
- Wastewater Master Plan – Proposal due 3/29/22

• **FY 20/21 Capital Improvement Projects**

- Emergency Generator at Sewer Lift Station
 - Finalizing agreement between LA County & LCF
 - New Project Start Date – 4/11/22

• **Grant Program**

- Local Hazard Mitigation Plan – Approved by FEMA
 - Application for five (5) new emergency generators and Seismic Feasibility Study of Facilities due 4/8/22
- USBR WaterSmart Grant 2021 – 3” & 4” Meters– Pending USBR agreement
- USBR WaterSmart Grant 2022 – USBR to award in March 2022
- Stormwater Capture Project at Crescenta Valley County Park – No Report

• **AMI Customer Engagement Portal**

- Completed Phase 1 of software integration
- Phase 2 – Working on layout of customer engagement portal

4. **Developer Projects**

- D-21-G2 – Fires Service for Clark High School - Claim Development & 100% submittal review
- 2341 Mira Vista – New 4 Units – Reconciliation and Transfer of Ownership
- 3037/3043 Foothill – New 38 Units and mixed commercial – Permitting
- 2201 Honolulu – New 4" water main – in design
- Waiting on Developer
 - 1961 Waltonia – New 6 units
 - 4360 Ocean View – 3 Units upgraded to 7 units
 - 4521 Briggs/2413 Foothill – New 70 units
 - 3900 Park Place – New 28 units
 - 2345 Mira Vista – New 4 units

5. **FMWD** – No Report

CRESCENTA VALLEY WATER DISTRICT

WATER PRODUCTION REPORT

February 1 - February 28, 2022

Well Production:	48,392,900	Gals		
GWP Production:	4,300,000	Gals		
Gravity Production:	1,143,930	Gals	% GW	58%
FMWD:	39,770,382	Gals		
City of Glendale:	0	Gals	% Import	42%
TOTAL:	93,607,212	Gals		
	287.27	ac-ft		

Glenwood Nitrate Water

Reclamation Plant:* 0

*Included in Well Production

WATER DEMAND COMPARISON

Time Period	Average Daily Usage (gals)	Current Period Change
February 1 - February 28, 2022	3,094,137	
February 1 - February 28, 2021	3,292,506	-6.0%
5-yr Average - February 2017 - 2021	2,950,642	4.9%

RAINFALL: Feb 1 - Feb 28, 2022

0.14"

Season-To-Date:

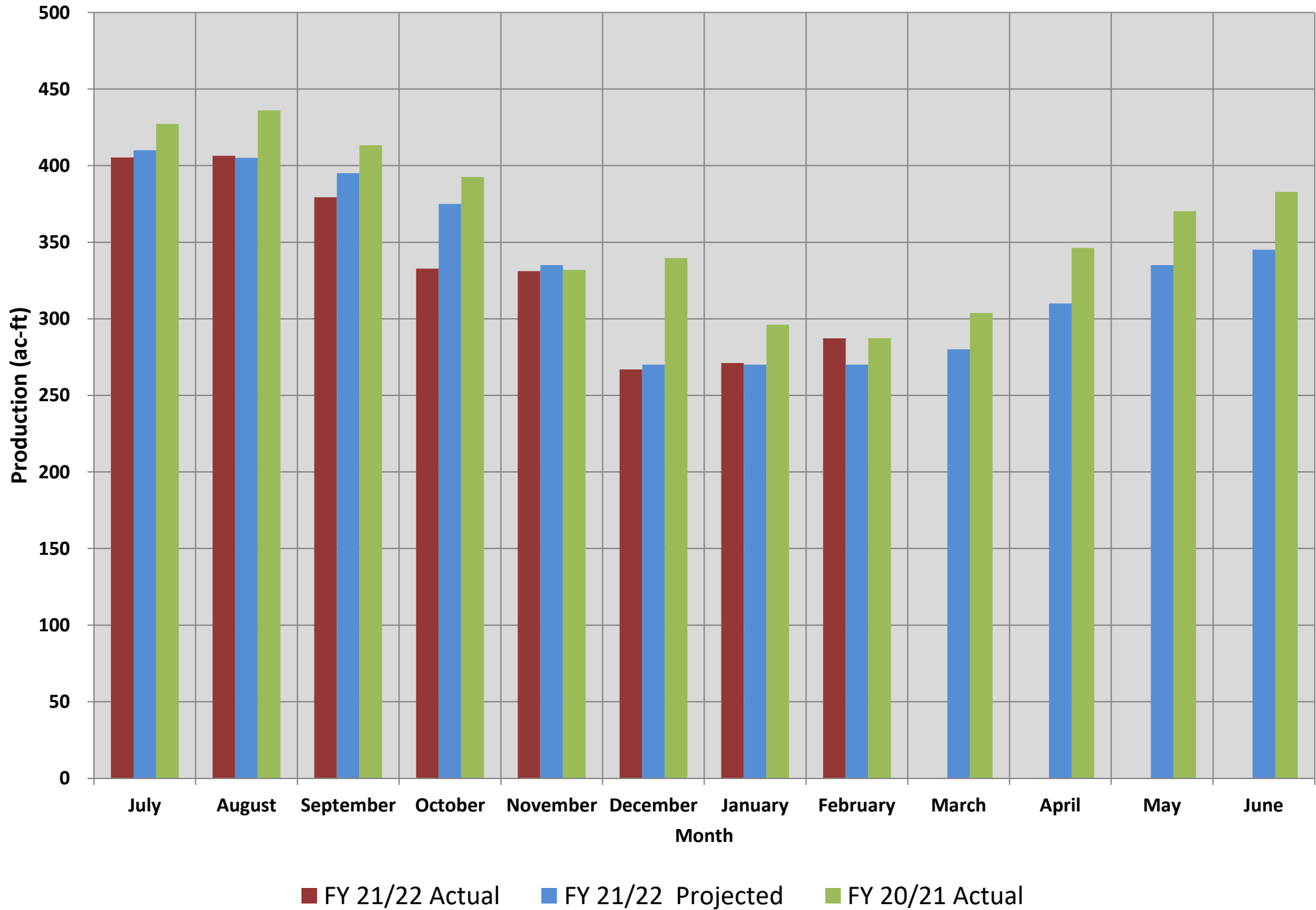
14.63"

2021/22 Fiscal Year Water Production			WY 21/22 - Groundwater Production Water Rights		GWP (Well 16) Water Production - 2022		Purchased Water Production Tier 2 Allocation 2022	
Month	Actual Total Water Production (ac-ft)	Projected Total Water Production (ac-ft)	Month	Month	Month	Well Production (ac-ft)	Month	Imported Water Production (ac-ft)
July	405	410	October	162	January	16	January	101
August	406	405	November	159	February	13	February	122
September	379	395	December	149	March		March	
October	333	375	January	154	April		April	
November	331	335	February	152	May		May	
December	267	270	March		June		June	
January	271	270	April		July		July	
February	287	270	May		August		August	
March		280	June		September		September	
April		310	July		October		October	
May		335	August		November		November	
June		345	September		December		December	
Total to Date	2,680	2,730	Total to Date	777	Total to Date	29	Total to Date	224
Projected	3,950	4,000	Water Rights	3,294			Tier 2	2,154
% of Projected	67.0%	68.3%	% of Rights	24%			% of Allocation	10%
Remaining	1,320	1,270	Remaining	2,517			Remaining	1,930

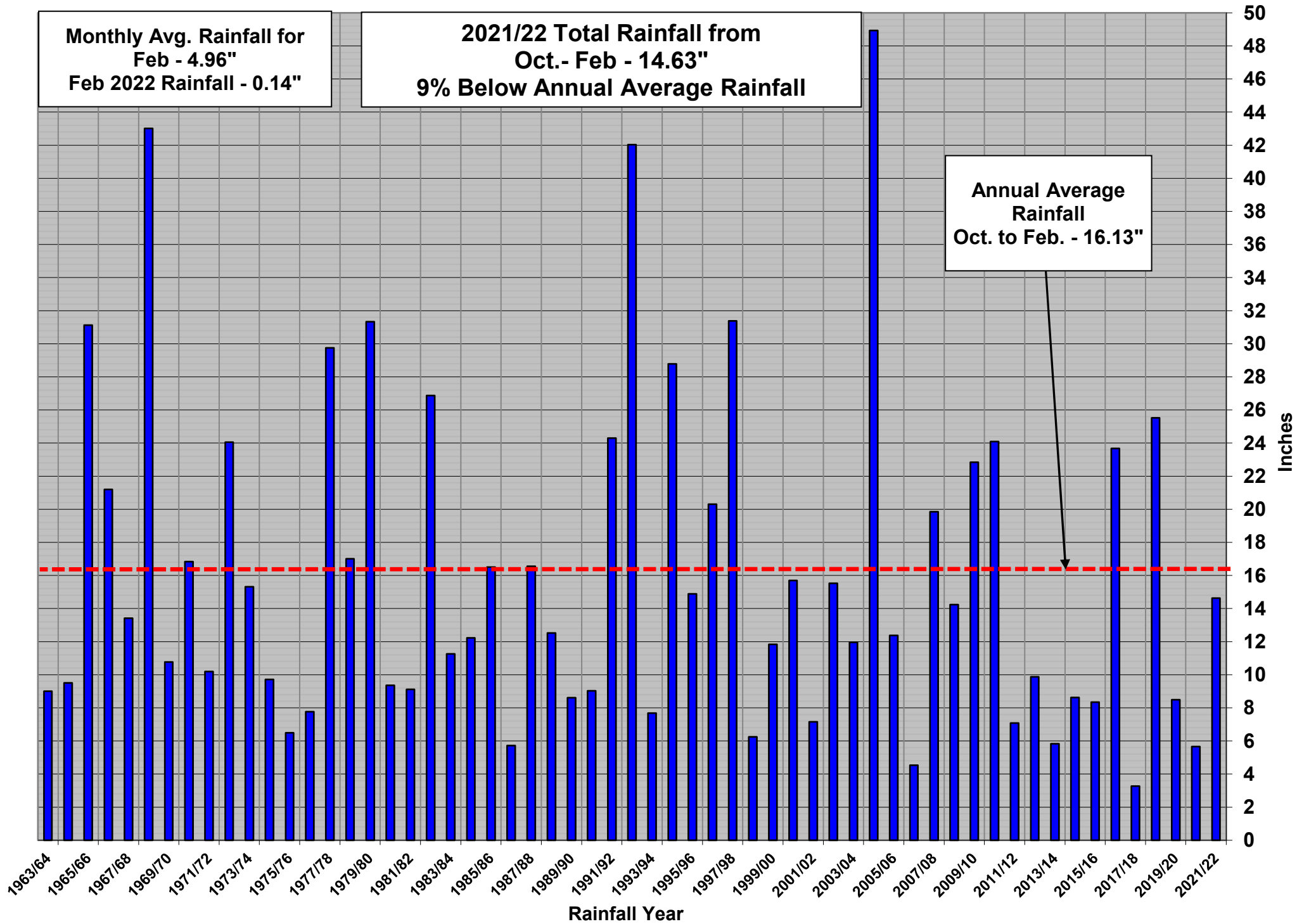
NOTE:

1) Blue Numbers = Estimated Water Production

Monthly Water Production: FY 21/22 Actual, FY 21/22 Projected & FY 20/21 Actual



Monthly Rainfall - 1963/64 - 2021/22 (Oct.- Feb.)



CRESCENTA VALLEY WATER DISTRICT

MEMORANDUM

DATE: March 3, 2022
TO: Engineering Committee
FROM: David S. Gould, Director of Engineering & Operations
SUBJECT: CVWD Engineering Committee Meeting No. 331

Following is a summary of Engineering Committee Meeting No. 331, held at 3:00 PM on March 3, 2022, via Zoom Teleconference, and was attended by the following:

Director Kerry Erickson – Committee Chairperson	CVWD
Director Ken Putnam	CVWD
David Gould – Director of Engineering & Operations	CVWD
Brook Yared – Engineer Manager	CVWD
Nemesciano Ochoa – General Manager	CVWD
James Lee – Director of Finance & Administration	CVWD
Arturo Montes – Finance & Administration Manager	CVWD
Darlene Telles - Operations & Maintenance Manager	CVWD
Pam Leddy – Administrative Assistant	CVWD
Jennifer Bautista – Project Coordinator	CVWD

Information Items

1. Discussion of the Replacement of the Supervisory Control and Data Acquisition of SCADA System, Project E-939

Mr. Gould began by providing a background of CVWD's existing SCADA system with Programming Logic Controllers (PLCs) and Remote Terminal Units (RTUs). Mr. Gould explained that Staff had included this project as part of the FY 21/22 CIP program to upgrade the SCADA system with newer equipment and programming.

In July 2021, it was recommended that Staff move forward with a pilot program for Wells 8 and 14. The pilot program utilized a collaborative work plan between Apex Manufacturing Services (APEX) on the design, and CVWD performed various installation parts. In the fall of 2021, Staff initiated the pilot project pilot conversion of SCADA upgrades was completed in a timely manner. The budget estimate for the pilot project was \$35,000, and the final cost was \$38,500.

Mr. Gould then explained that the next step was for Staff to take the information from the pilot program and provide an estimate of the costs and time frame to complete the remaining upgrades to the new system. Staff reviewed the remaining 25 sites with respect to new equipment needed, APEX programming, integration time, and CVWD staff time to complete the project. Mr. Gould presented a table showing the task, number of sites, average cost, and estimate of costs for each of the tasks in this project. The table shows a subtotal of \$665,000, a 10% contingency, for a total of \$731,500.

Mr. Gould also presented an overall project schedule to complete the upgrades relative to CIP budgets this year and next year. After a discussion with the SCADA team, it was estimated that it would take about 14 to 16 months to complete the entire project. The project costs will fall within FY 21/22 & FY 22/23, and the final project close-out will be completed in FY 23/24.

It is Staff's recommendation to the Engineering Committee for Staff to proceed with finalizing the project costs for new equipment from Royal Industrial Solution. Mr. Gould to increase the contingency from 10% to 15% as recommended by the Engineering Committee.

2. Discussion of Annual Well and Pump Maintenance Service Contract

Mr. Gould provided a background of CVWD's twelve (12) groundwater wells and thirty-four (34) booster pumps within the water distribution system.

Mr. Gould discussed CVWD's goal for strategic planning for pump maintenance. The goal is for CVWD to become proactive on pump maintenance rather than reactive when a pump or motor fails. To meet this goal, Staff is looking into an annual contract with a pump company with extensive field pump experience to provide semi-annual maintenance services, including recommendation reports on all CVWD's pumps and motors.

As part of the strategic plan, Staff would also like to have a contractor available for emergency services such as water service interruption caused by natural or man-made disasters, such as water service interruption during a power outage or earthquake.

Mr. Gould explained that Staff met with General Pump Company about an annual contract. General Pump provided a sample request for proposal for us to review. Staff created an RFP broken up into four (4) sections:

1. Annual Groundwater Well Rehabilitation
2. Annual Booster Pump Rehabilitation
3. Annual Booster Pump Inspection and Maintenance Service
4. Emergency Pump & Motor Services with a fixed cost

Mr. Gould reviewed the details and presented a table for the Estimated Annual Cost for FY 21/22 Booster Pump and Well Emergency and Maintenance Services for each of the four (4) sections in the RFP. The total estimated annual cost is \$265,000.

Staff's recommendation is to formalize the RFP and request a proposal from General Pump Company. Once the costs are finalized, it is Staff's recommendation to bring this item to a future Board meeting to approve an annual contract.

Mr. Gould added that General Pump Company had provided the best service compared to other contractors, demonstrated a high level of expertise in pump design, well rehabilitation and has a large inventory of materials that reduces the lead time and General Pump has staff available to assist with revising our standard well rehabilitation approach in the face of unique challenges.

Director Erickson and Director Putman request that Staff work on the item and bring it back to the Engineering Committee for further review.

3. Update of FY 21/22 CIP Budget and Schedule

Mr. Gould began by providing an update on the first pipeline replacement project for FY 21/22 on the 2800 to 3100 blocks of Los Olivos Lane, Project E-1033. Mr. Gould informed the Engineering Committee that construction begins on Monday, March 7, 2022.

Mr. Gould provided an update on the second pipeline replacement project for FY 21/22 on Alabama Street, Cheryl Avenue, and Thelma Street, Project E-1034. Mr. Gould informed the Committee that Thelma Street and a portion of Cheryl was from the project to bring down the cost of construction.

Mr. Gould updated the Committee on the FY 20/21 pipeline replacement project on the 4800 block of Dyer Avenue, 2800 block of El Caminito Street, 4800 block of Glenwood Avenue, 2800 block of Stevens Street, and the 2700 block of Paraiso Way, Project E-1022 was completed.

Mr. Gould updated the Committee on the New Pressure Reducing Station and Rehabilitation of the Ramsdell Mixing Station, Project E-977. Staff is in the design phase, and the preliminary estimate is \$1.2M. Staff is looking to reduce the cost of the project.

Mr. Gould provided an update of construction project at Edmund No.2, Project E-1036. J. Colon is currently working on the sandblast and coating. There have been no noise complaints. The anticipated end of construction date is April 2022.

Mr. Gould indicated that the Well 9 Rehabilitation and Booster 26 at Cresta Heights Replacement projects were discussed in Item No. 2 of the agenda.

Mr. Gould provided an update on the Replacement of the SCADA Communication Radio Network, Project E-1025. Staff is working on the scope of work. Mr. Gould informed the Committee that the project might be transferred to the FY22/23 CIP budget.

Mr. Gould discussed the Replacement of SCADA Equipment, Programming, and Impregnation, Project E-939, during Item No.1 of the agenda.

Mr. Gould informed the Committee that Staff is behind schedule but currently working on converting the Disinfection System to Chloramines, Project E-995.

Mr. Gould provided an update on the AMI Customer Engagement Platform (CEP), Project E-1035. Mr. Gould informed the Committee that the integration process of transferring data between Sensus Analytics, Springbrook, and WaterSmart had been completed. Staff will work on the design of the CEP. The goal is to have the CEP available to customers by May 2022. Staff will present a sample Welcome Letter to the Board on March 22, 2022, for discussion.

Mr. Gould updated the Committee on the installation of ¾-inch and 1-inch AMI meters within Zone 1. The goal is to install the SmartPoints and AMI meters for Zone 1 by July 2022.

Mr. Gould informed the Committee that Staff is waiting on USBR to finalize the Agreement for grant funding of the Installation of AMI 3-inch and 4-inch meters, Project E-1031.

Mr. Gould presented an update for the FEMA Local Hazard Mitigation Plan, Project M-1004. FEMA approved the two projects CVWD applied under Notice of Intent (NOI), 1) New emergency electrical generators at five (5) sites and 2) Seismic Evaluation of CVWD's facilities. Staff is working with Tetra Tech to submit sub-applications for each project by the deadline of April 8, 2022.

Mr. Gould reviewed the FY 21/22 Capital Improvement Project Program Cost Update. The table shows the current FY 21/22 to be about \$5.9M. The remaining balance of \$2.3M from Bond Financing will be utilized to construct pipelines.

Committee Member's Request for Future Agenda Items – No request

Next Meeting

- Next meeting scheduled for April 7, 2022, at 3:00 pm. Director Erickson requested to receive the next Engineering Committee packet at least a week before the next meeting. Staff will provide the packet by April 1, 2022

Adjournment - The Engineering Committee meeting was adjourned at 3:58 pm on March 3, 2022.

CRESCENTA VALLEY WATER DISTRICT

2700 FOOTHILL BOULEVARD
LA CRESCENTA, CALIFORNIA

To be held on
March 3, 2022 at 3:00 PM

Agenda for the Meeting of the Engineering Committee
of the Crescenta Valley Water District

Posted March 2, 2022 at 3:00 PM

TELECONFERENCING NOTICE

Under AB 361 and District Resolution No. 772, the District will continue to hold Board and Committee meetings by teleconference, due to the continuing State of Emergency for COVID-19 and the ongoing imminent risks to the health or safety of the attendees from COVID-19.

[This meeting will be held by teleconference only.]

Any member of the public may participate using a touchtone phone. You may select any of the following phone numbers (there are more than one for increased reliability during this time of increased phone traffic)

(669) 900-6833

(346) 248-7799

(929) 205-6099

(253) 215-8782

(301) 715-8592

(312) 626-6799

Then, enter Access Code: 894 8571 9053

[Pursuant to the above Executive Order, the public may not attend the meeting in person]

Those members of the public who are able to and would like to additionally participate with a computer through videoconference may access the Zoom videoconferencing tool available at the following link –<https://us02web.zoom.us/j/89485719053>

Any person may make a request for a disability-related modification or accommodation needed for that person to be able to participate in the public meeting by contacting the District by phone or in writing at customerservice@cvwd.com. Requests must specify the nature of the disability and the type of accommodation requested. A telephone number or other contact information should be included so that District staff may discuss appropriate arrangements. Persons requesting a disability-related accommodation should make the request with adequate time before the meeting for the District to provide the requested accommodation.

Call to Order

Adoption of Agenda

Public Comment:

At this time, members of the public shall have an opportunity to address the Committee on items of interest that are within the subject matter jurisdiction of this Committee. This opportunity is non-transferable, and speakers are limited to three (3) minutes each. Under the provisions of the Brown Act, the Board is prohibited from taking action on items not listed on the agenda, except under certain circumstances.

Action Items

The public shall have an opportunity to comment on any action item as each item is considered by the Committee. This opportunity is non-transferrable, and speakers are limited to one two-minute (2) comment each.

1. Discussion of the Replacement of the Supervisory Control and Data Acquisition of SCADA System, Project E-939
2. Discussion of Annual Well and Pump Maintenance Service Contract
3. Update of FY 21/22 CIP Budget and Schedule

Committee Member's Request for Future Agenda Items

Next Engineering Committee Meeting – TBA

Adjournment

CRESCENTA VALLEY WATER DISTRICT

STAFF REPORT

Information Item No. 1

March 3, 2022

To: Engineering Committee

From: David S. Gould, P.E. – Director of Engineering & Operations

Subject: Replacement of Supervisory Control and Data Acquisition (SCADA) System, Project E-939

INFORMATION ITEM

Discussion of the Replacement of the Supervisory Control and Data Acquisition of SCADA System, Project E-939

BACKGROUND:

CVWD has an existing SCADA system with Programming Logic Controllers (PLCs) and Remote Terminal Units (RTUs) that are installed at each of the District's facilities. These components fulfill critical operational functions including (but not limited to):

- Transmitting data that provides real-time status on the water distribution system
- Allowing for remote control of the water system (e.g., booster pumps and wells)
- Detecting when operational thresholds or designated operational settings are met
- Notifying key operations staff through system alarms when water system parameters are exceeded or when a shutdown occurs due to a power failure

Staff had included this project as part of the FY 21/22 CIP program to upgrade the SCADA system with newer equipment and programming based on industry standards, which is "open source". Once the project is complete, future SCADA maintenance and upgrades can be repaired and/or replaced by a variety of consultants and contractors, as opposed to proprietary programming by a single consultant, which creates time and cost inefficiencies and encourages competitive pricing. The upgrade will also fully integrate system data into the existing monitoring screens located on the main computers at the Glenwood Plant.

Staff discussed this item in detail at the July 20, 2021, Engineering Committee (see attached staff report). It was recommended to move forward with a pilot program at Well 8 and Well 14. The pilot program was utilizing a collaborative workplan between Apex Manufacturing Services (APEX) on the design, and CVWD performing various parts of the installation.

DISCUSSION:

Staff initiated the pilot project in September 2021 and the workplan included the following:

- Building and installing new equipment
- Re-designing the SCADA open-source programming based on current and future operating conditions
- Documenting standard programming in an understandable and easy-to-use format
- Integrating the data into the existing SCADA system

The pilot conversion of SCADA upgrades was successfully completed in December 2021, which included on-site installation of the equipment and integration into the system.

The main goal of the pilot project at the two sites was to work through the details on all equipment, programming, and the integration into Wonderware (SCADA monitoring software); to gain a better understanding of the process with respect to time and costs. The budget estimate for the pilot project was \$35,000 and the final costs were recorded at \$38,500.

Next Steps:

The next step will be to take this information from the pilot program and provide an estimate of the costs and time frame to complete the remaining upgrades to the new system. Staff reviewed the remaining 25 sites with respect to new equipment needed, APEX programming, integration time, and CVWD staff time to complete the project which is shown below.

Task	No. of Sites	Avg. cost/site	Estimate of Cost	Comments
Equipment, Materials & Supplies	25	\$11,376	\$284,400	<u>Example:</u> Well Sites about \$7,000/ea. & Larger sites like Glenwood are about \$25,000/ea.
APEX - Programing & Integration	25	\$13,378	\$334,460	<u>Example:</u> Well Sites about 80 hours/ea.& Larger sites like Glenwood are about 160 hours/ea.
CVWD	25	\$1,846	\$46,140	<u>Example:</u> Well Sites about 40 hours/ea. & Larger sites like Glenwood are about 80 hours/ea.
Subtotal			\$665,000	
Contingency		10%	\$66,500	
Total			\$731,500	

Staff reviewed the overall project schedule to complete the upgrades relative to this year and next fiscal year CIP budgets. After discussion with the SCADA team, it was estimated that it will take about 14 to 16 months to complete the entire project. The project costs will fall within FY 21/22 & FY 22/23, and the final project close-out will be completed in FY 23/24.

The table below shows the breakdown of costs per fiscal year budget. Staff is planning to order most of the equipment for the sites before the end of FY 21/22 since the vendors for the equipment have indicated that there may be some savings with a large equipment order. Also, staff is aware of and will need to accommodate long lead times for the equipment, which have been estimated to be 10 to 12 weeks.

Task	% Complete	FY 21/22	% Complete	FY 22/23	% Complete	FY 23/24	Total
Equipment, Materials & Supplies	80%	\$227,520	20%	\$56,880	0%	\$-	\$284,400
APEX - Programing & Integration	25%	\$83,615	70%	\$234,122	5%	\$16,723	\$334,460
CVWD	25%	\$11,535	70%	\$32,298	5%	\$2,307	\$46,140
Subtotal		\$322,670		\$323,300		\$19,030	\$665,000
10% Contingency		\$32,267		\$32,330		\$1,903	\$66,500
Total		\$354,937		\$355,630		\$20,933	\$731,500

RECOMMENDATION:

It is staff's recommendation to the Engineering Committee for staff to proceed with finalizing the project costs for new equipment from Royal Industrial Solution. Once this cost is finalized, it is also staff's recommendation to bring this item to the next Board meeting for approval.

Prepared & Submitted by:



David S. Gould, P.E.
Director of Engineering & Operations

Attachment:

1. Engineering Committee Staff dated July 20, 2021
2. Apex Manufacturing Solutions Proposal dated February 25, 2022

CRESCENTA VALLEY WATER DISTRICT

STAFF REPORT

Information Item No. 1

July 20, 2021

To: Engineering Committee

From: David S. Gould, P.E. – Director of Engineering

Subject: Replacement of Supervisory Control and Data Acquisition (SCADA) System, Project E-939

BACKGROUND:

CVWD has an existing SCADA system with Programming Logic Controllers (PLCs) and Remote Terminal Units (RTUs) that were installed at each of the District's facilities that transmits information on the status of the water system, provides for the ability to remotely control the booster pump operation, and sends out system alarms to the System Operators when the water system parameters have been exceeded.

The existing RTU & PLC hardware, software, and programming were manufactured and installed by Tesco Controls Inc (Tesco) in 1996. As these devices were commissioned more than 25 years ago, they are nearing the end of their serviceable life and are increasingly hard to support as we move towards the future. Additionally, any modification to the programming of these devices or upgrades to the PLCs/RTUs can only be done by a representative from Tesco as the equipment and programming are proprietary to Tesco. This was very common during the development of SCADA equipment at that time. However, this process has become both time consuming and expensive for CVWD.

The existing Tesco SCADA system is outdated and needs to be modernized to meet today's goals. Staff has worked with Tesco to update programming over the years. However, the existing software platform, from 1996, has become obsolete and caused temporary outages, resulting in a significant increase in overtime labor hours needed to correct it and an appreciable loss in operational resiliency.

In 2018 CVWD initiated a system-wide SCADA review to identify a strategy for upgrading the current hardware and software to a modern version that applies best management principles and includes:

- Open architecture for programming and integration that a variety of consultants and vendors can more easily support.
- Utilization of an "off-the-shelf" industry-standard system for all components.
- Implementation of enhanced remote support capabilities.
- Provide support for basic remote site development.

As a result of the system-wide review, CVWD selected a new programmable automation controller, and supporting hardware, manufactured by Allen Bradley (A/B). A/B is the brand name for a line of factory automation equipment owned by Rockwell Automation, which has been part of the water/wastewater industry for decades. The hardware and programming logic for A/B equipment uses standard protocol that can be serviced by any certified technician or programmer.

Staff has also been working with Apex Manufacturing Services (APEX) for the past year on the installation of new A/B equipment that it used to collect limited data at specific sites, reset the radio communication controls, and for future control of the new sodium hypochlorite and liquid ammonia injection pumps required for chloramination. Currently, the existing Tesco SCADA system is working in parallel with the A/B equipment until the new A/B system is ready to fully implement.

It is Engineering and Operation's goal, as part of the FY 21/22 CIP program, to upgrade the SCADA system with newer equipment and programming based on industry standards, which can be repaired and/or replaced by a variety of consultants and contractors. This will also include integrating the data into the existing monitoring screens located on the main computers at the Glenwood Plant.

DISCUSSION:

As part of the planning process, staff reviewed several preliminary options and project schedules to accomplish the goal of upgrading CVWD's SCADA system by the end of 2022. Options included 1) working directly with APEX on the design, and CVWD's crews performing the work to install the system 2) using a consultant for the design and a contractor to install the system, 3) using a contractor to design/build the system, and 4) performing a pilot project at two (2) sites to work through the details on equipment, programming, and integrating into Wonderware (SCADA monitoring software) to gain a better understanding of the process with respect to time and costs. Attachment No. 1 shows a preliminary project schedule for each Option.

The preliminary schedules show that Options 1, 3 & 4 could be completed before the end of 2022 to meet our goal, and Option 2 would be completed towards the end of 2023. Staff proceeded to look further into Options 1, 3 & 4 as the next step. A concern that was brought up internally was that staff has not had any in-depth experience with replacing a SCADA system, and the additional time that may be needed for both CVWD crews, operations, and engineering for the design and installation.

After much consideration, staff determined that Option 4 (Pilot Program) would allow staff and APEX to work together on the programming and installation at a smaller scale and allow the team to get a better idea of the time and costs involved in the upgrade. The two (2) sites that we are looking at are Well 8 and Well 14 since these sites are close to the Glenwood Operations Facility and have a relatively small number of monitoring components such as flow, water level, pressure, and controls. Also, the programming and integration into the CVWD master computers could be used as a template for the other well sites.

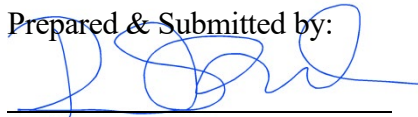
Project Budget:

Staff had budgeted \$610,000 for FY 20/21 and \$104,033 had been spent to date. For Budget FY 21/22, the Board approved a budgeted amount to \$374,000 as staff anticipated that a portion of the project will be completed in FY 20/21. The pilot program will allow staff to prepare a detailed budget for review at future Engineering Committee for any budget adjustments.

RECOMMENDATION:

Staff requested a quote from APEX for the programming, integration, and purchase of new equipment from Royal Industrial Solution, supplier of A/B equipment. The preliminary estimated cost for the pilot program will be \$35,000, and this project would be wrapped into the overall SCADA system project. It is Staff's recommendation to proceed with the pilot project and bring this item to the next Board meeting for approval.

Prepared & Submitted by:



David S. Gould, P.E.
Director of Engineering

Attachment:

1. Project Schedule Options

CRESCENTA VALLEY WATER DISTRICT

STAFF REPORT

Information Item No. 2
March 3, 2022

To: Engineering Committee
From: Brook Yared, M.S., P.E. – Engineering Manager
Subject: Annual Contract for Booster Pump and Well Emergency and Maintenance Services

INFORMATION ITEM:

Annual Contract for Booster Pump and Well Emergency and Maintenance Services – Discussion regarding utilizing a pump contractor to provide annual pump and well rehabilitation services, as well as annual pump maintenance services and emergency pump services.

BACKGROUND:

CVWD has twelve (12) groundwater wells with pumps and 34 booster pumps to move the water from the lower pressure zones to the higher-pressure zones. As staff prepares the annual Capital Improvement Project (CIP) program, projects are included for the replacement and rehabilitation of at least one of CVWD's wells and at least one booster pump per year.

A goal of CVWD's strategic plan is for CVWD to become proactive on pump maintenance instead of being reactive when a pump or motor fails. To meet this goal, staff is looking into having a pump contractor, that has extensive field pump experience to provide semi-annual maintenance services including recommendation reports on all CVWD's pumps and motors.

Another goal of CVWD's strategic plan is to have contractors available to provide emergency services during a man-made or natural emergency event. A great concern of staff is that, if an emergency event happens, contractors (not under contract) may not be available, as they will be serving other agencies.

DISCUSSION:

Staff met with General Pump Company about an annual pump contract since they have similar contracts with the Cities of Arcadia, Pasadena, and Glendora. They provided a sample request for proposal (RFP) for us to review, and staff utilized this to put together a draft RFP (see attached) for annual pump services. The RFP is broken out into four (4) sections as listed below:

1. Annual Groundwater Well Rehabilitation:

Staff has developed a detailed standard approach to well rehabilitation that can be used by a pump contractor as part of an annual well rehabilitation program. Staff has been investigating ways to improve our daily efficiency as we focus on our ever-increasing volume of annual pipeline replacements.

Typically, as part of the planning for a well rehabilitation project, there is a design period, advertising for bid period, and award of contract period that could take up to two (2) months before actual work by a contractor can begin. Also, the well rehabilitation needs to be scheduled during the winter season, when there is low water demand. If we decided to go to a consulting engineering firm for assistance, this time frame could be increased by another 8 to 12 weeks.

To assist staff, we are recommending that we have an annual pump contract such that staff will work with a pump contractor on the design and construction for well rehabilitation. This will eliminate the time lag between the start of design and mobilization on-site. The proposed construction cost for well rehabilitation will be based on the agreed upon contractor's fee schedule and scope of work. The final contract amount will be reviewed by staff and brought to the Board of Directors for final approval.

2. Annual Booster Pump Rehabilitation

Staff has also developed a standard approach to booster pump replacement that could be used by a pump contractor as part of the annual booster pump rehabilitation, such that staff will be able to focus on the annual pipeline replacement program.

As discussed above, part of the planning for a booster pump project, there is a period that could take up to two to three months before actual work by a contractor can begin. Therefore, staff is also recommending that we include this task as part of the annual pump contract with staff and pump contractor work on the design and construction for a booster pump. This will eliminate the time lag between the start of design and mobilization on-site.

The proposed cost for booster pump rehabilitation will be based on the agreed upon contractor's fee schedule and scope of work. The final contract amount will be reviewed by staff and brought to the Board of Directors for final approval.

3. Annual Booster Pump Inspection and Maintenance Service

As stated above, staff's objective as part of CVWD's strategic plan is to become proactive on pump maintenance. To meet this objective, staff will need the assistance of a pump contractor, to provide semi-annual maintenance and inspection services such as motor maintenance, pump efficiency, and visual inspection of all CVWD's pumps and motors at least twice a year. The pump contractor will also be required to provide an inspection report with recommendation that can be used by staff for prioritization of pump and motor replacement or rehabilitation in the following years.

4. Emergency Pump & Motor Services

Another objective of CVWD's strategic plan is to have contractors available to provide emergency services during a man-made or natural emergency event. To meet this objective, staff has included in the RFP, for a contractor to provide emergency services and to be responsive to CVWD's request within 24-hours of the event. The contract will be based on the agreed upon contractor's fee schedule, response time and availability of materials and will eliminate the need to chase around for an available pump contractor during an event.

Pump Contractors:

CVWD has utilized several pump contractors over the years, and the main issues that we have seen is a pump contractor being over extended, not providing timely service, not having material on-site and breaking down of equipment. General Pump Company has provided the best service compared to other contractors and their last well rehabilitation they performed for CVWD was completed within 3 months as compared to 5 to 6 months with other contractors. In addition, General Pump has demonstrated a high level of expertise with respect to knowledge on pump design and well rehabilitation. Also, they have a large inventory of material and equipment is in good shape. Finally, they are among a small group of firms that has engineers and hydrogeologists on staff to assist with revising our standard well rehabilitation approach in the face of unique challenges.

Project Costs:

For FY 21/22, CVWD has an available budget \$158,000 for the rehabilitation of Well 9 and the replacement of Booster 26 at Cresta Heights. The budgeted amount will need to be increased to accommodate the time and effort of General Pump Company to manage this year's well and booster pump CIP.

Prior to moving forward with work for a particular project, staff will request a quote from General Pump Company detailing the requested services to be provided. Staff would then review the scope of work, and if it is within the amount budgeted for annual contract, staff will bring the project to the Board of Directors for final approval.

FY 21/22 - Contract Cost Estimate:

Staff reviewed General Pump's fee schedule and estimated the project costs for the rehabilitation of Well 9 and the replacement of Booster #26 at Cresta Heights as discussed below.

Well Rehabilitation:

Past well rehabilitation projects for the District have included contributions of staff's time, which is estimated at a cost between \$85,000-\$110,000. Based on estimates General Pump's fee schedule, staff estimates the cost of having General Pump manage the rehabilitation of Well 9 would be around \$144,500. The scope of work for the rehabilitation of Well 9 would include the following:

- Removal of the existing pump and motor assembly
- Wire brushing & removal of sediment by bailing
- Pre-rehabilitation CCTV inspection of well casing
- Review inspection data and make rehabilitation recommendations
- Procurement of a new pump and motor assembly
- Mechanical development of the well
- Chemical treatment of well casing using acids and dispersants
- Advanced treatment, options of the well casing (i.e., Sonar Jetting, Air Bursting)
- Post-rehabilitation CCTV of well casing
- New pump and motor assembly installation
- Discharge requirements per NPDES best management practices
- Pump startup and testing
- Return well to service: well disinfection and DDW approval
- As built and report submission

Booster Pump Rehabilitation

Booster Pump rehabilitation or replacement does not involve as much rehabilitation work. However, pumps are generally larger and more expensive based on the pump capacity. The average booster pump replacement cost ranges from \$22,000 to \$40,000, depending on the size of the pump. To replace Booster #26 at Cresta Heights, staff estimates the cost of having General Pump manage the project will be around \$49,400. The scope of work for Booster 26 at Cresta Heights includes the following:

- Assessment of pump failure at the site, if necessary (vibration analysis, power surge)
- Remove pump and motor assembly
- Perform inspection of existing pump and motor for reporting
- Review inspection data and make rehabilitation recommendations
- Assess line shaft and column pipe for refurbishment or replacement
- Procure the new pump & motor assembly plus all necessary column piping or appurtenances
- Install new pump and motor after staff review.
- Start up and testing
- As built and report submission

This bringing the total cost estimate for the planned booster pump and well maintenance in FY 21/22 to approximately \$193,600, which is \$35,600 above the budget of \$158,000 for this fiscal year.

Annual Booster Pump Inspection and Maintenance Service

Staff reviewed General Pump's rate schedule for providing semi-annual maintenance and inspection services for all CVWD's pumps and motors and provide an inspection report with recommendation. Staff has estimated the annual cost for pump maintenance and inspection services for FY 21/22 (one inspection) to be approximately \$65,000. and will be included in the Booster Pump Maintenance expense account.

Emergency Pump & Motor Services

Staff reviewed General Pump's rate schedule for providing emergency pump and motor services and estimated the annual cost to be around \$20,000 if we need service. This amount will be included in the Emergency Operations expense account.

SUMMARY:

Staff put together a preliminary cost estimate for an annual contract for booster pump and well emergency and maintenance services for the remainder of FY 21/22 at \$265,900 by General Pump (see table below). Staff compared this estimate of \$195,000 funding available in the FY 21/22 CIP & expense budget. However, not included in the FY 21/22 CIP & expense budget is labor hours, which is estimated to be about 360 man-hours, necessary by CVWD's Water Production and Engineering Departments to perform this work effort. In addition, these in-house man-hours could be dedicated to other tasks such as infrastructure & water treatment maintenance, training, and other duties.

Id No.	FY 21/22 Booster Pump and Well Emergency and Maintenance Services	Estimated Annual Cost
1	Well Rehabilitation	\$144,500
2	Booster Pump Rehabilitation	\$49,400
3	Annual Booster Pump Inspection and Maintenance Service	\$52,000
4	Emergency Pump & Motor Services (contingency)	\$20,000
	Grant Total	\$265,900

It is staff's recommendation to formalize the RFP and send to General Pump Company for a quote. Once the costs are finalized, it is staff's recommendation to bring this item to a future Board meeting for approval.

Prepared by:


Brook Yared, M.S., P.E.
Engineering Manager

Submitted by:


David S. Gould, P.E.
Director of Engineering & Operations

Attachments:

1. CVWD's Request for Proposals
2. General Pump Company's Rate Sheet

g:\engineering committee\2022 ec memo\03-03-22 ecm memo - pump and well services contract v4.docx

CRESCENTA VALLEY WATER DISTRICT

STAFF REPORT

Information Item No. 3

March 3, 2022

To: Engineering Committee
From: David S. Gould, P.E. – Director of Engineering & Operations
Subject: Status Update - FY 21/22 Capital Improvement Project Budget

DISCUSSION:

The following is an update of the FY 21/22 Capital Improvement Project status and budget update.

1. 2800 to 3100 Blocks of Los Olivos (E-1033)

- a. Award to Brkich Construction
- b. Start Construction – 3/7/22
- c. End Construction – July 2022
- d. Budget

Account Description	Amount
FY 21/22 Water Distribution Pipeline Replacement for E-1033	\$1,500,000
E-1033 - 2800-3100 Los Olivos Ln., - Contract Bid	(\$945,600)
E-1033 - 10% Contingency for cost of unforeseen or additional work	(\$94,560)
E-1033 - Tetra Tech - Engineering Design Services	(\$56,200)
E-1033 - Dudek - Construction Management & Inspection Services	(\$142,230)
E-1033 - Additional costs such as material purchased by CVWD, soils engineer, and CVWD labor costs	(\$265,086)
Total Cost Estimate	(\$1,503,676)
Amount Remaining	(\$3,676)

2. 3200 Block of Alabama 4700 & 4800 Blocks of Cheryl & 3300 Block of Thelma St (E-1034)

- a. Advertising for Bids – 1/31/22
- b. Bid Opening – 3/1/22
- c. Award of Contract – 3/8/22
- d. Start Construction – 4/4/22
- e. End Construction – July 2022
- f. Budget

Account Description	Amount
FY 21/22 Water CIP– Water Distribution Pipeline Replacement	\$1,100,000
E-1034 Engineer's Cost Estimate for Contractor	(\$447,750)
E-1034 - 10% Contingency for cost of unforeseen or additional work	(\$44,775)
E-1034 - Tetra Tech - Engineering Design Services	(\$56,200)
E-1034 - Estimate for Construction Management & Inspection Services	(\$124,900)
Additional costs such as material purchase by CVWD, soils engineer & inspection labor costs	(\$176,375)
Total Cost Estimate for Project E-1034	(\$850,000)
Amount Remaining in Water CIP – Distribution System	\$250,000

3. FY 20/21 – Pipeline Replacement Projects – Carryover to FY 21/22

- a. E-1022 – Project completed in October 2021, finalizing change orders and project close out.

FY 20/21 Pipeline Replacement Program Cost Update: 03/03/2022	E-Job	Recorded FY 20/21	Budget FY 21/22	FY 21/22 Cost to date from 7/1/21 to 1/31/21	FY 21/22 Cost Committed from 2/1/22 to 6/30/22	Projected FY 21/22
2400 & 2500 Blocks of Janet Lee	E-1008	\$ 861,188		\$ 59,703		
4300 Block of Rosemont	E-1019	\$ 39,407		\$ 1,272		
3400 & 3500 Block of Encinal	E-1021	\$ 760,569		\$ 29,759		
4800 block of Dyer, 2800 block of El Caminito, 4800 block of Glenwood, 2800 block of Stevens & 2700 block of Paraiso Way	E-1022	\$ 175,758		\$ 638,477		
FY 20/21 Pipeline Replacement		\$1,836,922	\$400,000	\$ 729,212	\$ -	\$729,212

4. New Pressure Reducing Station & Rehabilitation of the Ramsdell Mixing Station (E-977)

- a. 90% design under review by staff
b. Preliminary Construction Cost Estimate – \$1.2M
c. Staff working with Cannon on budget and construction schedule

5. Steel Reservoir Rehabilitation at Edmund #2 (E-1036)

- a. Contract awarded to J. Colon Coatings Inc.
b. Structural work completed
c. Coating Work – Started Feb 2022
d. Project anticipated to be completed – April 2022

Account Description	Amount
FY 21/22 Water CIP– Water Storage	\$590,000
E-1036 - J. Colon - Contract amount	(\$623,100)
E-1036 - Harper & Associates - Engineering Design Services	(\$14,000)
E-1036 - Harper & Associates - Quality Control Inspection Services	(\$36,020)
Additional Costs such as CVWD labor costs	(\$22,880)
Total Cost Estimate for Project E-1036	(\$696,000)
Amount Remaining in Water CIP – Water Storage	(\$106,000)

6. Well 9 Rehabilitation

- a. In Design
b. Working with General Pump Company on Annual Well & Pump Rehabilitation Contract

7. Booster 26 at Cresta Heights Replacement

- a. In Design
b. Working with General Pump Company on Annual Well & Pump Rehabilitation Contract

8. Replacement of SCADA communication radio network (E-1025)

- a. Behind Schedule
b. Developing Scope of Work

9. Replacement of SCADA Equipment, Programing & Integration (E-939)

- a. Pilot Project for Wells 8 & 14 – Complete
b. See Staff Report

10. Conversion of Disinfection System to Chloramines (E-995)

- a. Behind Schedule
b. Working on Scope of Work

11. AMI – Customer Engagement Platform (E-1035)

- a. Working with WaterSmart on transferring data
- b. Reviewing “Welcome Letter” to customers
- c. Weekly meetings

12. AMI – Installation of ¾” & 1” meters (E-1035)

- a. Completing installation of ¾” & 1” meters within Zone 1
- b. Held planning meeting for installation of about 1,000 SmartPoints in Zone 1

13. AMI – Installation of 3” & 4” meters (E-1031)

- a. Waiting on USBR to finalizing Agreement
- b. Meeting in February 2022 to start survey of 3” & 4” meters

14. FEMA Local Hazard Mitigation Plan (M-1004)

- a. Applied for Notice of Intent (NOI) with FEMA for two (2) projects
- b. Project 1 – New emergency electrical generators at 5 sites application due 4/8/22
- c. Project 2 – Seismic Evaluation of CVWD’s facilities application due 4/8/22

FY 2021/21 CIP Budget

See attached for updated CIP Budget

RECOMMENDATION:

Staff’s recommendation is to continue to provide updated information to the Engineering Committee as the FY 21/22 CIP program progress over the next 3-months.

Prepared & submitted by:



David S. Gould, P.E.
Director of Engineering & Operations

FY 21/ 22 Capital Improvement Project Program Cost Update: 03/03/2022	E-Job	Recorded FY 20/21		Budget FY 21/22	<i>FY 21/22 Cost to date from 7/1/21 to 1/31/21</i>	<i>FY 21/22 Cost Committed from 2/1/22 to 6/30/22</i>	Projected FY 21/22
1. Water Supply		\$ 153,866		\$ 135,000	\$ 4,640	\$ 134,908	\$ 139,548
2. Water Storage		\$ 663,213		\$ 616,900	\$ 56,610	\$ 667,907	\$ 724,516
3A. Water Distribution - Pipeline - Pyramid - 20 yrs		\$ 1,838,368		\$ 3,000,000	\$ 1,043,714	\$ 2,039,173	\$ 3,082,888
3B. Water Distribution - Other		\$ 139,017		\$ 781,000	\$ 48,198	\$ 732,802	\$ 781,000
4. Water Treatment		\$ 54,073		\$ 75,000	\$ -	\$ 75,000	\$ 75,000
5. Technology		\$ 466,671		\$ 1,019,000	\$ 150,586	\$ 871,414	\$ 1,022,000
6. Public Safety/Emergency Response		\$ 134,549		\$ 30,450	\$ 27,548	\$ 2,902	\$ 30,450
7. Facilities & Planning		\$ 3,956		\$ -	\$ -	\$ -	\$ -
Capital Improvement Projects - Total		\$ 3,453,712		\$ 5,657,350	\$ 1,331,295	\$ 4,524,106	\$ 5,855,402
Bond Financing - CIP		\$ 2,695,174		\$ 2,304,826			\$ 2,304,826
Water Distribution - Pipeline Total				\$ 3,000,000			\$ 3,082,888
Remaining CIP				\$ 2,657,350			\$ 2,772,514
Water Fund Financing - CIP		\$ 758,538		\$ 3,352,524			\$ 3,550,576
Total Financing - CIP		\$ 3,453,712		\$ 5,657,350			\$ 5,855,402

Revised Date: 3/2/2022

FY 21/ 22 Capital Improvement Project Program Cost Update: 03/03/2022			E-Job	Recorded FY 20/21	Budget FY 21/22	FY 21/22 Cost to date from 7/1/21 to 1/31/21	FY 21/22 Cost Committed from 2/1/22 to 6/30/22	Projected FY 21/22
4. Water Treatment								
C. Disinfection - Convert to Chloramines								
	Conversion to Chloramination	E-995	\$	54,073	\$ 75,000	\$ -	\$ 75,000	\$ 75,000
WT Total			\$	54,073	\$ 75,000	\$ -	\$ 75,000	\$ 75,000
5. Technology								
A. Automated Meter Information (AMI) System								
	AMI - Communication	E-1020	\$	215,080				
	3" & 4" Smart Meters	E-1031	\$	1,004	\$ 200,000	\$ 834	\$ 199,166	\$ 200,000
	AMI - 3/4" to 1" - Smart Meters	E-1035	\$	71,693	\$ 233,000	\$ 8,751	\$ 224,249	\$ 233,000
	AMI - Customer Service Interface	E-1035			\$ 87,000	\$ 45,860	\$ 41,140	\$ 87,000
	AMI - USBR Grant	E-1041			\$ -	\$ 1,572	\$ 1,428	\$ 3,000
B. Supervisory Control and Data Acquisition (SCADA) System								
	Communication Radio Network	E-1025	\$	72,917	\$ 125,000	\$ 17,610	\$ 107,390	\$ 125,000
	SCADA Replacement - Installation	E-939	\$	105,977	\$ 374,000	\$ 75,959	\$ 298,041	\$ 374,000
TECH Total			\$	466,671	\$ 1,019,000	\$ 150,586	\$ 871,414	\$ 1,022,000
6. Public Safety/Emergency Response								
D. Miscellaneous								
	FEMA Local Hazard Mitigation Plan	M-1004	\$	134,549	\$ 30,450	\$ 27,548	\$ 2,902	\$ 30,450
SF/ER Total			\$	134,549	\$ 30,450	\$ 27,548	\$ 2,902	\$ 30,450
7. Facilities & Planning								
D. Reservoir Site Improvements								
	Roof for Old Encinal - Storage Bldg	E-1027	\$	3,956				
F & P Total			\$	3,956	\$ -	\$ -	\$ -	\$ -
Capital Improvement Projects - Total			\$	3,453,712	\$ 5,657,350	\$ 1,331,295	\$ 4,524,106	\$ 5,855,402

CRESCENTA VALLEY WATER DISTRICT

2700 FOOTHILL BOULEVARD
LA CRESCENTA, CALIFORNIA

To be held on
March 3, 2022 at 3:00 PM

Agenda for the Meeting of the Engineering Committee
of the Crescenta Valley Water District

Posted March 2, 2022 at 3:00 PM

TELECONFERENCING NOTICE

Under AB 361 and District Resolution No. 772, the District will continue to hold Board and Committee meetings by teleconference, due to the continuing State of Emergency for COVID-19 and the ongoing imminent risks to the health or safety of the attendees from COVID-19.

[This meeting will be held by teleconference only.]

Any member of the public may participate using a touchtone phone. You may select any of the following phone numbers (there are more than one for increased reliability during this time of increased phone traffic)

(669) 900-6833

(346) 248-7799

(929) 205-6099

(253) 215-8782

(301) 715-8592

(312) 626-6799

Then, enter Access Code: 894 8571 9053

[Pursuant to the above Executive Order, the public may not attend the meeting in person]

Those members of the public who are able to and would like to additionally participate with a computer through videoconference may access the Zoom videoconferencing tool available at the following link –<https://us02web.zoom.us/j/89485719053>

Any person may make a request for a disability-related modification or accommodation needed for that person to be able to participate in the public meeting by contacting the District by phone or in writing at customerservice@cvwd.com. Requests must specify the nature of the disability and the type of accommodation requested. A telephone number or other contact information should be included so that District staff may discuss appropriate arrangements. Persons requesting a disability-related accommodation should make the request with adequate time before the meeting for the District to provide the requested accommodation.

Call to Order

Adoption of Agenda

Public Comment:

At this time, members of the public shall have an opportunity to address the Committee on items of interest that are within the subject matter jurisdiction of this Committee. This opportunity is non-transferable, and speakers are limited to three (3) minutes each. Under the provisions of the Brown Act, the Board is prohibited from taking action on items not listed on the agenda, except under certain circumstances.

Action Items

The public shall have an opportunity to comment on any action item as each item is considered by the Committee. This opportunity is non-transferrable, and speakers are limited to one two-minute (2) comment each.

1. Discussion of the Replacement of the Supervisory Control and Data Acquisition of SCADA System, Project E-939
2. Discussion of Annual Well and Pump Maintenance Service Contract
3. Update of FY 21/22 CIP Budget and Schedule

Committee Member's Request for Future Agenda Items

Next Engineering Committee Meeting – TBA

Adjournment

CRESCENTA VALLEY WATER DISTRICT

STAFF REPORT

Information Item No. 1

March 3, 2022

To: Engineering Committee

From: David S. Gould, P.E. – Director of Engineering & Operations

Subject: Replacement of Supervisory Control and Data Acquisition (SCADA) System, Project E-939

INFORMATION ITEM

Discussion of the Replacement of the Supervisory Control and Data Acquisition of SCADA System, Project E-939

BACKGROUND:

CVWD has an existing SCADA system with Programming Logic Controllers (PLCs) and Remote Terminal Units (RTUs) that are installed at each of the District's facilities. These components fulfill critical operational functions including (but not limited to):

- Transmitting data that provides real-time status on the water distribution system
- Allowing for remote control of the water system (e.g., booster pumps and wells)
- Detecting when operational thresholds or designated operational settings are met
- Notifying key operations staff through system alarms when water system parameters are exceeded or when a shutdown occurs due to a power failure

Staff had included this project as part of the FY 21/22 CIP program to upgrade the SCADA system with newer equipment and programming based on industry standards, which is "open source". Once the project is complete, future SCADA maintenance and upgrades can be repaired and/or replaced by a variety of consultants and contractors, as opposed to proprietary programming by a single consultant, which creates time and cost inefficiencies and encourages competitive pricing. The upgrade will also fully integrate system data into the existing monitoring screens located on the main computers at the Glenwood Plant.

Staff discussed this item in detail at the July 20, 2021, Engineering Committee (see attached staff report). It was recommended to move forward with a pilot program at Well 8 and Well 14. The pilot program was utilizing a collaborative workplan between Apex Manufacturing Services (APEX) on the design, and CVWD performing various parts of the installation.

DISCUSSION:

Staff initiated the pilot project in September 2021 and the workplan included the following:

- Building and installing new equipment
- Re-designing the SCADA open-source programming based on current and future operating conditions
- Documenting standard programming in an understandable and easy-to-use format
- Integrating the data into the existing SCADA system

The pilot conversion of SCADA upgrades was successfully completed in December 2021, which included on-site installation of the equipment and integration into the system.

The main goal of the pilot project at the two sites was to work through the details on all equipment, programming, and the integration into Wonderware (SCADA monitoring software); to gain a better understanding of the process with respect to time and costs. The budget estimate for the pilot project was \$35,000 and the final costs were recorded at \$38,500.

Next Steps:

The next step will be to take this information from the pilot program and provide an estimate of the costs and time frame to complete the remaining upgrades to the new system. Staff reviewed the remaining 25 sites with respect to new equipment needed, APEX programming, integration time, and CVWD staff time to complete the project which is shown below.

Task	No. of Sites	Avg. cost/site	Estimate of Cost	Comments
Equipment, Materials & Supplies	25	\$11,376	\$284,400	<u>Example:</u> Well Sites about \$7,000/ea. & Larger sites like Glenwood are about \$25,000/ea.
APEX - Programing & Integration	25	\$13,378	\$334,460	<u>Example:</u> Well Sites about 80 hours/ea.& Larger sites like Glenwood are about 160 hours/ea.
CVWD	25	\$1,846	\$46,140	<u>Example:</u> Well Sites about 40 hours/ea. & Larger sites like Glenwood are about 80 hours/ea.
Subtotal			\$665,000	
Contingency		10%	\$66,500	
Total			\$731,500	

Staff reviewed the overall project schedule to complete the upgrades relative to this year and next fiscal year CIP budgets. After discussion with the SCADA team, it was estimated that it will take about 14 to 16 months to complete the entire project. The project costs will fall within FY 21/22 & FY 22/23, and the final project close-out will be completed in FY 23/24.

The table below shows the breakdown of costs per fiscal year budget. Staff is planning to order most of the equipment for the sites before the end of FY 21/22 since the vendors for the equipment have indicated that there may be some savings with a large equipment order. Also, staff is aware of and will need to accommodate long lead times for the equipment, which have been estimated to be 10 to 12 weeks.

Task	% Complete	FY 21/22	% Complete	FY 22/23	% Complete	FY 23/24	Total
Equipment, Materials & Supplies	80%	\$227,520	20%	\$56,880	0%	\$-	\$284,400
APEX - Programing & Integration	25%	\$83,615	70%	\$234,122	5%	\$16,723	\$334,460
CVWD	25%	\$11,535	70%	\$32,298	5%	\$2,307	\$46,140
Subtotal		\$322,670		\$323,300		\$19,030	\$665,000
10% Contingency		\$32,267		\$32,330		\$1,903	\$66,500
Total		\$354,937		\$355,630		\$20,933	\$731,500

RECOMMENDATION:

It is staff's recommendation to the Engineering Committee for staff to proceed with finalizing the project costs for new equipment from Royal Industrial Solution. Once this cost is finalized, it is also staff's recommendation to bring this item to the next Board meeting for approval.

Prepared & Submitted by:



David S. Gould, P.E.

Director of Engineering & Operations

Attachment:

1. Engineering Committee Staff dated July 20, 2021
2. Apex Manufacturing Solutions Proposal dated February 25, 2022

CRESCENTA VALLEY WATER DISTRICT

STAFF REPORT

Information Item No. 1

July 20, 2021

To: Engineering Committee
From: David S. Gould, P.E. – Director of Engineering
Subject: Replacement of Supervisory Control and Data Acquisition (SCADA) System, Project E-939

BACKGROUND:

CVWD has an existing SCADA system with Programming Logic Controllers (PLCs) and Remote Terminal Units (RTUs) that were installed at each of the District's facilities that transmits information on the status of the water system, provides for the ability to remotely control the booster pump operation, and sends out system alarms to the System Operators when the water system parameters have been exceeded.

The existing RTU & PLC hardware, software, and programming were manufactured and installed by Tesco Controls Inc (Tesco) in 1996. As these devices were commissioned more than 25 years ago, they are nearing the end of their serviceable life and are increasingly hard to support as we move towards the future. Additionally, any modification to the programming of these devices or upgrades to the PLCs/RTUs can only be done by a representative from Tesco as the equipment and programming are proprietary to Tesco. This was very common during the development of SCADA equipment at that time. However, this process has become both time consuming and expensive for CVWD.

The existing Tesco SCADA system is outdated and needs to be modernized to meet today's goals. Staff has worked with Tesco to update programming over the years. However, the existing software platform, from 1996, has become obsolete and caused temporary outages, resulting in a significant increase in overtime labor hours needed to correct it and an appreciable loss in operational resiliency.

In 2018 CVWD initiated a system-wide SCADA review to identify a strategy for upgrading the current hardware and software to a modern version that applies best management principles and includes:

- Open architecture for programming and integration that a variety of consultants and vendors can more easily support.
- Utilization of an "off-the-shelf" industry-standard system for all components.
- Implementation of enhanced remote support capabilities.
- Provide support for basic remote site development.

As a result of the system-wide review, CVWD selected a new programmable automation controller, and supporting hardware, manufactured by Allen Bradley (A/B). A/B is the brand name for a line of factory automation equipment owned by Rockwell Automation, which has been part of the water/wastewater industry for decades. The hardware and programming logic for A/B equipment uses standard protocol that can be serviced by any certified technician or programmer.

Staff has also been working with Apex Manufacturing Services (APEX) for the past year on the installation of new A/B equipment that it used to collect limited data at specific sites, reset the radio communication controls, and for future control of the new sodium hypochlorite and liquid ammonia injection pumps required for chloramination. Currently, the existing Tesco SCADA system is working in parallel with the A/B equipment until the new A/B system is ready to fully implement.

It is Engineering and Operation's goal, as part of the FY 21/22 CIP program, to upgrade the SCADA system with newer equipment and programming based on industry standards, which can be repaired and/or replaced by a variety of consultants and contractors. This will also include integrating the data into the existing monitoring screens located on the main computers at the Glenwood Plant.

DISCUSSION:

As part of the planning process, staff reviewed several preliminary options and project schedules to accomplish the goal of upgrading CVWD's SCADA system by the end of 2022. Options included 1) working directly with APEX on the design, and CVWD's crews performing the work to install the system 2) using a consultant for the design and a contractor to install the system, 3) using a contractor to design/build the system, and 4) performing a pilot project at two (2) sites to work through the details on equipment, programming, and integrating into Wonderware (SCADA monitoring software) to gain a better understanding of the process with respect to time and costs. Attachment No. 1 shows a preliminary project schedule for each Option.

The preliminary schedules show that Options 1, 3 & 4 could be completed before the end of 2022 to meet our goal, and Option 2 would be completed towards the end of 2023. Staff proceeded to look further into Options 1, 3 & 4 as the next step. A concern that was brought up internally was that staff has not had any in-depth experience with replacing a SCADA system, and the additional time that may be needed for both CVWD crews, operations, and engineering for the design and installation.

After much consideration, staff determined that Option 4 (Pilot Program) would allow staff and APEX to work together on the programming and installation at a smaller scale and allow the team to get a better idea of the time and costs involved in the upgrade. The two (2) sites that we are looking at are Well 8 and Well 14 since these sites are close to the Glenwood Operations Facility and have a relatively small number of monitoring components such as flow, water level, pressure, and controls. Also, the programming and integration into the CVWD master computers could be used as a template for the other well sites.

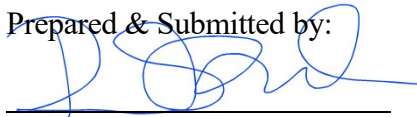
Project Budget:

Staff had budgeted \$610,000 for FY 20/21 and \$104,033 had been spent to date. For Budget FY 21/22, the Board approved a budgeted amount to \$374,000 as staff anticipated that a portion of the project will be completed in FY 20/21. The pilot program will allow staff to prepare a detailed budget for review at future Engineering Committee for any budget adjustments.

RECOMMENDATION:

Staff requested a quote from APEX for the programming, integration, and purchase of new equipment from Royal Industrial Solution, supplier of A/B equipment. The preliminary estimated cost for the pilot program will be \$35,000, and this project would be wrapped into the overall SCADA system project. It is Staff's recommendation to proceed with the pilot project and bring this item to the next Board meeting for approval.

Prepared & Submitted by:



David S. Gould, P.E.
Director of Engineering

Attachment:

1. Project Schedule Options

CRESCENTA VALLEY WATER DISTRICT

STAFF REPORT

Information Item No. 2
March 3, 2022

To: Engineering Committee
From: Brook Yared, M.S., P.E. – Engineering Manager
Subject: Annual Contract for Booster Pump and Well Emergency and Maintenance Services

INFORMATION ITEM:

Annual Contract for Booster Pump and Well Emergency and Maintenance Services – Discussion regarding utilizing a pump contractor to provide annual pump and well rehabilitation services, as well as annual pump maintenance services and emergency pump services.

BACKGROUND:

CVWD has twelve (12) groundwater wells with pumps and 34 booster pumps to move the water from the lower pressure zones to the higher-pressure zones. As staff prepares the annual Capital Improvement Project (CIP) program, projects are included for the replacement and rehabilitation of at least one of CVWD's wells and at least one booster pump per year.

A goal of CVWD's strategic plan is for CVWD to become proactive on pump maintenance instead of being reactive when a pump or motor fails. To meet this goal, staff is looking into having a pump contractor, that has extensive field pump experience to provide semi-annual maintenance services including recommendation reports on all CVWD's pumps and motors.

Another goal of CVWD's strategic plan is to have contractors available to provide emergency services during a man-made or natural emergency event. A great concern of staff is that, if an emergency event happens, contractors (not under contract) may not be available, as they will be serving other agencies.

DISCUSSION:

Staff met with General Pump Company about an annual pump contract since they have similar contracts with the Cities of Arcadia, Pasadena, and Glendora. They provided a sample request for proposal (RFP) for us to review, and staff utilized this to put together a draft RFP (see attached) for annual pump services. The RFP is broken out into four (4) sections as listed below:

1. Annual Groundwater Well Rehabilitation:

Staff has developed a detailed standard approach to well rehabilitation that can be used by a pump contractor as part of an annual well rehabilitation program. Staff has been investigating ways to improve our daily efficiency as we focus on our ever-increasing volume of annual pipeline replacements.

Typically, as part of the planning for a well rehabilitation project, there is a design period, advertising for bid period, and award of contract period that could take up to two (2) months before actual work by a contractor can begin. Also, the well rehabilitation needs to be scheduled during the winter season, when there is low water demand. If we decided to go to a consulting engineering firm for assistance, this time frame could be increased by another 8 to 12 weeks.

To assist staff, we are recommending that we have an annual pump contract such that staff will work with a pump contractor on the design and construction for well rehabilitation. This will eliminate the time lag between the start of design and mobilization on-site. The proposed construction cost for well rehabilitation will be based on the agreed upon contractor's fee schedule and scope of work. The final contract amount will be reviewed by staff and brought to the Board of Directors for final approval.

2. Annual Booster Pump Rehabilitation

Staff has also developed a standard approach to booster pump replacement that could be used by a pump contractor as part of the annual booster pump rehabilitation, such that staff will be able to focus on the annual pipeline replacement program.

As discussed above, part of the planning for a booster pump project, there is a period that could take up to two to three months before actual work by a contractor can begin. Therefore, staff is also recommending that we include this task as part of the annual pump contract with staff and pump contractor work on the design and construction for a booster pump. This will eliminate the time lag between the start of design and mobilization on-site.

The proposed cost for booster pump rehabilitation will be based on the agreed upon contractor's fee schedule and scope of work. The final contract amount will be reviewed by staff and brought to the Board of Directors for final approval.

3. Annual Booster Pump Inspection and Maintenance Service

As stated above, staff's objective as part of CVWD's strategic plan is to become proactive on pump maintenance. To meet this objective, staff will need the assistance of a pump contractor, to provide semi-annual maintenance and inspection services such as motor maintenance, pump efficiency, and visual inspection of all CVWD's pumps and motors at least twice a year. The pump contractor will also be required to provide an inspection report with recommendation that can be used by staff for prioritization of pump and motor replacement or rehabilitation in the following years.

4. Emergency Pump & Motor Services

Another objective of CVWD's strategic plan is to have contractors available to provide emergency services during a man-made or natural emergency event. To meet this objective, staff has included in the RFP, for a contractor to provide emergency services and to be responsive to CVWD's request within 24-hours of the event. The contract will be based on the agreed upon contractor's fee schedule, response time and availability of materials and will eliminate the need to chase around for an available pump contractor during an event.

Pump Contractors:

CVWD has utilized several pump contractors over the years, and the main issues that we have seen is a pump contractor being over extended, not providing timely service, not having material on-site and breaking down of equipment. General Pump Company has provided the best service compared to other contractors and their last well rehabilitation they performed for CVWD was completed within 3 months as compared to 5 to 6 months with other contractors. In addition, General Pump has demonstrated a high level of expertise with respect to knowledge on pump design and well rehabilitation. Also, they have a large inventory of material and equipment is in good shape. Finally, they are among a small group of firms that has engineers and hydrogeologists on staff to assist with revising our standard well rehabilitation approach in the face of unique challenges.

Project Costs:

For FY 21/22, CVWD has an available budget \$158,000 for the rehabilitation of Well 9 and the replacement of Booster 26 at Cresta Heights. The budgeted amount will need to be increased to accommodate the time and effort of General Pump Company to manage this year's well and booster pump CIP.

Prior to moving forward with work for a particular project, staff will request a quote from General Pump Company detailing the requested services to be provided. Staff would then review the scope of work, and if it is within the amount budgeted for annual contract, staff will bring the project to the Board of Directors for final approval.

FY 21/22 - Contract Cost Estimate:

Staff reviewed General Pump's fee schedule and estimated the project costs for the rehabilitation of Well 9 and the replacement of Booster #26 at Cresta Heights as discussed below.

Well Rehabilitation:

Past well rehabilitation projects for the District have included contributions of staff's time, which is estimated at a cost between \$85,000-\$110,000. Based on estimates General Pump's fee schedule, staff estimates the cost of having General Pump manage the rehabilitation of Well 9 would be around \$144,500. The scope of work for the rehabilitation of Well 9 would include the following:

- Removal of the existing pump and motor assembly
- Wire brushing & removal of sediment by bailing
- Pre-rehabilitation CCTV inspection of well casing
- Review inspection data and make rehabilitation recommendations
- Procurement of a new pump and motor assembly
- Mechanical development of the well
- Chemical treatment of well casing using acids and dispersants
- Advanced treatment, options of the well casing (i.e., Sonar Jetting, Air Bursting)
- Post-rehabilitation CCTV of well casing
- New pump and motor assembly installation
- Discharge requirements per NPDES best management practices
- Pump startup and testing
- Return well to service: well disinfection and DDW approval
- As built and report submission

Booster Pump Rehabilitation

Booster Pump rehabilitation or replacement does not involve as much rehabilitation work. However, pumps are generally larger and more expensive based on the pump capacity. The average booster pump replacement cost ranges from \$22,000 to \$40,000, depending on the size of the pump. To replace Booster #26 at Cresta Heights, staff estimates the cost of having General Pump manage the project will be around \$49,400. The scope of work for Booster 26 at Cresta Heights includes the following:

- Assessment of pump failure at the site, if necessary (vibration analysis, power surge)
- Remove pump and motor assembly
- Perform inspection of existing pump and motor for reporting
- Review inspection data and make rehabilitation recommendations
- Assess line shaft and column pipe for refurbishment or replacement
- Procure the new pump & motor assembly plus all necessary column piping or appurtenances
- Install new pump and motor after staff review.
- Start up and testing
- As built and report submission

This bringing the total cost estimate for the planned booster pump and well maintenance in FY 21/22 to approximately \$193,600, which is \$35,600 above the budget of \$158,000 for this fiscal year.

Annual Booster Pump Inspection and Maintenance Service

Staff reviewed General Pump's rate schedule for providing semi-annual maintenance and inspection services for all CVWD's pumps and motors and provide an inspection report with recommendation. Staff has estimated the annual cost for pump maintenance and inspection services for FY 21/22 (one inspection) to be approximately \$65,000. and will be included in the Booster Pump Maintenance expense account.

Emergency Pump & Motor Services

Staff reviewed General Pump's rate schedule for providing emergency pump and motor services and estimated the annual cost to be around \$20,000 if we need service. This amount will be included in the Emergency Operations expense account.

SUMMARY:

Staff put together a preliminary cost estimate for an annual contract for booster pump and well emergency and maintenance services for the remainder of FY 21/22 at \$265,900 by General Pump (see table below). Staff compared this estimate of \$195,000 funding available in the FY 21/22 CIP & expense budget. However, not included in the FY 21/22 CIP & expense budget is labor hours, which is estimated to be about 360 man-hours, necessary by CVWD's Water Production and Engineering Departments to perform this work effort. In addition, these in-house man-hours could be dedicated to other tasks such as infrastructure & water treatment maintenance, training, and other duties.

Id No.	FY 21/22 Booster Pump and Well Emergency and Maintenance Services	Estimated Annual Cost
1	Well Rehabilitation	\$144,500
2	Booster Pump Rehabilitation	\$49,400
3	Annual Booster Pump Inspection and Maintenance Service	\$52,000
4	Emergency Pump & Motor Services (contingency)	\$20,000
	Grant Total	\$265,900

It is staff's recommendation to formalize the RFP and send to General Pump Company for a quote. Once the costs are finalized, it is staff's recommendation to bring this item to a future Board meeting for approval.

Prepared by:


Brook Yared, M.S., P.E.
Engineering Manager

Submitted by:


David S. Gould, P.E.
Director of Engineering & Operations

Attachments:

1. CVWD's Request for Proposals
2. General Pump Company's Rate Sheet

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CRESCENTA VALLEY WATER DISTRICT

STAFF REPORT

Information Item No. 3

March 3, 2022

To: Engineering Committee
From: David S. Gould, P.E. – Director of Engineering & Operations
Subject: Status Update - FY 21/22 Capital Improvement Project Budget

DISCUSSION:

The following is an update of the FY 21/22 Capital Improvement Project status and budget update.

1. 2800 to 3100 Blocks of Los Olivos (E-1033)

- a. Award to Brkich Construction
- b. Start Construction – 3/7/22
- c. End Construction – July 2022
- d. Budget

Account Description	Amount
FY 21/22 Water Distribution Pipeline Replacement for E-1033	\$1,500,000
E-1033 - 2800-3100 Los Olivos Ln., - Contract Bid	(\$945,600)
E-1033 - 10% Contingency for cost of unforeseen or additional work	(\$94,560)
E-1033 - Tetra Tech - Engineering Design Services	(\$56,200)
E-1033 - Dudek - Construction Management & Inspection Services	(\$142,230)
E-1033 - Additional costs such as material purchased by CVWD, soils engineer, and CVWD labor costs	(\$265,086)
Total Cost Estimate	(\$1,503,676)
Amount Remaining	(\$3,676)

2. 3200 Block of Alabama 4700 & 4800 Blocks of Cheryl & 3300 Block of Thelma St (E-1034)

- a. Advertising for Bids – 1/31/22
- b. Bid Opening – 3/1/22
- c. Award of Contract – 3/8/22
- d. Start Construction – 4/4/22
- e. End Construction – July 2022
- f. Budget

Account Description	Amount
FY 21/22 Water CIP– Water Distribution Pipeline Replacement	\$1,100,000
E-1034 Engineer's Cost Estimate for Contractor	(\$447,750)
E-1034 - 10% Contingency for cost of unforeseen or additional work	(\$44,775)
E-1034 - Tetra Tech - Engineering Design Services	(\$56,200)
E-1034 - Estimate for Construction Management & Inspection Services	(\$124,900)
Additional costs such as material purchase by CVWD, soils engineer & inspection labor costs	(\$176,375)
Total Cost Estimate for Project E-1034	(\$850,000)
Amount Remaining in Water CIP – Distribution System	\$250,000

3. FY 20/21 – Pipeline Replacement Projects – Carryover to FY 21/22

- a. E-1022 – Project completed in October 2021, finalizing change orders and project close out.

FY 20/21 Pipeline Replacement Program Cost Update: 03/03/2022	E-Job	Recorded FY 20/21	Budget FY 21/22	FY 21/22 Cost to date from 7/1/21 to 1/31/21	FY 21/22 Cost Committed from 2/1/22 to 6/30/22	Projected FY 21/22
2400 & 2500 Blocks of Janet Lee	E-1008	\$ 861,188		\$ 59,703		
4300 Block of Rosemont	E-1019	\$ 39,407		\$ 1,272		
3400 & 3500 Block of Encinal	E-1021	\$ 760,569		\$ 29,759		
4800 block of Dyer, 2800 block of El Caminito, 4800 block of Glenwood, 2800 block of Stevens & 2700 block of Paraiso Way	E-1022	\$ 175,758		\$ 638,477		
FY 20/21 Pipeline Replacement		\$1,836,922	\$400,000	\$ 729,212	\$ -	\$729,212

4. New Pressure Reducing Station & Rehabilitation of the Ramsdell Mixing Station (E-977)

- a. 90% design under review by staff
b. Preliminary Construction Cost Estimate – \$1.2M
c. Staff working with Cannon on budget and construction schedule

5. Steel Reservoir Rehabilitation at Edmund #2 (E-1036)

- a. Contract awarded to J. Colon Coatings Inc.
b. Structural work completed
c. Coating Work – Started Feb 2022
d. Project anticipated to be completed – April 2022

Account Description	Amount
FY 21/22 Water CIP– Water Storage	\$590,000
E-1036 - J. Colon - Contract amount	(\$623,100)
E-1036 - Harper & Associates - Engineering Design Services	(\$14,000)
E-1036 - Harper & Associates - Quality Control Inspection Services	(\$36,020)
Additional Costs such as CVWD labor costs	(\$22,880)
Total Cost Estimate for Project E-1036	(\$696,000)
Amount Remaining in Water CIP – Water Storage	(\$106,000)

6. Well 9 Rehabilitation

- a. In Design
b. Working with General Pump Company on Annual Well & Pump Rehabilitation Contract

7. Booster 26 at Cresta Heights Replacement

- a. In Design
b. Working with General Pump Company on Annual Well & Pump Rehabilitation Contract

8. Replacement of SCADA communication radio network (E-1025)

- a. Behind Schedule
b. Developing Scope of Work

9. Replacement of SCADA Equipment, Programing & Integration (E-939)

- a. Pilot Project for Wells 8 & 14 – Complete
b. See Staff Report

10. Conversion of Disinfection System to Chloramines (E-995)

- a. Behind Schedule
b. Working on Scope of Work

11. AMI – Customer Engagement Platform (E-1035)

- a. Working with WaterSmart on transferring data
- b. Reviewing “Welcome Letter” to customers
- c. Weekly meetings

12. AMI – Installation of ¾” & 1” meters (E-1035)

- a. Completing installation of ¾” & 1” meters within Zone 1
- b. Held planning meeting for installation of about 1,000 SmartPoints in Zone 1

13. AMI – Installation of 3” & 4” meters (E-1031)

- a. Waiting on USBR to finalizing Agreement
- b. Meeting in February 2022 to start survey of 3” & 4” meters

14. FEMA Local Hazard Mitigation Plan (M-1004)

- a. Applied for Notice of Intent (NOI) with FEMA for two (2) projects
- b. Project 1 – New emergency electrical generators at 5 sites application due 4/8/22
- c. Project 2 – Seismic Evaluation of CVWD’s facilities application due 4/8/22

FY 2021/21 CIP Budget

See attached for updated CIP Budget

RECOMMENDATION:

Staff’s recommendation is to continue to provide updated information to the Engineering Committee as the FY 21/22 CIP program progress over the next 3-months.

Prepared & submitted by:



David S. Gould, P.E.
Director of Engineering & Operations

FY 21/ 22 Capital Improvement Project Program Cost Update: 03/03/2022	E-Job	Recorded FY 20/21		Budget FY 21/22	<i>FY 21/22 Cost to date from 7/1/21 to 1/31/21</i>	<i>FY 21/22 Cost Committed from 2/1/22 to 6/30/22</i>	Projected FY 21/22
1. Water Supply		\$ 153,866		\$ 135,000	\$ 4,640	\$ 134,908	\$ 139,548
2. Water Storage		\$ 663,213		\$ 616,900	\$ 56,610	\$ 667,907	\$ 724,516
3A. Water Distribution - Pipeline - Pyramid - 20 yrs		\$ 1,838,368		\$ 3,000,000	\$ 1,043,714	\$ 2,039,173	\$ 3,082,888
3B. Water Distribution - Other		\$ 139,017		\$ 781,000	\$ 48,198	\$ 732,802	\$ 781,000
4. Water Treatment		\$ 54,073		\$ 75,000	\$ -	\$ 75,000	\$ 75,000
5. Technology		\$ 466,671		\$ 1,019,000	\$ 150,586	\$ 871,414	\$ 1,022,000
6. Public Safety/Emergency Response		\$ 134,549		\$ 30,450	\$ 27,548	\$ 2,902	\$ 30,450
7. Facilities & Planning		\$ 3,956		\$ -	\$ -	\$ -	\$ -
Capital Improvement Projects - Total		\$ 3,453,712		\$ 5,657,350	\$ 1,331,295	\$ 4,524,106	\$ 5,855,402
Bond Financing - CIP		\$ 2,695,174		\$ 2,304,826			\$ 2,304,826
Water Distribution - Pipeline Total				\$ 3,000,000			\$ 3,082,888
Remaining CIP				\$ 2,657,350			\$ 2,772,514
Water Fund Financing - CIP		\$ 758,538		\$ 3,352,524			\$ 3,550,576
Total Financing - CIP		\$ 3,453,712		\$ 5,657,350			\$ 5,855,402

FY 21/ 22 Capital Improvement Project Program Cost Update: 03/03/2022			E-Job	Recorded FY 20/21	Budget FY 21/22	FY 21/22 Cost to date from 7/1/21 to 1/31/21	FY 21/22 Cost Committed from 2/1/22 to 6/30/22	Projected FY 21/22
4. Water Treatment								
C. Disinfection - Convert to Chloramines								
	Conversion to Chloramination	E-995	\$	54,073	\$ 75,000	\$ -	\$ 75,000	\$ 75,000
WT Total			\$	54,073	\$ 75,000	\$ -	\$ 75,000	\$ 75,000
5. Technology								
A. Automated Meter Information (AMI) System								
	AMI - Communication	E-1020	\$	215,080				
	3" & 4" Smart Meters	E-1031	\$	1,004	\$ 200,000	\$ 834	\$ 199,166	\$ 200,000
	AMI - 3/4" to 1" - Smart Meters	E-1035	\$	71,693	\$ 233,000	\$ 8,751	\$ 224,249	\$ 233,000
	AMI - Customer Service Interface	E-1035			\$ 87,000	\$ 45,860	\$ 41,140	\$ 87,000
	AMI - USBR Grant	E-1041			\$ -	\$ 1,572	\$ 1,428	\$ 3,000
B. Supervisory Control and Data Acquisition (SCADA) System								
	Communication Radio Network	E-1025	\$	72,917	\$ 125,000	\$ 17,610	\$ 107,390	\$ 125,000
	SCADA Replacement - Installation	E-939	\$	105,977	\$ 374,000	\$ 75,959	\$ 298,041	\$ 374,000
TECH Total			\$	466,671	\$ 1,019,000	\$ 150,586	\$ 871,414	\$ 1,022,000
6. Public Safety/Emergency Response								
D. Miscellaneous								
	FEMA Local Hazard Mitigation Plan	M-1004	\$	134,549	\$ 30,450	\$ 27,548	\$ 2,902	\$ 30,450
SF/ER Total			\$	134,549	\$ 30,450	\$ 27,548	\$ 2,902	\$ 30,450
7. Facilities & Planning								
D. Reservoir Site Improvements								
	Roof for Old Encinal - Storage Bldg	E-1027	\$	3,956				
F & P Total			\$	3,956	\$ -	\$ -	\$ -	\$ -
Capital Improvement Projects - Total			\$	3,453,712	\$ 5,657,350	\$ 1,331,295	\$ 4,524,106	\$ 5,855,402

CRESCENTA VALLEY WATER DISTRICT

MEMORANDUM

DATE: March 3, 2022
TO: Engineering Committee
FROM: David S. Gould, Director of Engineering & Operations
SUBJECT: CVWD Engineering Committee Meeting No. 331

Following is a summary of Engineering Committee Meeting No. 331, held at 3:00 PM on March 3, 2022, via Zoom Teleconference, and was attended by the following:

Director Kerry Erickson – Committee Chairperson	CVWD
Director Ken Putnam	CVWD
David Gould – Director of Engineering & Operations	CVWD
Brook Yared – Engineer Manager	CVWD
Nemesciano Ochoa – General Manager	CVWD
James Lee – Director of Finance & Administration	CVWD
Arturo Montes – Finance & Administration Manager	CVWD
Darlene Telles - Operations & Maintenance Manager	CVWD
Pam Leddy – Administrative Assistant	CVWD
Jennifer Bautista – Project Coordinator	CVWD

Information Items

1. Discussion of the Replacement of the Supervisory Control and Data Acquisition of SCADA System, Project E-939

Mr. Gould began by providing a background of CVWD's existing SCADA system with Programming Logic Controllers (PLCs) and Remote Terminal Units (RTUs). Mr. Gould explained that Staff had included this project as part of the FY 21/22 CIP program to upgrade the SCADA system with newer equipment and programming.

In July 2021, it was recommended that Staff move forward with a pilot program for Wells 8 and 14. The pilot program utilized a collaborative work plan between Apex Manufacturing Services (APEX) on the design, and CVWD performed various installation parts. In the fall of 2021, Staff initiated the pilot project pilot conversion of SCADA upgrades was completed in a timely manner. The budget estimate for the pilot project was \$35,000, and the final cost was \$38,500.

Mr. Gould then explained that the next step was for Staff to take the information from the pilot program and provide an estimate of the costs and time frame to complete the remaining upgrades to the new system. Staff reviewed the remaining 25 sites with respect to new equipment needed, APEX programming, integration time, and CVWD staff time to complete the project. Mr. Gould presented a table showing the task, number of sites, average cost, and estimate of costs for each of the tasks in this project. The table shows a subtotal of \$665,000, a 10% contingency, for a total of \$731,500.

Mr. Gould also presented an overall project schedule to complete the upgrades relative to CIP budgets this year and next year. After a discussion with the SCADA team, it was estimated that it would take about 14 to 16 months to complete the entire project. The project costs will fall within FY 21/22 & FY 22/23, and the final project close-out will be completed in FY 23/24.

It is Staff's recommendation to the Engineering Committee for Staff to proceed with finalizing the project costs for new equipment from Royal Industrial Solution. Mr. Gould to increase the contingency from 10% to 15% as recommended by the Engineering Committee.

2. Discussion of Annual Well and Pump Maintenance Service Contract

Mr. Gould provided a background of CVWD's twelve (12) groundwater wells and thirty-four (34) booster pumps within the water distribution system.

Mr. Gould discussed CVWD's goal for strategic planning for pump maintenance. The goal is for CVWD to become proactive on pump maintenance rather than reactive when a pump or motor fails. To meet this goal, Staff is looking into an annual contract with a pump company with extensive field pump experience to provide semi-annual maintenance services, including recommendation reports on all CVWD's pumps and motors.

As part of the strategic plan, Staff would also like to have a contractor available for emergency services such as water service interruption caused by natural or man-made disasters, such as water service interruption during a power outage or earthquake.

Mr. Gould explained that Staff met with General Pump Company about an annual contract. General Pump provided a sample request for proposal for us to review. Staff created an RFP broken up into four (4) sections:

1. Annual Groundwater Well Rehabilitation
2. Annual Booster Pump Rehabilitation
3. Annual Booster Pump Inspection and Maintenance Service
4. Emergency Pump & Motor Services with a fixed cost

Mr. Gould reviewed the details and presented a table for the Estimated Annual Cost for FY 21/22 Booster Pump and Well Emergency and Maintenance Services for each of the four (4) sections in the RFP. The total estimated annual cost is \$265,000.

Staff's recommendation is to formalize the RFP and request a proposal from General Pump Company. Once the costs are finalized, it is Staff's recommendation to bring this item to a future Board meeting to approve an annual contract.

Mr. Gould added that General Pump Company had provided the best service compared to other contractors, demonstrated a high level of expertise in pump design, well rehabilitation and has a large inventory of materials that reduces the lead time and General Pump has staff available to assist with revising our standard well rehabilitation approach in the face of unique challenges.

Director Erickson and Director Putman request that Staff work on the item and bring it back to the Engineering Committee for further review.

3. Update of FY 21/22 CIP Budget and Schedule

Mr. Gould began by providing an update on the first pipeline replacement project for FY 21/22 on the 2800 to 3100 blocks of Los Olivos Lane, Project E-1033. Mr. Gould informed the Engineering Committee that construction begins on Monday, March 7, 2022.

Mr. Gould provided an update on the second pipeline replacement project for FY 21/22 on Alabama Street, Cheryl Avenue, and Thelma Street, Project E-1034. Mr. Gould informed the Committee that Thelma Street and a portion of Cheryl was from the project to bring down the cost of construction.

Mr. Gould updated the Committee on the FY 20/21 pipeline replacement project on the 4800 block of Dyer Avenue, 2800 block of El Caminito Street, 4800 block of Glenwood Avenue, 2800 block of Stevens Street, and the 2700 block of Paraiso Way, Project E-1022 was completed.

Mr. Gould updated the Committee on the New Pressure Reducing Station and Rehabilitation of the Ramsdell Mixing Station, Project E-977. Staff is in the design phase, and the preliminary estimate is \$1.2M. Staff is looking to reduce the cost of the project.

Mr. Gould provided an update of construction project at Edmund No.2, Project E-1036. J. Colon is currently working on the sandblast and coating. There have been no noise complaints. The anticipated end of construction date is April 2022.

Mr. Gould indicated that the Well 9 Rehabilitation and Booster 26 at Cresta Heights Replacement projects were discussed in Item No. 2 of the agenda.

Mr. Gould provided an update on the Replacement of the SCADA Communication Radio Network, Project E-1025. Staff is working on the scope of work. Mr. Gould informed the Committee that the project might be transferred to the FY22/23 CIP budget.

Mr. Gould discussed the Replacement of SCADA Equipment, Programming, and Impregnation, Project E-939, during Item No.1 of the agenda.

Mr. Gould informed the Committee that Staff is behind schedule but currently working on converting the Disinfection System to Chloramines, Project E-995.

Mr. Gould provided an update on the AMI Customer Engagement Platform (CEP), Project E-1035. Mr. Gould informed the Committee that the integration process of transferring data between Sensus Analytics, Springbrook, and WaterSmart had been completed. Staff will work on the design of the CEP. The goal is to have the CEP available to customers by May 2022. Staff will present a sample Welcome Letter to the Board on March 22, 2022, for discussion.

Mr. Gould updated the Committee on the installation of ¾-inch and 1-inch AMI meters within Zone 1. The goal is to install the SmartPoints and AMI meters for Zone 1 by July 2022.

Mr. Gould informed the Committee that Staff is waiting on USBR to finalize the Agreement for grant funding of the Installation of AMI 3-inch and 4-inch meters, Project E-1031.

Mr. Gould presented an update for the FEMA Local Hazard Mitigation Plan, Project M-1004. FEMA approved the two projects CVWD applied under Notice of Intent (NOI), 1) New emergency electrical generators at five (5) sites and 2) Seismic Evaluation of CVWD's facilities. Staff is working with Tetra Tech to submit sub-applications for each project by the deadline of April 8, 2022.

Mr. Gould reviewed the FY 21/22 Capital Improvement Project Program Cost Update. The table shows the current FY 21/22 to be about \$5.9M. The remaining balance of \$2.3M from Bond Financing will be utilized to construct pipelines.

Committee Member's Request for Future Agenda Items – No request

Next Meeting

- Next meeting scheduled for April 7, 2022, at 3:00 pm. Director Erickson requested to receive the next Engineering Committee packet at least a week before the next meeting. Staff will provide the packet by April 1, 2022

Adjournment - The Engineering Committee meeting was adjourned at 3:58 pm on March 3, 2022.