CRESCENTA VALLEY WATER DISTRICT

2700 FOOTHILL BOULEVARD
LA CRESCENTA, CALIFORNIA

To be held on
May 17, 2022 at 3:00 PM

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

Posted May 13, 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: 884 5494 0877

[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/88454940877

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 Preliminary FY 22/23 Capital Improvement Project Budget

2. Status Update - FY 21/22 Capital Improvement Project Budget

Committee Member's Request for Future Agenda Items

Next Engineering Committee Meeting – June 21, 2022, at 3:00 pm

Adjournment

CRESCENTA VALLEY WATER DISTRICT
STAFF REPORT

Information Item No. 1

To: Engineering Committee May 17, 2022

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

Subject: Discussion of Preliminary FY 22/23 Capital Improvement Project Budget

BACKGROUND:

Staff presented the preliminary FY 22/23 Capital Improvement Project Budget (CIP) based on the Board discussion on May 10, 2022, to revise the CIP budget to $5M per year for the next 3-years in accordance with the 3-year rate increase.

DISCUSSION:

Attached are the draft FY 22/23, FY 23/24 & 24/25 CIP budgets for review and discussion. A major element of the CIP budget is the pipeline replacement schedule. Last year, staff prepared a "Ramp-up" plan to increase the amount of pipeline from 5,450 LF (1 mile) to 13,300 LF (2.5 miles) within the next ten years and then reduce it back to 1 mile of pipeline replacement for the next 10 years.

The revised 3-year budget includes a reduction of pipeline replacement, as shown in the table below.

"Ramp-up" Pipeline Replacement Schedule						
FY	Pipeline Replacement LF/Yr	Cumulative Pipeline Replacement LF/Yr	Revised Pipeline Replacement LF/Yr	Revised Cumulative Pipeline Replacement LF/Yr	Cost/LF	Estimated Construction Cost
2022	5,450	5,450	5,150	5,150	$ 475	$ 2,588,750
2023	6,300	11,750	2,420	7,570	$ 496	$ 3,130,000
2024	7,200	18,950	3,700	11,270	$ 519	$ 3,730,000
2025	8,200	27,150	4,580	15,850	$ 542	$ 4,440,000
2026	9,400	36,550	20,700	36,550	$ 566	$ 5,320,000
2027	11,100	47,650	11,100	47,650	$ 592	$ 6,570,000
2028	12,300	59,950	12,300	59,950	$ 619	$ 7,610,000
2029	12,400	72,350	12,400	72,350	$ 646	$ 8,020,000
2030	13,300	85,650	13,300	85,650	$ 675	$ 8,980,000
2031	14,500				$ 706	$ 10,240,000
2032	15,500				$ 738	$ 11,430,000
2033	14,600				$ 771	$ 11,250,000
2034	14,000				$ 806	$ 11,280,000
2035	13,200				$ 842	$ 11,110,000
2036	12,400				$ 880	$ 10,910,000
2037	11,700				$ 919	$ 10,760,000
2038	11,000				$ 961	$ 10,570,000
2039	10,000				$ 1,004	$ 10,040,000
2040	9,500				$ 1,049	$ 9,970,000
2041	8,400				$ 1,096	$ 9,210,000
2042	8,105				$ 1,146	$ 9,280,000
Total	228,555					$ 176,438,750

The table shows that in FY 25/26, 20,700 LF (or 3.9 miles) will have to be installed to get the pipeline ramp-up program back on track.

The other major projects for this coming fiscal year include reservoir rehabilitation, continuation of AMI program, continuation of the SCADA replacement, and design of 5 new emergency electrical generators, stormwater recharge – planning, conversion to chloramines and Annual Booster Pump Replacement,

SUMMARY:

This revised CIP is being presented for discussion with the Engineering Committee and will be presented at the next Board of Directors.

Prepared & Submitted by:

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

FY 2022/23 CIP Budget $5M/year for next 3-years Date: 5/13/22	Budget FY 21/22	Projected FY 21/22	Budget FY 22/23	Forecast FY 23/24	Forecast FY 24/25	Forecast FY 25/26	Forecast FY 26/27
5-Year Capital Improvement Project Summary							
1. Water Supply	$ 135,000	$ 9,048	$ 219,000	$ 145,000	$ 154,000	$ 159,000	$ 264,000
2. Water Storage	$ 590,000	$ 724,201	$ 800,000	$ 865,000	$ 1,070,000	$ 3,055,000	$ 1,275,000
3A. Water Distribution - Pipeline -10-Yr Ramp up	$ 3,000,000	$ 3,098,759	$ 2,587,000	$ 2,369,000	$ 2,912,000	$ 2,200,000	$ 5,800,000
3B. Water Distribution - Other	$ 781,000	$ 54,000	$ 50,000	$ 552,000	$ 520,000	$ 490,000	$ 148,000
4. Water Treatment	$ 75,000	$ -	$ 100,000	$ -	$ -	$ -	$ 225,000
5. Technology	$ 1,019,000	$ 858,075	$ 1,100,000	$ 485,000	$ 225,000	$ 975,000	$ 750,000
6. Public Safety/Emergency Response	$ 30,450	$ 30,450	$ 170,000	$ 518,000	$ 150,000	$ 890,000	$ 898,000
7. Facilities & Planning	$ -	$ -	$ -	$ 101,000	$ -	$ 150,000	$ -
Capital Improvement Projects - Total	$ 5,630,450	$ 4,774,533	$ 5,026,000	$ 5,035,000	$ 5,031,000	$ 7,919,000	$ 9,360,000

FY 2022/23 CIP Budget $5M/year for next 3-years Date: 5/13/22	Budget FY 21/22	Projected FY 21/22	Budget FY 22/23	Forecast FY 23/24	Forecast FY 24/25	Forecast FY 25/26	Forecast FY 26/27
1. Water Supply							
A. Groundwater Water Supply							
i. Well Rehabilitation							
Well 12 Rehabilitation	$ -	$ 4,548					
Well 9 Rehabilitation	$ 105,000	$ -					
Well Rehabilitation (1 Well per year)			$ 144,000	$ 145,000	$ 154,000	$ 159,000	$ 264,000
ii. New Wells							
iii. Groundwater Basin Recharge							
Stormwater Recharge Project at CVC Park - Planning	$ 30,000	$ 4,500	$ 75,000				
B. Imported Water Supply							
C. Recycled Water System							
i. Recycled Water							
ii. Membrane Bioreactor Technology (MBR)							
D. Water Supply Studies							
WS Total	$ 135,000	$ 9,048	$ 219,000	$ 145,000	$ 154,000	$ 159,000	$ 264,000
2. Water Storage							
A. Reservoir Rehabilitation							
i. Steel Reservoir Rehabilitation							
Markridge							
Rosemont		$ 26,929					
Oak Creek - 16" Manifold Repair		$ 1,272					
Edmund #2	$ 590,000	$ 696,000					
Goss Canyon #1			$ 800,000				
Goss Canyon #2				$ 865,000			
Shields					$ 1,070,000		
Eagle Canyon						$ 2,755,000	
Dunsmore							$ 950,000
ii. Concrete Reservoir Rehabilitation							
iii. Steel Reservoir Corrosion Protection System							
Cathodic Protection Inspection & Replacement							$ 100,000
iv. Overflow & Drain System Upgrade							
B. Reservoir Water Quality							
i. Water Quality Mixing System							
Reservoir Mixing System - 4 Reservoirs						$ 300,000	
Reservoir Mixing System - 3 Reservoirs							$ 225,000
Reservoir Mixing System - 4 Reservoirs							
C. Water Storage Studies							
WS Total	$ 590,000	$ 724,201	$ 800,000	$ 865,000	$ 1,070,000	$ 3,055,000	$ 1,275,000

FY 2022/23 CIP Budget $5M/year for next 3-years Date: 5/13/22	Budget FY 21/22	Projected FY 21/22	Budget FY 22/23	Forecast FY 23/24	Forecast FY 24/25	Forecast FY 25/26	Forecast FY 26/27
3. Water Distribution							
A. Pipeline Replacement							
FY 20/21 Pipeline Replacement	$ 400,000	$ 731,033					
2800 to 3100 blocks of Los Olivos Lane - 3,400 LF	$ 1,500,000	$ 1,503,676	$ 713,100				
4700 Block of Cheryl & 3200 Block of Alabama - 1,750 LF	$ 1,100,000	$ 864,050	$ 523,400				
Pipeline Replacement Carry Over	$ 2,600,000	$ 2,367,726	$ 1,236,500				
Project 1: 2600 & 2700 Block of Orange (2425 LF)			$ 1,350,500				
Project 2: 3000 & 3100 Blocks of Alabama (1650 LF)				$ 990,000			
Project 3: 3400 & 3500 Blocks of Montrose (1150 LF)				$ 828,000			
FY 23/24 Pipeline Replacement (900 LF)				$ 551,000			
Project 4 : 2400 - 2600 Blocks of Upper Terrace (1380 LF)					$ 895,000		
FY 24/25 Pipeline Replacement (3200 LF)					$ 2,017,000		
Annual Pipeline Replacement			$ 2,587,000	$ 2,369,000	$ 2,912,000	$ 2,200,000	$ 5,800,000
C. Booster Pump System							
i. Annual Pump /Motor Replacement							
Annual Booster Replace - 1 Booster	$ 53,000	$ -	$ 50,000	$ 52,000	$ 54,000	$ 56,000	$ 58,000
ii. Pump Station Upgrade							
iii. Misc.							
Upgrade - Ramsdell Mixing Station	$ 728,000	$ 54,000	$ -	$ 500,000	$ 466,000	$ 434,000	
Mills Plant - Aeration Tower							$ 90,000
F. Water Distribution Studies							
WD Total	$ 3,781,000	$ 3,152,759	$ 2,637,000	$ 2,921,000	$ 3,432,000	$ 2,690,000	$ 5,948,000
4. Water Treatment							
A. Nitrate Removal							
i. Glenwood							
Replace Ion Exchange Resin at Glenwood							$ 150,000
ii. Mills							
iii. Ordunio							
Replace Bio Remediation ARoNite Membranes at Ordunio							$ 75,000
C. Disinfection - Convert to Chloramines							
Conversion to Chloramination	$ 75,000	$ -	$ 100,000				
D. Federal and State Regulations							
E. Water Quality Studies							
WT Total	$ 75,000	$ -	$ 100,000	$ -	$ -	$ -	$ 225,000

FY 2022/23 CIP Budget $5M/year for next 3-years Date: 5/13/22	Budget FY 21/22	Projected FY 21/22	Budget FY 22/23	Forecast FY 23/24	Forecast FY 24/25	Forecast FY 25/26	Forecast FY 26/27
5. Technology							
A. Automated Meter Information (AMI) System							
GRANT - 3" & 4" Smart Meters	$ 200,000	$ 200,000	$ 150,000				
AMI - 3/4" to 1" - Smart Meters	$ 233,000	$ 233,000					
AMI - Customer Service Interface	$ 87,000	$ 50,000					
GRANT - AMI - USBR Water Efficiency Grant	$ -	$ 2,000					
GRANT - 1-1/2" Smart Meters - USBR Grant			$ 335,000				
AMI - Meter Lids - Zones 9, 10 & 11			$ 220,000				
2" Smart Meters				$ 150,000			
AMI - Meter Lids - Zones 6, 7 & 8				$ -	$ 225,000	$ 225,000	
AMI - Meter Lids - Zones 1, 2, 3, 4 & 5						$ 750,000	$ 750,000
B. Supervisory Control and Data Acquisition (SCADA) System							
Communication Radio Network	$ 125,000	$ 25,000		$ 240,000			
SCADA Replacement - Installation	$ 374,000	$ 348,075	$ 395,000	$ 95,000			
C. Graphical Information System (GIS)							
TECH Total	$ 1,019,000	$ 858,075	$ 1,100,000	$ 485,000	$ 225,000	$ 975,000	$ 750,000
6. Public Safety/Emergency Response							
A. Emergency Electrical Generators							
New Emergency Electrical Generator - Paschall			$ 35,000			$ 310,000	$ 400,000
New Emergency Electrical Generator - Mills Plant			$ 35,000	$ 354,000			
New Emergency Electrical Generator - Wells 5, 7 & 9			$ 100,000			$ 315,000	$ 320,000
B. Water Storage							
Dunsmore/Pickens - Seismic Sensors & Valve Actuators				$ 120,000			
Ordunio - Seismic Sensors & Valve Actuators					$ 150,000		
Oak Creek #1 & #2 - Seismic Sensors & Valve Actuators						$ 175,000	
Encinal & Ocean View - Seismic Sensors & Valve Actuators							$ 150,000
C. Security							
Security Cameras - Reservoir Sites				$ 44,000			
Security Cameras - Well Sites						$ 65,000	
Security Cameras - Other Sites						$ 25,000	$ 28,000
D. Miscellaneous							
FEMA Local Hazard Mitigation Plan	$ 30,450	$ 30,450					
SF/ER Total	$ 30,450	$ 30,450	$ 170,000	$ 518,000	$ 150,000	$ 890,000	$ 898,000
7. Facilities & Planning							
A. Main Office							
Seismic Vulnerability Study - Main Office & Glenwood Plant			$ -	$ 101,000			
B. Glenwood Plant							
C. Mills Plant							
D. Reservoir Site Improvements							
Facilities Maintenance Master Plan						$ 150,000	
5. Misc. Properties							
6. District Planning							
F & P Total	$ -	$ -	$ -	$ 101,000	$ -	$ 150,000	$ -
Capital Improvement Projects - Total	$ 5,630,450	$ 4,774,533	$ 5,026,000	$ 5,035,000	$ 5,031,000	$ 7,919,000	$ 9,360,000

Crescenta Valley Water District

FY 22/23 Capital Improvement Project Priority List

Capital Improvement Project Program	Budget FY 22/23	Category	Priority	Cumulative Estimated Costs	Project Description
Annual Pipeline Replacement - 3,055 LF and FY 21/22 Pipeline Carryover Costs	$ 2,587,000	Water Distribution	1	$ 2,587,000	**Pipeline Replacement** - Project 1 - 2600 & 2700 blocks of Orange and 5000 Block of Adobe Ln and Carryover from FY 21/22
Steel Reservoir Rehabilitation - Goss Canyon #1	$ 800,000	Water Storage	1	$ 3,387,000	**Reservoir Rehabilitation** - Structural repairs and re-coating at Goss Canyon #1 Reservoir during low demand (Winter) season
Well 14 Rehabilitation	$ 144,000	Water Supply	1	$ 3,531,000	**Well Rehabilitation** - Remove & Inspect Well Pump & Casing, Chemical Treatment Well Casing, Pump Test, New Pump & Motor
Replacement - SCADA System	$ 395,000	Technology	1	$ 3,926,000	**Replacement of SCADA System** - ***Continuation from FY 21/22*** - Completion of the replacement of RTU/PLC Equipment including new equipment, programing, integration and testing
AMI - Replace 3" & 4" Smart Meters with SmartPoints (Grant)	$ 150,000	Technology	1	$ 4,076,000	**Advanced Metering Infrastructure (AMI) - *Continuation from FY 21/22*** Install 3" & 4" water meters with SmartPoints - **USBR Grant**
Annual Booster Pump Replacement	$ 50,000	Water Distribution	2	$ 4,126,000	**Booster Pump Replacement** - Replace 15-yr and older booster pump with new pump assembly and high efficiency motor - Replace Booster 26 at Cresta Heights Reservoir
AMI - Replace 1-1/2" Meters (Grant)	$ 335,000	Technology	2	$ 4,461,000	**Advanced Metering Infrastructure (AMI) -** Replace 1-1/2" Meters - **USBR Grant**
AMI - Zone 9, 10, & 11 - Install Meter Lids & SmartPoints	$ 220,000	Technology	2	$ 4,681,000	**Advanced Metering Infrastructure (AMI)** - Install SmartPoints & Meter Lids in Zones 9, 10 & 11
Disinfection - Conversion to Chloramines	$ 100,000	Water Treatment	2	$ 4,781,000	**Disinfection Changeover -** Utilizing a consultant to assist operations staff with conversion, monitoring and standard operating procedures
New Emergency Electrical Generator at Mills Plant - Design	$ 170,000	Public Safety	2	$ 4,951,000	**New Emergency Electrical Generator** - Installation of a Stationary 200kW Emergency Electrical Generators at the Mills Plant & Paschall Booster Station; 3 - 70kW Emergency Electrical Generator at Wells 5, 7 & 9 - **Cal OES Grant**
Stormwater Recharge CVC Park - Planning	$ 75,000	Water Supply	2	$ 5,026,000	**Stormwater Recharge** - ***Continuation from FY 20/21*** - Concept plan, grant funding options and coordination with stakeholders
Annual Pipeline Replacement - 1,650 LF	$ -	Water Distribution	3	$ 5,026,000	**Pipeline Replacement -** Project 2 - 3000 & 3100 Blocks of Alabama
Replacement - Communication Radio Network	$ -	Technology	3	$ 5,026,000	**Replacement of SCADA Radio Communication System** - ***Continuation from FY 21/22*** - Completion to Upgrading Radio System to 5.8GHz radios
Seismic Vulnerability Study - Main Office & Glenwood Plant	$ -	Facilities & Planning	3	$ 5,026,000	**Seismic Vulnerability Study** - at Main Office & Glenwood Plant - **Cal OES Grant**
Annual Pipeline Replacement - 1,150 LF	$ -	Water Distribution	4	$ 5,026,000	**Pipeline Replacement -** Project 3 - 3400 & 3500 Blocks of Montrose (1150 LF)
Annual Pipeline Replacement - 1,380 LF	$ -	Water Distribution	4	$ 5,026,000	**Pipeline Replacement -** Project 4 - 2400 - 2600 Blocks of Upper Terrace (1380 LF)
PRS - Zone 2 to Zone 1/Upgrade - Ramsdell Mixing Station	$ -	Water Distribution	4	$ 5,026,000	**New Pressure Reducing Station & Upgrade Ramsdell Mixing Station** - ***Continuation from FY 21/22*** - Construction of PRS from Zone 2 to zone 1 & Upgrade to Ramsdell Mixing Station
Pay-Go Total	$ 5,026,000				

Notes:

Priority Level 1: Projects **MUST** be constructed during FY 22/23
Priority Level 2: Projects **SHOULD** be constructed during FY 22/23
Priority Level 3: Projects **Could Be Postponed** to FY 23/24 (Unless Awarded Grant)
Priority Level 4: Projects **Postponed** to FY 23/24 or later

Crescenta Valley Water District

FY 23/24 Capital Improvement Project Priority List

Capital Improvement Project Program	Budget FY 23/24	Category	Priority	Cumulative Estimated Costs	Project Description
Annual Pipeline Replacement - 3,700 LF	**$ 2,369,000**	**Water Distribution**	**1**	**$ 2,369,000**	**Pipeline Replacement** - Project 1: 3000 & 3100 Blocks of Alabama (1650 LF), Project 2: 3400 & 3500 Blocks of Montrose (1150 LF), FY 23/24 Pipeline (900 LF)
Steel Reservoir Rehabilitation - Goss Canyon #2	**$ 865,000**	**Water Storage**	**1**	**$ 3,234,000**	**Reservoir Rehabilitation** - Structural repairs and re-coating at Goss Canyon #2 Reservoir during low demand (Winter) season
Well 11 Rehabilitation	**$ 145,000**	**Water Supply**	**1**	**$ 3,379,000**	**Well Rehabilitation** - Remove & Inspect Well Pump & Casing, Chemical Treatment Well Casing, Pump Test, New Pump & Motor
Replacement - SCADA System	**$ 95,000**	**Technology**	**1**	**$ 3,474,000**	**Replacement of SCADA System** - ***<u>Continuation from FY 22/23</u>*** - Completion of the replacement of RTU/PLC Equipment including new equipment, programing, integration and testing
AMI - Replace 2" Smart Meters with SmartPoints (Grant)	**$ 150,000**	**Technology**	**1**	**$ 3,624,000**	**Advanced Metering Infrastructure (AMI)** - ***<u>Continuation from FY 22/23</u>*** Install 2" water meters with SmartPoints
PRS - Zone 2 to Zone 1 at Mayfield & Ramsdell	**$ 500,000**	**Water Distribution**	**1**	**$ 4,124,000**	**New Pressure Reducing Station at Mayfield & Ramsdell** - ***<u>Continuation from FY 22/23</u>*** - Construction of PRS from Zone 2 to zone 1
Replacement - SCADA Communication Radio Network	**$ 240,000**	**Technology**	**1**	**$ 4,364,000**	**Replacement of SCADA Radio Communication System** - Upgrading Radio System to 5.8GHz radios.
Annual Booster Pump Replacement	**$ 52,000**	**Water Distribution**	**2**	**$ 4,416,000**	**Booster Pump Replacement** - Replace 15-yr and older booster pump with new pump assembly and high efficiency motor
New Emergency Electrical Generator at Mills Plant	**$ 354,000**	**Public Safety**	**2**	**$ 4,770,000**	**New Emergency Electrical Generator** - Installation of a Stationary 200kW Emergency Electrical Generators at the Mills Plant - **Cal OES Grant**
Seismic Vulnerability Study - Main Office & Glenwood Plant	**$ 101,000**	**Facilities & Planning**	**2**	**$ 4,871,000**	**Seismic Vulnerability Study** - at Main Office & Glenwood Plant **- Cal OES Grant**
Security Cameras - Reservoir Sites	**$ 44,000**	**Facilities & Planning**	**3**	**$ 4,915,000**	**Security Cameras - Reservoir Sites** - Installation of Security at 14 sites
Dunsmore/Pickens - Seismic Sensors & Valve Actuators	**$ 120,000**	**Public Safety**	**3**	**$ 5,035,000**	**Seismic Sensors & Valve Actuators** - Install Seismic Sensors at Dunsmore & Pickens Reserviors
Pay-Go Total	**$ 5,035,000**				

<u>Notes:</u>

Priority Level 1: Projects **<u>MUST</u>** be constructed during FY 23/24

Priority Level 2: Projects **<u>SHOULD</u>** be constructed during FY 23/24

Priority Level 3: Projects **<u>Could Be Postponed</u>** to FY 24/25

Priority Level 4: Projects **<u>Postponed</u>** to FY 24/25

Crescenta Valley Water District

FY 24/25 Capital Improvement Project Priority List

Capital Improvement Project Program	Budget FY 24/25	Category	Priority	Cumulative Estimated Costs	Project Description
Annual Pipeline Replacement - 4,580 LF	$ 2,912,000	Water Distribution	1	$ 2,912,000	**Pipeline Replacement** - Project 1: 2400 - 2600 Blocks of Upper Terrace (1380 LF); FY 24/25 Pipeline Replacement (3200 LF)
Steel Reservoir Rehabilitation - Shields	$ 1,070,000	Water Storage	1	$ 3,982,000	**Reservoir Rehabilitation** - Structural repairs and re-coating at Shields Reservoir during low demand (Winter) season
Well 7 Rehabilitation	$ 154,000	Water Supply	1	$ 4,136,000	**Well Rehabilitation** - Remove & Inspect Well Pump & Casing, Chemical Treatment Well Casing, Pump Test, New Pump & Motor
AMI - Replace Meter Lids - Zones 6, 7 & 8	$ 225,000	Technology	1	$ 4,361,000	**Advanced Metering Infrastructure (AMI) - *Continuation from FY 23/24*** Replace Meter Lids - Zones 6, 7 & 8
PRS - Upgrade - Ramsdell Mixing Station	$ 466,000	Water Distribution	1	$ 4,827,000	**Upgrade Ramsdell Mixing Station** - Construction for upgrades to Ramsdell Mixing Station
Annual Booster Pump Replacement	$ 54,000	Water Distribution	1	$ 4,881,000	**Booster Pump Replacement** - Replace 15-yr and older booster pump with new pump assembly and high efficiency motor
Seismic Sensors & Valve Actuators at Ordunio Reservoir	$ 150,000	Public Safety	3	$ 5,031,000	**Seismic Sensors & Valve Actuators** - Install Seismic Sensors at Dunsmore & Pickens Reserviors
Pay-Go Total	$ 5,031,000				

Notes:

Priority Level 1: Projects **MUST** be constructed during FY 24/25

Priority Level 2: Projects **SHOULD** be constructed during FY 24/25

Priority Level 3: Projects **Could Be Postponed** to FY 24/25

Priority Level 4: Projects **Postponed** to FY 25/26

CRESCENTA VALLEY WATER DISTRICT
STAFF REPORT

Information Item No. 2
May 17, 2022

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

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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. Construction Started – March 8, 2022
   b. Installed 3,400 LF of pipeline and 52 water services to date
   c. End Construction – July 2022
   d. Change Orders to date - $0.00
   e. 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. Construction to Start – May 23, 2022
   b. End Construction – July 2022
   c. Budget

Account Description	Amount
FY 21/22 Water CIP– Water Distribution Pipeline Replacement	$1,100,000
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	**$232,274**

Summary of FY 21/22 Pipeline Replacement Budget:

FY 20/21 Pipeline Replacement Program Cost Update: 5/13/22	E-Job	Budget FY 21/22	FY 21/22 Cost to date from 7/1/21 to 4/30/22	FY 21/22 Cost Committed from 5/1/22 to 6/30/22	Projected FY 21/22
2800 - 3100 Blocks of Los Olivos	**E-1033**	**$1,500,000**	**$ 234,146**	**$ 1,269,530**	**$ 1,503,676**
4700 Block of Cheryl	**E-1034**	**$1,100,000**	**$ 244,215**	**$ 619,835**	**$ 864,050**
FY 21/22 Pipeline Replacement		**$2,600,000**	**$ 478,361**	**$ 1,889,365**	**$ 2,367,726**

3. **FY 20/21 – Pipeline Replacement Projects – Carryover to FY 21/22**
    a. E-1022 – Project completed in October 2021

FY 20/21 Pipeline Replacement Program Cost Update: 05/13/22	E-Job	Recorded FY 20/21	Budget FY 21/22	FY 21/22 Cost to date from 7/1/21 to 4/30/22	FY 21/22 Cost Committed from 5/1/22 to 6/30/22	Projected FY 21/22
2400 & 2500 Blocks of Janet Lee	E-1008	$ 861,188		$ 59,632		
4300 Block of Rosemont	E-1019	$ 39,407		$ 1,304		
3400 & 3500 Block of Encinal	E-1021	$ 760,569		$ 31,620		
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	$ 400,000	$ 638,477		
FY 20/21 Pipeline Replacement		$ 1,836,922	$ 400,000	$ 731,033	$ -	$ 731,033

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 – $1.4M

The original budget for FY 21/22 was $728,000 for design and construction. Staff has been working with Cannon on finalizing the design of the project and the preliminary construction cost estimate provided by Cannon was at $1.4M, which is more than the original cost estimate. Staff reassessed the remaining portions of the project for FY 21/22 and the design is planned to be finished in the next couple of months. Construction cost will be moved to FY 22/23 or later depending on the final CIP Budget.

FY 21/ 22 Capital Improvement Project Program Cost Update: 05/12/22	E-Job	Recorded FY 20/21	Budget FY 21/22	FY 21/22 Cost to date from 7/1/21 to 4/30/22	FY 21/22 Cost Committed from 5/1/22 to 6/30/22	Projected FY 21/22	Budget FY 22/23	Total Project Costs
Upgrade to Ramsdell Mixing Station - Design	E-977	$ 2,869	$ 728,000	$ 48,594	$ 5,406	$ 54,000	$ 1,400,000	$ 1,456,869

5. **Steel Reservoir Rehabilitation at Edmund #2 (E-1036)**
    a. Contract awarded to J. Colon Coatings Inc.
    b. Structural work and interior coating are complete
    c. Exterior Coating to be completed within the next 2 weeks.
    d. Project anticipated to be completed and reservoir back in service by the end of May 2022

FY 21/ 22 Capital Improvement Project Program Cost Update: 05/12/22	E-Job	Budget FY 21/22	FY 21/22 Cost to date from 7/1/21 to 4/30/22	FY 21/22 Cost Committed from 5/1/22 to 6/30/22	Projected FY 21/22
Edmund #2	E-1036	$ 590,000	$ 443,743	$ 252,257	$ 696,000

6. **Replacement of SCADA Equipment, Programing & Integration (E-939)**
    a. APEX Manufacturing Solutions and CVWD have ordered equipment and materials.
    b. Completed Wells 5, 8, 11, 14, 16.

FY 21/ 22 Capital Improvement Project Program Cost Update: 05/12/22	E-Job	Budget FY 21/22	FY 21/22 Cost to date from 7/1/21 to 4/30/22	FY 21/22 Cost Committed from 5/1/22 to 6/30/22	Projected FY 21/22
SCADA Replacement - Installation	E-939	$ 374,000	$ 84,092	$ 263,983	$ 348,075

7. **AMI – Customer Engagement Platform (E-1035)**
   a. Working with WaterSmart on transferring data from Springbrook - Complete
   b. Reviewing “Welcome Letter” to customers
   c. Working with WaterSmart on layout and content of Customer Portal
   d. Tentative Launch Date – June 29, 2022

8. **AMI – Installation of ¾” & 1” meters (E-1035)**
   a. Installation of ¾” & 1” meters within Zone 1
      i. Installed 377 meters to-date
      ii. 120 meters remaining to install
   b. Installation of SmartPoints and Meter Lids in Zone 1
      i. Put on Hold

9. **AMI – Installation of 3” & 4” meters (E-1031) – USBR Grant**
   a. Site Survey -May to July 2022
   b. Ordering 3" & 4" meters; Delivery June 2022.
   c. Install and connect 32 - 3" & 4" meters in August 2022.

FY 21/ 22 Capital Improvement Project Program Cost Update: 05/12/22	E-Job	Recorded FY 20/21	Budget FY 21/22	FY 21/22 Cost to date from 7/1/21 to 3/31/22	FY 21/22 Cost Committed from 4/1/22 to 6/30/22	Projected FY 21/22
3" & 4" Smart Meters	E-1031	$ 1,004	$ 200,000	$ 1,498	$ 198,502	$ 200,000
AMI - 3/4" to 1" - Smart Meters	E-1035	$ 71,693	$ 233,000	$ 9,682	$ 223,318	$ 233,000
AMI - Customer Service Interface	E-1035		$ 87,000	$ 45,860	$ 4,140	$ 50,000

10. **FEMA Local Hazard Mitigation Plan (M-1004)**
    a. Project 1 – New emergency electrical generators at 5 sites
       i. New stationary generators at Mills Plant, Paschall Booster Station, & Wells 5, 7 & 9
       ii. Preliminary cost - $1.5M
          1) 75% reimbursement from Cal OES - $1.125M
          2) 25% reimbursement from CVWD - $375,000
    b. Project 2 – Seismic Evaluation of CVWD’s facilities application
       i. Facilities Seismic Vulnerability Study for Main Office and Glenwood Operations building
       ii. Preliminary cost - $100,100
          1) 75% reimbursement from Cal OES - $75,075
          2) 25% reimbursement from CVWD - $25,025

11. **Well 9 Rehabilitation**
    a. On Hold
    b. Working with General Pump Company on Annual Well & Pump Rehabilitation Contract

12. **Booster 26 at Cresta Heights Replacement**
    a. On Hold
    b. Working with General Pump Company on Annual Well & Pump Rehabilitation Contract

13. **Replacement of SCADA communication radio network (E-1025)**
    a. Finalizing Scope of Work
    b. Moved to FY 22/23 CIP Budget

14. **Conversion of Disinfection System to Chloramines (E-995)**
    a. Moved to FY 22/23 CIP Budget

FY 2021/21 CIP Budget

See attached for updated CIP Budget with actual costs

SUMMARY:

Staff continues to provide updated information to the Engineering Committee as the FY 21/22 CIP program progress over the next 2 months.

Prepared & submitted by:

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

FY 21/ 22 Capital Improvement Project Program Cost Update: 05/12/22	E-Job	Recorded FY 20/21		Budget FY 21/22	*FY 21/22* *Cost to date from 7/1/21 to 4/30/22*	*FY 21/22* *Cost Committed from 5/1/22 to 6/30/22*	Projected FY 21/22
1. Water Supply		$ 153,866		$ 135,000	$ 6,290	$ 2,758	$ 9,048
2. Water Storage		$ 663,213		$ 616,900	$ 471,944	$ 252,257	$ 724,201
3A. Water Distribution - Pipeline - Pyramid - 20 yrs		$ 1,838,368		$ 3,000,000	$ 1,209,394	$ 1,889,365	$ 3,098,759
3B. Water Distribution - Other		$ 139,017		$ 781,000	$ 48,594	$ 5,406	$ 54,000
4. Water Treatment		$ 54,073		$ 75,000	$ -	$ -	$ -
5. Technology		$ 466,671		$ 1,019,000	$ 160,314	$ 697,761	$ 858,075
6. Public Safety/Emergency Response		$ 134,549		$ 30,450	$ 30,450	$ -	$ 30,450
7. Facilities & Planning		$ 3,956		$ -	$ -	$ -	$ -
Capital Improvement Projects - Total		$ 3,453,712		$ 5,657,350	$ 1,926,986	$ 2,847,547	$ 4,774,533
Bond Financing - CIP		$ 2,695,174		$ 2,304,826			$ 2,304,826
Water Distribution - Pipeline Total				$ 3,000,000			$ 3,098,759
Remaining CIP				$ 2,657,350			$ 1,675,774
Water Fund Financing - CIP		$ 758,538		$ 3,352,524			$ 2,469,707
Total Financing - CIP		$ 3,453,712		$ 5,657,350			$ 4,774,533

Revised Date: 5/13/2022

FY 21/ 22 Capital Improvement Project Program Cost Update: 05/12/22	E-Job	Recorded FY 20/21	Budget FY 21/22	FY 21/22 Cost to date from 7/1/21 to 4/30/22	FY 21/22 Cost Committed from 5/1/22 to 6/30/22	Projected FY 21/22
1. Water Supply						
A. Groundwater Water Supply						
i. Well Rehabilitation						
Well 11 Rehabilitation		$ 56,106				
Well 12 Rehabilitation	E-1028	$ 94,042	$ -	$ 4,548	$ -	$ 4,548
Well 9 Rehabilitation			$ 105,000	$ -	$ -	$ -
iii. Groundwater Basin Recharge						
Stormwater Recharge Project at CVC Park - Planning	E-985	$ 3,718	$ 30,000	$ 1,742	$ 2,758	$ 4,500
WS Total		$ 153,866	$ 135,000	$ 6,290	$ 2,758	$ 9,048
2. Water Storage						
A. Reservoir Rehabilitation						
i. Steel Reservoir Rehabilitation						
Markridge		$ 367				
Rosemont	E-1018	$ 607,665	$ 26,900	$ 26,929	$ -	$ 26,929
Oak Creek - 16" Manifold Repair	E-1026	$ 55,181	$ -	$ 1,272	$ -	$ 1,272
Edmund #2	E-1036		$ 590,000	$ 443,743	$ 252,257	$ 696,000
WS Total		$ 663,213	$ 616,900	$ 471,944	$ 252,257	$ 724,201
3. Water Distribution						
A. Pipeline Replacement						
2400 & 2500 Blocks of Janet Lee	E-1008	$ 861,188		$ 59,632		
4300 Block of Rosemont	E-1019	$ 39,407		$ 1,304		
3400 & 3500 Block of Encinal	E-1021	$ 760,569		$ 31,620		
2800 Block of El Caminito, 4800 Block of Glenwood	E-1022	$ 175,758		$ 638,477		
FY 20/21 Pipeline Replacement		$ 1,836,922	$ 400,000	$ 731,033	$ -	$ 731,033
2800 - 3100 Blocks of Los Olivos	E-1033	*$ 774*	$ 1,500,000	$ 234,146	$ 1,269,530	$ 1,503,676
4700 Block of Cheryl	E-1034	*$ 671*	$ 1,100,000	$ 244,215	$ 619,835	$ 864,050
FY 21/22 Pipeline Replacement		$ 1,445	$ 2,600,000	$ 478,361	$ 1,889,365	$ 2,367,726
i. Annual Pump /Motor Replacement						
Boosters - Glenwood 32 & 33		$ 85,951				
Booster - Paschall Booster B	E-1029	$ 20,385				
Booster - Booster 26 at Cresta Heights			$ 53,000	$ -	$ -	$ -
D. Pressure Reducing Stations						
PRS - Zone 2 to Zone 1	E-977	$ 32,680				
PRS - Upgrade Zone 4 to Zone 3			$ -			$ -
E. Miscellaneous Projects						
iii. Misc.						
Upgrade - Ramsdell Mixing Station	E-977	$ -	$ 728,000	$ 48,594	$ 5,406	$ 54,000
WD Total		$ 1,977,384	$ 3,781,000	$ 1,257,988	$ 1,894,771	$ 3,152,759

FY 21/ 22 Capital Improvement Project Program Cost Update: 05/12/22	E-Job	Recorded FY 20/21		Budget FY 21/22	*FY 21/22* *Cost to date from 7/1/21 to 4/30/22*	*FY 21/22* *Cost Committed from 5/1/22 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	$ -	$ -	$ -
WT Total		$ 54,073		$ 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	$ 1,498	$ 198,502	$ 200,000
AMI - 3/4" to 1" - Smart Meters	E-1035	$ 71,693		$ 233,000	$ 9,682	$ 223,318	$ 233,000
AMI - Customer Service Interface	E-1035			$ 87,000	$ 45,860	$ 4,140	$ 50,000
AMI - USBR Grant	E-1041			$ -	$ 1,572	$ 428	$ 2,000
B. Supervisory Control and Data Acquisition (SCADA) System							
Communication Radio Network	E-1025	$ 72,917		$ 125,000	$ 17,610	$ 7,390	$ 25,000
SCADA Replacement - Installation	E-939	$ 105,977		$ 374,000	$ 84,092	$ 263,983	$ 348,075
TECH Total		$ 466,671		$ 1,019,000	$ 160,314	$ 697,761	$ 858,075
6. Public Safety/Emergency Response							
D. Miscellaneous							
FEMA Local Hazard Mitigation Plan	M-1004	$ 134,549		$ 30,450	$ 30,450	$ -	$ 30,450
SF/ER Total		$ 134,549		$ 30,450	$ 30,450	$ -	$ 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	$ 1,926,986	$ 2,847,547	$ 4,774,533