

CRESCENTA VALLEY WATER DISTRICT

2700 FOOTHILL BOULEVARD
LA CRESCENTA, CALIFORNIA

To be held on
April 7, 2022 at 3:00 PM

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

Posted April 6, 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: 854 6816 2314

[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/85468162314>

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 FY 22/23 Capital Improvement Project Program Budget
2. Update of FY 21/22 CIP Budget and Schedule

Committee Member's Request for Future Agenda Items

Next Engineering Committee Meeting – May 17, 2022, at 3:00 pm

Adjournment

CRESCENTA VALLEY WATER DISTRICT

STAFF REPORT

Information Item No. 1
April 20, 2021

To: Engineering Committee
From: David S. Gould, P.E. – Director of Engineering & Operations
Subject: Discussion of Draft FY 22/23 Capital Improvement Project Budget

BACKGROUND:

Staff presented the draft FY 22/23 Capital Improvement Project Budget (CIP) for the discussion. The main element of the CIP budget is replacement of 6605 LF (1.25 miles) pipeline as continue with the 10-year ramps schedule. The Board agreed to use Pay as you go financing for the next 3-years in accordance with the 3-year rate increase.

DISCUSSION:

Attached is the draft FY 22/23 CIP budget for review and discussion. The major projects for this coming fiscal year include replacement of 6,605 LF of pipeline, reservoir rehabilitation, continuation of AMI program, continuation of the SCADA replacement project, and design for installation of 5 new emergency electrical generators. In addition, included in the CIP summary is a list of grants awarded and pending that will offset CIP costs.

SUMMARY:

The CIP is being presented for discussion with the Engineering Committee and the final budget will be presented to the Board of Directors at the future Board meeting.

Prepared & Submitted by:



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

Crescenta Valley Water District

FY 22/23 Capital Improvement Project Priority List

Capital Improvement Project Program	Budget FY 22/23	Category	Bond (B) or PayGo (P)	Cumulative Estimated Costs	Project Description
Annual Pipeline Replacement - 6,605 LF	\$ 3,598,500	Water Distribution	P	\$ 3,598,500	Pipeline Replacement - Project 1 - 3400 & 3500 Block of Montrose. Project 2 - 2600 & 2700 blocks of Orange and 5000 Block of Adobe Ln. Project 3: 2400-2600 Block of Upper Terrace. Project 4: 3000 & 3100 Block of Orange.
Steel Reservoir Rehabilitation - Goss Canyon #1	\$ 845,000	Water Storage	P	\$ 4,443,500	Reservoir Rehabilitation - Structural repairs and re-coating at Goss Canyon #1 Reservoir during low demand (Winter) season
Well 14 Rehabilitation	\$ 140,000	Water Supply	P	\$ 4,583,500	Well Rehabilitation - Remove & Inspect Well Pump & Casing, Chemical Treatment Well Casing, Pump Test, New Pump & Motor
PRS - Zone 2 to Zone 1/Upgrade - Ramsdell Mixing Station	\$ 1,400,000	Water Distribution	P	\$ 5,983,500	New Pressure Reducing Station & Upgrade Ramsdell Mixing Station - <u>Continuation from FY 21/22</u> - Construction of PRS from Zone 2 to zone 1 & Upgrade to Ramsdell Mixing Station
Replacement - SCADA System	\$ 395,000	Technology	P	\$ 6,378,500	Replacement of SCADA System - <u>Continuation from FY 21/22</u> - Completion of the replacement of RTU/PLC Equipment including new equipment, programing, integration and testing
Replacement - Communication Radio Network	\$ 225,500	Technology	P	\$ 6,604,000	Replacement of SCADA Radio Communication System - <u>Continuation from FY 21/22</u> - Completion to Upgrading Radio System to 5.8GHz radios
AMI - Replace 1-1/2" Meters & Add Zone 9, 10, & 11 SmartPoints	\$ 450,000	Technology	P	\$ 7,054,000	Advanced Metering Infrastructure (AMI) - <u>Continuation from FY 21/22</u> 1) Install 1-1/2" water meters 2) SmartPoints - Zones 9, 10 & 11
New Emergency Electrical Generator at Mills Plant - Design	\$ 160,000	Public Safety	P	\$ 7,214,000	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
Annual Booster Pump Replacement	\$ 50,000	Water Distribution	P	\$ 7,264,000	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
Stormwater Recharge CVC Park - Planning	\$ 50,000	Water Supply	P	\$ 7,314,000	Stormwater Recharge - <u>Continuation from FY 20/21</u> - Concept plan, grant funding options and coordination with stakeholders
Disinfection - Conversion to Chloramines	\$ 75,000	Water Treatment	P	\$ 7,389,000	Disinfection Changeover - Utilizing a consultant to assist operations staff with conversion, monitoring and standard operating procedures
Seismic Vulnerability Study - Main Office & Glenwood Plant	\$ 100,100	Facilities & Planning	P	\$ 7,489,100	Seismic Vulnerability Study - at Main Office & Glenwood Plant - Cal OES Grant
Pay-Go Total	\$ 7,489,100				

FY 2022/23 CIP Budget Draft - 04/07/22	Recorded FY 20/21		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	Forecast FY 27/28	Forecast FY 28/29	Forecast FY 29/30	Forecast FY 30/31	Forecast FY 31/32
10-Year Capital Improvement Project Summary																
1. Water Supply	\$ 157,768		\$ 135,000	\$ 139,548		\$ 190,000		\$ 144,000	\$ 148,000	\$ 152,000	\$ 157,000	\$ 162,000	\$ 167,000	\$ 172,000	\$ 177,000	\$ 182,000
2. Water Storage	\$ 663,607		\$ 590,000	\$ 724,201		\$ 845,000		\$ 1,020,400	\$ 1,046,500	\$ 1,725,000	\$ 1,325,000	\$ 1,660,000	\$ 1,125,000	\$ 1,685,000	\$ -	\$ -
3A. Water Distribution - Pipeline -10-Yr Ramp up	\$ 1,924,636		\$ 3,000,000	\$ 3,084,656		\$ 3,598,500		\$ 3,730,000	\$ 4,440,000	\$ 5,320,000	\$ 6,570,000	\$ 7,610,000	\$ 8,020,000	\$ 8,980,000	\$ 10,240,000	\$ 10,240,000
3B. Water Distribution - Other	\$ 133,014		\$ 781,000	\$ 150,400		\$ 1,450,000		\$ 511,500	\$ 53,000	\$ 54,600	\$ 56,200	\$ 97,900	\$ 159,600	\$ 61,400	\$ 63,200	\$ 1,325,100
4. Water Treatment	\$ 54,073		\$ 75,000	\$ 75,000		\$ 75,000		\$ -	\$ -	\$ -	\$ 225,000	\$ -	\$ -	\$ -	\$ -	\$ -
5. Technology	\$ 473,911		\$ 1,019,000	\$ 996,075		\$ 1,070,500		\$ 560,000	\$ 605,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
6. Public Safety/Emergency Response	\$ 134,549		\$ 30,450	\$ 30,450		\$ 160,000		\$ 1,340,000	\$ 215,000	\$ 189,000	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ -
7. Facilities & Planning	\$ 3,956		\$ -	\$ -		\$ 100,100		\$ 151,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Improvement Projects - Total	\$ 3,545,513		\$ 5,630,450	\$ 5,200,330		\$ 7,489,100		\$ 7,456,900	\$ 6,507,500	\$ 7,440,600	\$ 8,483,200	\$ 9,529,900	\$ 9,471,600	\$ 10,898,400	\$ 10,480,200	\$ 11,747,100
Bond Financing - CIP	\$ 2,291,858		\$ 2,708,142	\$ 2,708,142		\$ -		\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Water Distribution - Pipeline Total	\$ 1,924,636		\$ 3,000,000	\$ 3,084,656		\$ 3,598,500		\$ 3,730,000	\$ 4,440,000	\$ 5,320,000	\$ 6,570,000	\$ 7,610,000	\$ 8,020,000	\$ 8,980,000	\$ 10,240,000	\$ 10,240,000
Remaining CIP	\$ 1,620,877		\$ 2,922,308	\$ 2,492,188		\$ 3,890,600		\$ 3,726,900	\$ 2,067,500	\$ 2,120,600	\$ 1,913,200	\$ 1,919,900	\$ 1,451,600	\$ 1,918,400	\$ 240,200	\$ 1,507,100
IRWMP - Re-Activate Well 2 - Construction (Award)						\$ (63,000)										
Cal OES - Local Hazard Mitigation Plan (Award)						\$ (24,064)										
USBR Small - Large Meter AMI Project (Award)						\$ (70,000)										
USBR WaterSMART 2022 - AMI Project - \$500K (Pending)						\$ (150,000)		\$ (350,000)								
USBR WaterSMART 2022 - AMI Project - \$2M (Pending)																
Cal OES - Critical Infrastructure Emergency Generator Project (Pending)						\$ (120,000)		\$ (1,005,000)								
Cal OES - CVWD Seismic Vulnerability Study (Pending)						\$ (75,075)										
Grant Reimbursement						\$ (502,139)		\$ (1,355,000)								
Water Fund Financing - CIP	\$ 3,545,513		\$ 5,630,450	\$ 5,200,330		\$ 6,986,961		\$ 6,101,900	\$ 6,507,500	\$ 7,440,600	\$ 8,483,200	\$ 9,529,900	\$ 9,471,600	\$ 10,898,400	\$ 10,480,200	\$ 11,747,100
Total Financing - CIP	\$ 3,545,513		\$ 5,630,450	\$ 5,200,330		\$ 6,986,961		\$ 6,101,900	\$ 6,507,500	\$ 7,440,600	\$ 8,483,200	\$ 9,529,900	\$ 9,471,600	\$ 10,898,400	\$ 10,480,200	\$ 11,747,100
CIP Total per FY 21/22 - 5 year projections with 8% increase				\$ 5,208,750		\$ 5,227,163		\$ 5,939,726	\$ 6,760,092	\$ 7,755,608	\$ 9,123,057	\$ 10,288,646	\$ 10,288,646	\$ 10,829,677	\$ 13,338,137	\$ 14,691,527
						\$ (1,759,798)		\$ (162,174)	\$ 252,592	\$ 315,008	\$ 639,857	\$ 758,746	\$ 817,046	\$ (68,723)	\$ 2,857,937	\$ 2,944,427

FY 2022/23 CIP Budget Draft - 04/07/22			Recorded FY 20/21		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	Forecast FY 27/28	Forecast FY 28/29	Forecast FY 29/30	Forecast FY 30/31	Forecast FY 31/32
1. Water Supply																		
A. Groundwater Water Supply																		
i. Well Rehabilitation																		
	Well 11 Rehabilitation	\$	56,106															
	Well 12 Rehabilitation	\$	97,944															
	Well 9 Rehabilitation																	
	Well Rehabilitation (1 Well per year)																	
ii. New Wells																		
	Well 18 (Sycamore House) - Design																	
	Well 18 (Sycamore House) - Construction																	
iii. Groundwater Basin Recharge																		
	Stormwater Recharge Project at CVC Park - Planning	\$	3,718															
	Storm water Recharge Project at CVC Park - Design																	
	Storm water Recharge Project at CVC Park - Construction																	
B. Imported Water Supply																		
C. Recycled Water System																		
i. Recycled Water																		
ii. Membrane Bioreactor Technology (MBR)																		
	MBR Plant - Harmony/Two-Strike Park- Planning																	
D. Water Supply Studies																		
	Water Resources Study																	
	GWP Water Supply Feasibility Study																	
	Verdugo Basin Groundwater Model																	
	Groundwater Well Replacement Study																	
	Groundwater Pilot Hole Study																	
WS Total		\$	157,768															
2. Water Storage																		
A. Reservoir Rehabilitation																		
i. Steel Reservoir Rehabilitation																		
	Markridge	\$	367															
	Rosemont	\$	608,059															
	Oak Creek - 16" Manifold Repair	\$	55,181															
	Edmund #2																	
	Goss Canyon #1																	
	Goss Canyon #2																	
	Shields																	
	Eagle Canyon																	
	Dunsmore																	
	Cresta Hts #1 & 2																	
	Pickens Canyon																	
	Ordunio																	
ii. Concrete Reservoir Rehabilitation																		
	Encinal																	
	Williams (Ocean View)																	
	Edmund #1																	
iii. Steel Reservoir Corrosion Protection System																		
	Cathodic Protection Inspection & Replacement																	
iv. Overflow & Drain System Upgrade																		
B. Reservoir Water Quality																		
i. Water Quality Mixing System																		
	Reservoir Mixing System - 2 Reservoirs																	
	Reservoir Mixing System - 2 Reservoirs																	
	Reservoir Mixing System - 3 Reservoirs																	
	Reservoir Mixing System - 4 Reservoirs																	
C. Water Storage Studies																		
	Reservoir Inlet/Outlet & Overflow Piping Study																	
	Conditional Assessment of Reservoirs Study																	
	Ocean View #2 Reservoir Feasibility Study																	
WS Total		\$	663,607															

FY 2022/23 CIP Budget Draft - 04/07/22		Recorded FY 20/21	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	Forecast FY 27/28	Forecast FY 28/29	Forecast FY 29/30	Forecast FY 30/31	Forecast FY 31/32													
3. Water Distribution																											
A. Pipeline Replacement																											
FY 20/21 Pipeline Replacement		\$	1,924,636	\$	400,000	\$	730,980																				
Project 1: 3400 & 3500 Blocks of Montrose (1150 LF)																											
Project 2: 2600 & 2700 Block of Orange (2425 LF)																											
Project3 : 2400 - 2600 Blocks of Upper Terrace (1380 LF)																											
Project 4: 3000 & 3100 Blocks of Alabama (1650 LF)																											
Annual Pipeline Replacement				\$	2,600,000	\$	2,353,676		\$	4,100,000	\$	4,440,000	\$	5,320,000	\$	6,570,000	\$	7,610,000	\$	8,020,000	\$	8,980,000	\$	10,240,000	\$	11,500,000	
C. Booster Pump System																											
i. Annual Pump /Motor Replacement																											
Boosters - Glenwood 32 & 33		\$	85,951																								
Annual Booster Replace - 1 Booster		\$	20,385	\$	53,000	\$	53,000	\$	50,000	\$	51,500	\$	53,000	\$	54,600	\$	56,200	\$	57,900	\$	59,600	\$	61,400	\$	63,200	\$	65,100
ii. Pump Station Upgrade																											
Paschall Booster Station - Technical Memorandum Study																											
Paschall Booster Station - Booster Station																											
iii. VFD Pump Upgrade																											
iii. MCC Replacement																											
Paschall																											
D. Pressure Reducing Stations																											
PRS - Zone 2 to Zone 1		\$	26,677																								
E. Miscellaneous Projects																											
i. Water Surge Control																											
Rehabilitation Surge Tank at Glenwood																											
Install Surge Tank at Mills Plant																											
Rehabilitation Surge Tank at Paschall Booster Station										\$	40,000	\$	100,000														
iii. Misc.																											
Upgrade - Ramsdell Mixing Station				\$	728,000	\$	97,400	\$	1,400,000																		
Mills Plant - Aeration Tower										\$	90,000																
F. Water Distribution Studies																											
WD Total		\$	2,057,650	\$	3,781,000	\$	3,235,056	\$	5,048,500	\$	4,241,500	\$	4,493,000	\$	5,374,600	\$	6,626,200	\$	7,707,900	\$	8,179,600	\$	9,041,400	\$	10,303,200	\$	11,565,100
4. Water Treatment																											
A. Nitrate Removal																											
i. Glenwood																											
Replace Ion Exchange Resin at Glenwood									\$	150,000																	
ii. Mills																											
iii. Ordunio																											
Replace Bio Remediation ARoNite Media at Ordunio									\$	75,000																	
C. Disinfection - Convert to Chloramines																											
Conversion to Chloramination		\$	54,073	\$	75,000	\$	75,000	\$	75,000																		
D. Federal and State Regulations																											
E. Water Quality Studies																											
WT Total		\$	54,073	\$	75,000	\$	75,000	\$	75,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-
5. Technology																											
A. Automated Meter Information (AMI) System																											
AMI - Communication		\$	215,080																								
GRANT - 3" & 4" Smart Meters		\$	1,004	\$	200,000	\$	200,000																				
AMI - 3/4" to 1" - Smart Meters		\$	71,693	\$	233,000	\$	233,000																				
AMI - Customer Service Interface				\$	87,000	\$	87,000																				
GRANT - AMI - USBR Grant				\$	-	\$	3,000																				
1-1/2" & 2" Smart Meters								\$	97,800	\$	170,750																
AMI - Meter Lids								\$	352,200	\$	364,250	\$	605,000														
B. Supervisory Control and Data Acquisition (SCADA) System																											
Communication Radio Network		\$	77,101	\$	125,000	\$	125,000	\$	225,500																		
SCADA Replacement - Installation		\$	109,033	\$	374,000	\$	348,075	\$	395,000	\$	25,000																
C. Graphical Information System (GIS)																											
TECH Total		\$	473,911	\$	1,019,000	\$	996,075	\$	1,070,500	\$	560,000	\$	605,000	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-	\$	-

FY 2022/23 CIP Budget Draft - 04/07/22		Recorded FY 20/21		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	Forecast FY 27/28	Forecast FY 28/29	Forecast FY 29/30	Forecast FY 30/31	Forecast FY 31/32
6. Public Safety/Emergency Response																	
A. Emergency Electrical Generators																	
New Emergency Electrical Generator - Paschall							\$ 35,000		\$ 353,800								
New Emergency Electrical Generator - Mills Plant							\$ 35,000		\$ 353,800								
New Emergency Electrical Generator - Wells 5, 7 & 9							\$ 90,000		\$ 632,400								
B. Water Storage																	
Dunsmore/Pickens - Seismic Sensors																	
Ordunio - Seismic Sensors & Valve Actuators									\$ 126,000								
Oak Creek #1 & #2 - Seismic Sensors & Valve Actuators										\$ 146,000							
Encinal & Ocean View - Seismic Sensors & Valve Actuators											\$ 150,000						
C. Security																	
Security Cameras - Reservoir Sites									\$ 44,000								
Security Cameras - Well Sites									\$ 45,000	\$ 20,000							
Security Cameras - Other Sites										\$ 23,000							
D. Miscellaneous																	
FEMA Local Hazard Mitigation Plan		\$ 134,549		\$ 30,450	\$ 30,450												
SF/ER Total		\$ 134,549		\$ 30,450	\$ 30,450		\$ 160,000		\$ 1,340,000	\$ 215,000	\$ 189,000	\$ 150,000	\$ -	\$ -	\$ -	\$ -	\$ -
7. Facilities & Planning																	
A. Main Office																	
Seismic Vulnerability Study - Main Office & Glenwood Plant							\$ 100,100										
Expansion with New Roof with Solar Panels																	
New Main Office Building - Design																	
B. Glenwood Plant																	
Needs Assessment Study																	
Upgrades to Glenwood Plant																	
C. Mills Plant																	
D. Reservoir Site Improvements																	
Roof for Old Encinal - Storage Bldg		\$ 3,956															
Facilities Maintenance Master Plan									\$ 151,000								
Facilities Upgrade & Improvements																	
5. Misc. Properties																	
6. District Planning																	
Asset Management Study																	
Computer Maintenance Management System (CMMS)																	
Solar Power Feasibility Study																	
LAFCO/Overlap Area Study with GWP																	
F & P Total		\$ 3,956		\$ -	\$ -		\$ 100,100		\$ 151,000	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Capital Improvement Projects - Total		\$ 3,545,513		\$ 5,630,450	\$ 5,200,330		\$ 7,489,100		\$ 7,456,900	\$ 6,507,500	\$ 7,440,600	\$ 8,483,200	\$ 9,529,900	\$ 9,471,600	\$ 10,898,400	\$ 10,480,200	\$ 11,747,100

CRESCENTA VALLEY WATER DISTRICT

STAFF REPORT

Information Item No. 2
April 7, 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. Construction Started – March 8, 2022
- b. Installed 1,200 LF of pipeline and 20 water services to date
- c. End Construction – June 30, 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. Start Construction – April 11, 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: 04/07/22	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
2800 - 3100 Blocks of Los Olivos	E-1033	\$ 774	\$1,500,000	\$ 249,625	\$ 1,254,051	\$1,503,676
4700 Block of Cheryl	E-1034	\$ 671	\$1,100,000	\$ 95,726	\$ 768,324	\$ 864,050
FY 21/22 Pipeline Replacement		\$ 345,351	\$2,600,000	\$ 345,351	\$ 2,022,375	\$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: 04/07/22	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
2400 & 2500 Blocks of Janet Lee	E-1008	\$ 861,188		\$ 59,930		
4300 Block of Rosemont	E-1019	\$ 39,407		\$ 1,272		
3400 & 3500 Block of Encinal	E-1021	\$ 760,569		\$ 31,301		
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	\$ 730,980	\$ -	\$730,980

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

- 90% design under review by staff
- 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 revised the project such that the design to be finished by July 1, 2022, which is shown in the revised budget below.

Construction cost will be moved to FY 22/23 with the preliminary project schedule that after the design is complete, staff will obtain permits from the City of Glendale for permits and advertise for bids. In anticipated that the project will be awarded in September 2022. Shop drawing review, ordering completed by October 2023 and delivery of materials should be available by January 2023. Staff anticipates that construction to be completed by July 2023.

FY 20/21 Pipeline Replacement Program Cost Update: 04/07/22	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	Budget FY 22/23	Total Project Costs
Upgrade to Ramsdell Mixing Station - Design	E-977	\$ 2,869	\$ 728,000	\$ 48,198	\$ 49,202	\$ 97,400	\$1,400,000	\$1,500,269

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

- Contract awarded to J. Colon Coatings Inc.
- Structural work completed
- Coating Work – Started Feb 2022
- Project anticipated to be completed – End of April 2022

FY 20/21 Pipeline Replacement Program Cost Update: 04/07/22	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
Edmund #2	E-1036		\$ 590,000	\$ 61,348	\$ 634,652	\$ 696,000

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

- a. Pilot Project for Wells 8 & 14 – Complete
- b. APEX Manufacturing Solutions and CVWD crews have begun the design and ordering equipment and materials.

FY 20/21 Pipeline Replacement Program Cost Update: 04/07/22	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
<i>SCADA Replacement - Installation</i>	E-939	\$ 105,977	\$ 374,000	\$ 77,449	\$ 270,626	\$ 348,075

SCADA Replacement -Project Cost Breakdown							
Summary		% Complete	FY 21/22	% Complete	FY 22/23	% Complete	FY 23/24
New Equipment	\$ 285,000	80%	\$ 228,000	20%	\$ 57,000	0%	\$ -
Programing	\$ 334,460	25%	\$ 83,615	70%	\$ 234,122	5%	\$ 16,723
CVWD Costs	\$ 46,140	25%	\$ 11,535	70%	\$ 32,298	5%	\$ 2,307
Contingency	\$ 99,840	25%	\$ 24,960	70%	\$ 69,888	5%	\$ 4,992
Total	\$ 765,440		\$ 348,110		\$ 393,308		\$ 24,022

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 13, 2022

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

- a. Installation of ¾” & 1” meters within Zone 1
 - i. Installed 347 meters to-date
 - ii. 150 meters remaining to install
- b. Installation of SmartPoints and Meter Lids in Zone 1
 - i. Ordering 500 SmartPoints & Meter Lids
 - ii. Estimated Delivery – End of May 2022
 - iii. Install and connect to AMI Network about 500 meters in Zone 1

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

- a. Received and finalizing agreement with USBR
- b. Site Survey – meeting in May 2022
- c. Ordering 3” & 4” meters; Delivery June 2022.
- d. Install and connect 32 - 3” & 4” meters in June 2022.

FY 20/21 Pipeline Replacement Program Cost Update: 04/07/22	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	\$ 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	\$ 4,140	\$ 50,000

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

- a. Received approval 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
 - i. Working with Tetra Tech on submittal to Cal OES
 - ii. New stationary generators at Mills Plant, Paschall Booster Station, & Wells 5, 7 & 9
 - iii. Preliminary cost - \$1.5M
 - 1) 75% reimbursement from Cal OES - \$1.125M
 - 2) 25% reimbursement from CVWD - \$375,000
- c. Project 2 – Seismic Evaluation of CVWD's facilities application due 4/8/22
 - i. Working with Tetra Tech on submittal to Cal OES
 - ii. Facilities Seismic Vulnerability Study for Main Office and Glenwood Operations building
 - iii. Preliminary cost - \$100,100
 - 1) 75% reimbursement from Cal OES - \$75,075
 - 2) 25% reimbursement from CVWD - \$25,025

11. Well 9 Rehabilitation

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

12. Booster 26 at Cresta Heights Replacement

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

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

- a. Behind Schedule
- b. Developing Scope of Work

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

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

FY 2021/21 CIP Budget

See attached for updated CIP Budget with actual costs

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: 04/01/22	E-Job	Recorded FY 20/21		Budget FY 21/22	<i>FY 21/22 Cost to date from 7/1/21 to 3/31/22</i>	<i>FY 21/22 Cost Committed from 4/1/22 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	\$ 89,549	\$ 634,652	\$ 724,201
3A. Water Distribution - Pipeline - Pyramid - 20 yrs		\$ 1,838,368		\$ 3,000,000	\$ 1,076,331	\$ 2,022,375	\$ 3,098,706
3B. Water Distribution - Other		\$ 139,017		\$ 781,000	\$ 48,198	\$ 102,202	\$ 150,400
4. Water Treatment		\$ 54,073		\$ 75,000	\$ -	\$ 75,000	\$ 75,000
5. Technology		\$ 466,671		\$ 1,019,000	\$ 152,076	\$ 716,999	\$ 869,075
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	\$ 1,401,243	\$ 3,686,137	\$ 5,087,379
Bond Financing - CIP		\$ 2,695,174		\$ 2,304,826			\$ 2,304,826
Water Distribution - Pipeline Total				\$ 3,000,000			\$ 3,098,706
Remaining CIP				\$ 2,657,350			\$ 1,988,673
Water Fund Financing - CIP		\$ 758,538		\$ 3,352,524			\$ 2,782,553
Total Financing - CIP		\$ 3,453,712		\$ 5,657,350			\$ 5,087,379

FY 21/ 22 Capital Improvement Project Program Cost Update: 04/01/22	E-Job	Recorded FY 20/21	Budget FY 21/22	<u>FY 21/22</u> Cost to date from 7/1/21 to 3/31/22	<u>FY 21/22</u> Cost Committed from 4/1/22 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			
Well 9 Rehabilitation						
iii. Groundwater Basin Recharge						
Stormwater Recharge Project at CVC Park - Planning	E-985	\$	3,718			
WS Total		\$	153,866			
2. Water Storage						
A. Reservoir Rehabilitation						
i. Steel Reservoir Rehabilitation						
Markridge		\$	367			
Rosemont	E-1018	\$	607,665			
Oak Creek - 16" Manifold Repair	E-1026	\$	55,181			
Edmund #2	E-1036					
WS Total		\$	663,213			
3. Water Distribution						
A. Pipeline Replacement						
2400 & 2500 Blocks of Janet Lee	E-1008	\$	861,188			
4300 Block of Rosemont	E-1019	\$	39,407			
3400 & 3500 Block of Encinal	E-1021	\$	760,569			
2800 Block of El Caminito, 4800 Block of Glenwood	E-1022	\$	175,758			
FY 20/21 Pipeline Replacement		\$	1,836,922			
2800 - 3100 Blocks of Los Olivos	E-1033	\$	774			
4700 Block of Cheryl	E-1034	\$	671			
FY 21/22 Pipeline Replacement		\$	1,445			
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						
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	\$	-			
WD Total		\$	1,977,384			

FY 21/ 22 Capital Improvement Project Program Cost Update: 04/01/22			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
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	\$ 4,140	\$ 50,000
	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	\$ 17,390	\$ 35,000
	SCADA Replacement - Installation	E-939	\$	105,977	\$ 374,000	\$ 77,449	\$ 270,626	\$ 348,075
TECH Total			\$	466,671	\$ 1,019,000	\$ 152,076	\$ 716,999	\$ 869,075
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	\$ 1,401,243	\$ 3,686,137	\$ 5,087,379