CRESCENTA VALLEY WATER DISTRICT

2700 FOOTHILL BOULEVARD
LA CRESCENTA, CALIFORNIA

To be held on

June 15, 2020 at 1:30 PM

Agenda for the Meeting of the Engineering Committee
of the Crescenta Valley Water District
Posted June 12, 2020 at 3:00 PM

TELECONFERENCING NOTICE

[This meeting will be held by teleconference only.]

Pursuant to the provisions of Executive Order N-29-20 issued by Governor Gavin Newsom on March 18, 2020, the public may not attend the meeting in person.

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: 833 9711 0165

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

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 at (818) 248-3925 or in writing at this email address, dgould@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:

The public shall have an opportunity to comment on any agenda item when the item is considered by the committee. This opportunity is non-transferable, and speakers are limited to one two-minute comment.

Information Items

1. Discussion of FY 20/21Capital Improvement Project Program
    - Projects
    - Schedule
    - Preliminary Cost Estimate

Public Comments

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.

Committee Member's Request for Future Agenda Items

Next Engineering Committee Meeting – July 10, 2020

Adjournment

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CRESCENTA VALLEY WATER DISTRICT
STAFF REPORT

Information Item No. 1

To: Engineering Committee — June 12, 2020

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

Subject: **FY 20/21 Water Capital Improvement Program**

BACKGROUND:

Staff has presented several Capital Improvement Program (CIP) budget scenarios with various financing options for review and discussion with the Engineering Committee and Board over the past few months.

The Board agreed to pursue refinancing CVWD's existing bond debt and requesting additional funding, totaling $5M, available for CIP at the April 28, 2020 meeting, with the understanding that the bond proceeds must be spent within 3-years of issuance of the bond.

The Board approved FY 20/21 Water Budget at the June 9, 2020 meeting, and the approved budget showed $2.3M available for CIP projects with no water rate increase.

DISCUSSION:

Bond financing may occur as early as August/September 2020, and Board members expressed concerns about allocating funds for CIP projects before the bond financing process is complete. The Board also acknowledged that current economic conditions might make bonding impractical. If the District decides not to pursue bond financing due to unfavorable economic conditions, then staff's FY 20/21 CIP budget should not assume the additional bond funding will be available.

Staff used this information to prepare two CIP scenarios, 1) Issuing $5M Bond Financing ($5M Bond) and 2) Paying as you go by utilizing water reserve funding (PayGo) for review and discussion with the Engineering Committee.

Staff reviewed the proposed FY 20/21 CIP budget relative to each scenario, including a proposed project schedule and preliminary cost estimates, as shown on the attached tables. Below is a detailed discussion of each proposed CIP project relative to each scenario.

1. **Steel Reservoir Rehabilitation – Rosemont Reservoir** – This project is for the structural repairs and re-coating of the reservoir interior, which is necessary to maintain the District's water storage capacity and to increase the life expectancy of the steel tank. This project is funded in both scenarios because of the necessity for rehabilitation due to the advanced corrosion in the interior of the reservoir. Rosemont Reservoir was last re-coated in 2000 and previous inspections verified that this reservoir needs to be rehabilitated.

   A design contract has been awarded to Harper and Associates Engineering (Harper) for $14,700, and staff is working towards completing the plans and specifications by the end of July 2020. The project bidding period will be in August 2020 and award of contract is planned for the first Board meeting in September 2020. Construction should begin in November 2020 and be completed by February 2021.

   The preliminary cost estimate is based on the previous projects at Oak Creek and Markridge reservoirs and discussions with coating contractors. The preliminary cost estimate for construction is $407,000, and the cost estimate for CVWD staff time and specialty inspection from Harper is $58,300.

2. **Annual Pipeline Replacement** – This project is for the replacement of steel pipelines that are at least 50-years old or more in a timely manner. We have discussed a variety of pipeline replacement schedules with respect to replacing all the older pipelines in the next 75 to 200 years.

The following is a summary of the pipeline replacement program based on funding scenarios.

a. ***$5M Bond*** – Replacement of 1 mile (5,280 LF) of pipelines based on the age, size, and condition of the pipeline, as shown in the table below:

Project No.	Street Name	Block No.	Year Const.	Age of Pipe (yrs)	Pipe Size (in)	Pipe Length (ft)	Pipe Material	No. Leaks	Contractor Cost Estimate	Consultant, Materials, Permits, etc.	Total Cost Estimate	Cost/LF
1	Janet Lee	2400	1954	66	6	690	STD	2				
	Janet Lee	2500	1954	66	6	600	STD	2	$425,700	$98,800	$524,500	$407
2	Rosemont	4300	1929	91	8	650	STD	3	$207,900	$83,100	$291,000	$448
3	Encinal	3400	1932	88	10	810	STD	0				
	Encinal	3500	1932	88	10	790	STD	1	$607,700	$102,000	$709,700	$444
4	Paraiso Way	2700	1946	74	2	180	STD	3				
	Dyer	4800	1946	74	2	380	STD	0				
	El Caminito	2800	1946	74	8	900	CL&W	0				
	Glenwood	4800	1960	60	6	300	CL&W	0				
	Stevens	2800	1958	62	6	125	STD	1	$630,000	$144,800	$774,800	$411
Total						**5,425**			**$1,871,300**	**$428,700**	**$2,300,000**	**$424**

Staff has completed the design for the 2400 & 2500 Blocks of Janet Lee (Project 1) and will start on the design of the 4300 Block of Rosemont (Project 2). The remaining Projects, 3 & 4, will need to be designed by a consulting firm in order to start construction in January 2021. Staff can put together a request for proposal, and a firm could begin the work by September 2020, which will coincide with the bond financing. Construction schedule will probably be in two stages, first stage will be Projects 1 & 2 and the second stage will be Projects 3 & 4. Staff will also need additional inspection services from a consultant to assist during construction.

b. ***PayGo*** – Replacement of 1,000 LF of pipe based on the age, size, and condition of the pipeline. As stated above, staff has completed the work for Project 1 and this project can be ready to advertise for bid in August 2020, construction is planned to begin in November 2020 and completed by January 2021. The District's inspector will be able to coordinate this project.

3. **Groundwater Well Rehabilitation** – This project is for the rehabilitation of Well 9, which was last rehabilitated in 2014. This project is planned to proceed in both scenarios because of the necessity to continue to perform well rehabilitation to maintain CVWD's local water supply. The design of the project will be done by Mr. Yared, and the preliminary cost estimate was based on previous projects with similar scopes of work. The schedule will be to complete the design and award the contract in December 2020. Rehabilitation to be completed in March 2021.

4. **New Pressure Reducing Station & Upgrade Ramsdell Mixing Station** – This project is for the installation of a new PRV station near the intersection of Mayfield Ave and Ramsdell Ave. to provide water from Zone 2 to Zone 1 when Encinal Reservoir is out of service during construction of the upgrades to the Ramsdell/Mayfield Mixing Station (Mixing Station). The Mixing Station is an underground vault which blends imported water from FMWD and groundwater from the Glenwood plant. The existing piping, valves and controls are in very bad condition and need to be replaced. This project is planned in both budget scenarios because of how critical the Mixing Station is in maintaining proper ratio between imported water and groundwater flows.

   The majority of the design has been completed by staff, with additional assistance from DMc Engineering for topographic and right-of-way survey, Cannon for the electrical design and APEX for SCADA programing and integration.

The final design should be completed by the end of September 2020 and construction should be from November 2020 to May 2021. The project will include two (2) pre-cast vaults, which have a long lead time. The preliminary cost estimate is $600,000 for the project, and it will be refined as the design is completed. Staff will also need additional inspection services from a consultant to assist during construction.

5. **Replacement of Supervisory Control and Data Acquisition (SCADA) System Upgrade** - CVWD has an existing SCADA system with RTU/PLC's installed at each of the District's facilities that provides information on the status of the system, controls to operate booster pumps and provides alarms to the System Operators. The existing SCADA system was installed in 1996 by Tesco Controls (Tesco), and the equipment, programing and integration are all proprietary to Tesco. Therefore, if there are any changes or upgrades, it must go through Tesco.

   CVWD plans to design and install an upgraded SCADA system such that the equipment, programing and integration are based on industry standards and can be installed, repaired, and/or replaced by various companies. By utilizing other companies, CVWD could see cost savings during the competitive bid process. The following is a summary of the SCADA upgrade project based on funding scenarios.

   a. ***$5M Bond*** – Design and installation of new equipment, programing and integration at the District's 26 locations. This includes staff preparing a request for proposal that will be used to define the scope of work from a consulting firm. The consultant will prepare plans and specifications that will specify the manufacturer of the equipment, programming of the new RTU/PLC's and integration of the new equipment into the existing SCADA computer system. Staff anticipates the design will be completed in January 2021 and construction to be 75% completed by the end of June 2021. Staff is planning for this project to last over 2 years. The preliminary estimated cost is $610,000 for FY 20/21 and $150,000 for FY 21/22.

   b. ***PayGo*** – Design only for FY 20/21 and installation of new equipment, programing, integration in FY 21/22. This includes staff preparing a request for proposal that will used to define the scope of work from a consulting firm. The consultant will prepare plans and specifications as discussed above and will be ready for bidding in late April 2021. Purchasing and installation of the equipment by a contractor, programing and integration will be included in FY 21/22 CIP budget.

6. **Replacement of SCADA Communication Radio Network** – CVWD has an existing radio communication network that operates on the 900 MHz radio frequency. In the past year, the radio system has seen interference with other communication devices and the equipment, which was installed 6 years ago, is nearing the end of its useful life, and has been malfunctioning. Staff's plan is to design and install an upgraded radio communication network including analyzing available radio frequencies, such as 5.8GHZ or a licensed frequency, upgrading the radio equipment, creating a redundant system through the use of fiber optical cable lines at sites near existing cable service and increasing efficiency of the network. The following is a summary of the SCADA Communication Radio Network project based on funding scenarios.

   a. ***$5M Bond*** – Staff to prepare a request for proposal for a consulting firm to perform a radio frequency survey, prepare an analysis of available radio frequencies, design a new communication system and prepare specifications to procure new equipment for the new system. Staff anticipates the design will be completed in November 2020 and construction to be completed by the end of June 2021.

b. ***PayGo*** – Design only for FY 20/21 and installation of new equipment in FY 21/22. This includes staff preparing a request for proposal that will be used to define the scope of work from a consulting firm.

   The consultant will prepare plans and specifications as discussed above and will be ready for bidding in late April 2021. The cost for a contractor Purchase and install the equipment will be included in FY 21/22 CIP budget.

7. **Local Hazard Mitigation Plan** - CVWD has been awarded a grant from Cal OES and FEMA to prepare a Local Hazard Mitigation Plan (LHMP) to address high priority hazards related to its water and sewer systems, including drought, water shortage, energy shortage/outage, wildfire, earthquake, terrorim and cyber-attack. The total grant amount to prepare a local hazard mitigation plan is $165,000, with $125,000 grant funding from FEMA and $40,000 funding from CVWD.

   This project is planned to proceed in both scenarios since it is staff's goal to complete the LHMP within a year. Staff has prepared a request for proposal that will be sent to qualified consulting firms. Staff is planning to award this contract in August 2020, and the LHMP should be completed by October 2021.

8. **Annual Booster Pump Replacement** – This project is for the replacement or upgrade at least one (1) booster pump per year, of CVWD's 34 booster pumps, to meet customer water demands, maximize "water to wire" efficiency and control electrical power usage. As part of the project, the existing motors will be replaced with premium efficiency motors to decrease power costs. The following is a summary of the booster pump project based on funding scenarios.

   a. ***$5M Bond*** – Design and replacement of one (1) booster replacement based on age of the pump, "water to wire" efficiency and number of hours in service. The design of the project will be done by Mr. Yared, and the preliminary cost estimate was based on previous projects with similar scopes of work. The schedule will be to complete the design and award the contract in January 2021 and complete construction in April 2021. Estimated construction cost for one (1) booster replacement based on past projects is about $75,000 per booster pump.

   b. ***PayGo*** – The design and replacement of one (1) booster replacement will be deferred to FY 21/22.

9. **Advanced Metering Infrastructure (AMI) Program** – This project has two (2) components, 1) replacement of ¾" & 1" meters with new Sensus iPERL "Smart Meters" in Pressure Zones 1 & 2, and 2) installation of the AMI network communication system. Staff and its consultant, UtiliWorks Consulting have completed a request for proposal that can be sent to vendors to bring the water meter data from the smart meter to a central data host. Also included in the scope is the installation of 50 – 100 collection points to verify the AMI network communication system. The following is a summary of the AMI program based on funding scenarios.

   a. ***$5M Bond*** – Continue replacing water meters at a preliminary estimated cost of $50,000 for FY 20/21. Also, move forward with the procurement and installation of AMI network communication system with the assistance of UtiliWorks Consulting. The schedule will be to complete the procurement contract and award in January 2021 and to complete construction in June 2021. The preliminary estimated cost for this portion of the project is $25,000 for consulting services provided by UtiliWorks and $125,000 for the AMI network communication system for a total of $150,000.

   b. ***PayGo*** - Continue replacing water meters at a preliminary estimated cost of $50,000 for FY 20/21. The AMI network communication system will be deferred to FY 21/22.

10. **Stormwater Recharge Program** - Stormwater Recharge Project at Crescenta Valley County Park (CVC Park) includes the design and install a stormwater infiltration system within CVC Park that will direct stormwater from the Verdugo Wash into infiltration galleries for groundwater recharge.

    The focus for the Stormwater Recharge Project in FY 20/21 will be preparing conceptual plans and preliminary cost estimates with cost/benefit analysis, working with the City of Los Angeles on an agreement on storm water rights, coordinating with LA County and State grant funding programs and with Stakeholders, including City of Glendale, Los Angeles County Department of Public Works, Los Angeles County Department of Parks & Recreation, CV Town Council and ULARA Watermaster. This will require assistance from John Robinson Consulting and Wood Environmental & Infrastructure on the project design and coordination. Also, working with Mr. Bunn from Lagerlof, on the agreement with the City of Los Angeles. The following is a summary of the Stormwater Recharge Project based on funding scenarios.

    a. ***$5M Bond*** – Staff will be concentrating on preparing conceptual plans, establishing an agreement with City of Los Angeles on storm water rights, and coordinating grant funding programs. The preliminary cost estimate for the consultants mentioned above is $75,000 and this will be a continuing project for FY 21/22 in preparing for the next step of design and construction.

    b. ***PayGo*** – Staff will be concentrating on establishing an agreement with the City of Los Angeles to establish storm water rights and coordinate grant funding programs. The preliminary cost estimate for John Robinson Consulting and Lagerlof is $35,000.

11. **Facility Improvement Program** – Installation of a new roof on the existing 70 ft diameter concrete reservoir at Encinal for material and equipment storage. The material and equipment currently stored at the site are exposed to the environment (rain, sun, etc.). The project will be to install a permanent roof over the existing structure for protection of the material and equipment from the elements. Staff will use a consulting firm for the structural design of the new roof and will prepare a request for proposal such that a consulting firm could start the work by September 2020. The project will be awarded for construction in December 2020 and construction completed by April 2021. The following is a summary of the facilities improvement program based on funding scenarios.

    a. **$5M Bond** – Design and construction of the new roof is discussed above. The preliminary cost estimate for consulting services is $35,000 and $80,000 for construction.

    b. ***PayGo*** – This project will be deferred to FY 21/22 CIP Budget.

12. **Rehabilitation Surge Tank at Glenwood** – This project is the rehabilitation of the surge tank at the Glenwood plant. The surge tank was originally installed in 1972 and has been out of service since 2014. Staff has a preliminary design completed, and the next step will be completing the design and specifications for a specialty contractor to perform the repairs. The project will be awarded for construction in January 2021 and construction completed by April 2021. The following is a summary of the rehabilitation of the surge tank based on funding scenarios.

    a. ***$5M Bond*** - Design and construction for rehabilitation of the surge tank is discussed above. The preliminary cost estimate is $5,000 for consulting services and $30,000 for construction.

    b. ***PayGo*** – This project will be deferred to FY 21/22 CIP Budget

RECOMMENDATION:

Staff prepared a CIP Program - $5M Bond vs. PayGo cost allocation chart (see attached) for discussion. The chart shows that the amount of expenditures required between July 2020 and December 2020 for consultants and construction are below $1M for both funding scenarios.

Most disbursements will occur after January 2021, when these projects are under construction. Therefore, this will provide the Board with additional information and a preliminary project schedule when discussing the bond financing in August/September 2020.

Prepared & Submitted by:

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

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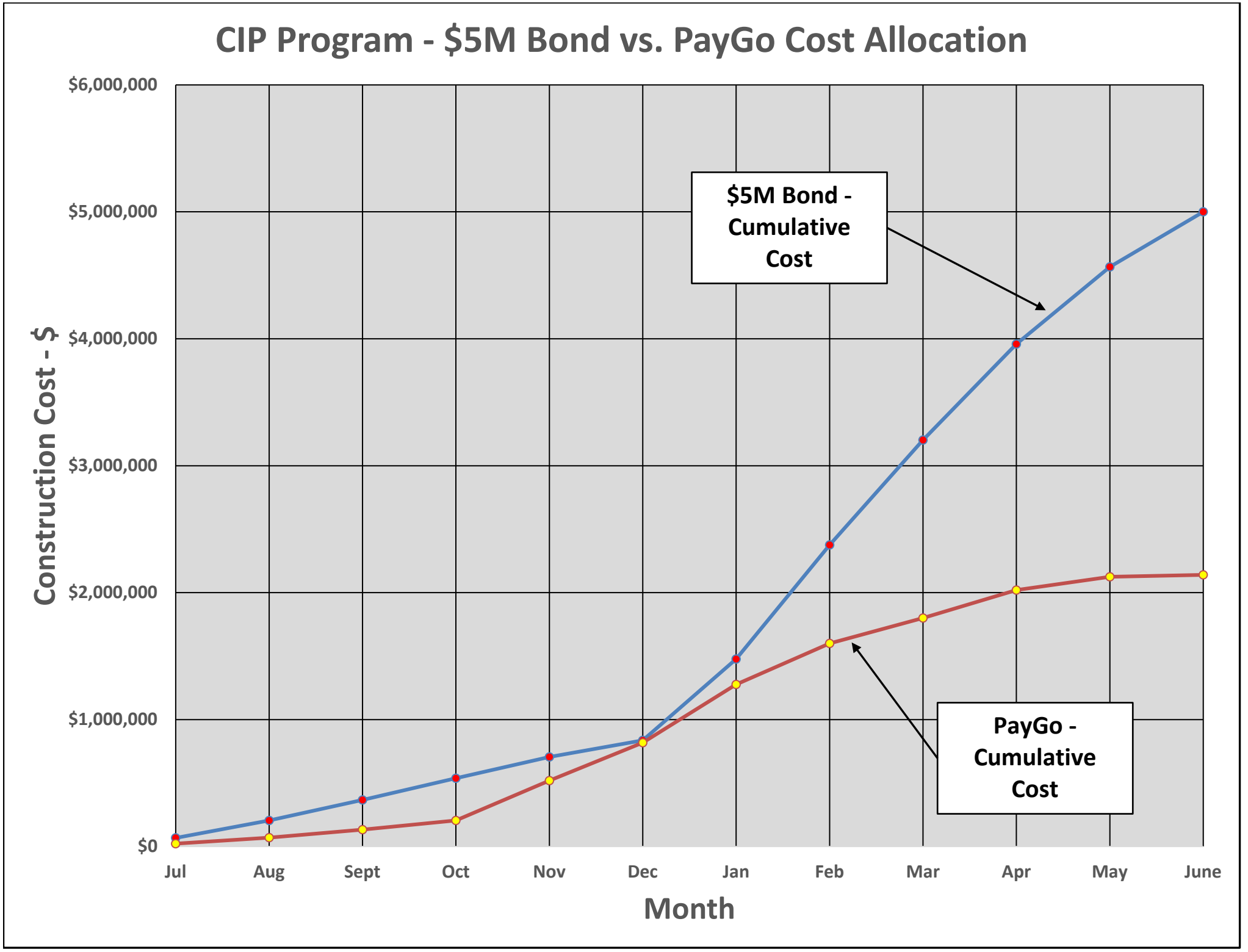
Project	Project No.	Budget FY 20/21 ($5M Bond)	Budget FY 20/21 (PayGo)	Project Description	Comment	Schedule	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Steel Reservoir Rehabilitation	**1**	**$ 480,000**	**$ 480,000**	**Reservoir Rehabilitation** - Structural repairs and re-coating at Rosemont Reservoir	Project scheduled to proceed based on either CIP Budget option	$5M Bond	Design		Bidding/Award		Construction							
						PayGo	Design		Bidding/Award		Construction							
Annual Pipeline Replacement	**2**	**$ 2,300,000**	**$ 510,000**	**Pipeline Replacement** - Reduced from 5,280 LF to 1,000 LF	Project Scope and Cost Estimate reduced for PayGo Option	$5M Bond	Design				Bidding/Award		Construction					
						PayGo	Design		Bidding/Award		Construction							
Well Rehabilitation	**3**	**$ 95,000**	**$ 95,000**	**Well 9 Rehabilitation -** Remove Well Pump, Chemical Treatment Well Casing, New Pump & Motor	Project scheduled to proceed based on either CIP Budget option	$5M Bond			Design		Bidding/Award		Construction					
						PayGo			Design		Bidding/Award		Construction					
PRS - Zone 2 to Zone 1 & Ramsdell Mixing Station	**4**	**$ 600,000**	**$ 600,000**	**New Pressure Reducing Station & Upgrade Ramsdell Mixing Station** - New PRS & Ramsdell Mix Station Upgrade	Project scheduled to proceed based on either CIP Budget option	$5M Bond	Design			Bidding/Award		Construction						
						PayGo	Design			Bidding/Award		Construction						
Replacement - SCADA System	**5**	**$ 610,000**	**$ 105,000**	**Replacement of SCADA System** - Reduced from $600K to $105K; New Scope - Design & Replacement as needed	Project Scope and Cost Estimate reduced for PayGo Option	$5M Bond	RFP	Design			Bidding/Award			Construction				
						PayGo		RFP			Design					Bidding/Award		
Replacement - SCADA Communication Radio Network	**6**	**$ 260,000**	**$ 100,000**	**Replacement of SCADA Radio Communication System** - - Reduced from $266K to $100K; New Scope - Design & Replacement as needed	Project Scope and Cost Estimate reduced for PayGo Option	$5M Bond		RFP	Design			Bidding/Award			Construction			
						PayGo		RFP			Design					Bidding/Award		
FEMA Local Hazard Mitigation Plan	**7**	**$ 165,000**	**$ 165,000**	**FEMA Grant** - **$125,000 grant**, $40,000 CVWD to prepare a local hazard mitigation plan	Project scheduled to proceed based on either CIP Budget option	$5M Bond	RFP	Prepare Local Hazard Mitigation Plan										
						PayGo	RFP	Prepare Local Hazard Mitigation Plan										
Annual Booster Pump Replacement	**8**	**$ 75,000**	**$ -**	**Booster Pump Replacement** - Reduced from $75K to $0K	Project postponed until FY 21/22	$5M Bond				Design		Bidding/Award		Construction				
						PayGo												
Advanced Metering Infrastructure (AMI) Program	**9**	**$ 200,000**	**$ 50,000**	**Replacement of 3/4" to 1" - Smart Meters & AMI Communication Network -** Reduced from $200K to $50K; Scope - Replace 1" & 3/4" meters only	Project Scope and Cost Estimate reduced for PayGo Option	$5M Bond		Design - Network Communication		Bidding/Award - Network Communication			Construction - Network Communication					
						PayGo	Water Meter Replacement											
Stormwater Recharge Program	**10**	**$ 75,000**	**$ 35,000**	**Stormwater Recharge Project at CVC Park** - Reduced from $75K to $35K; Scope - Grant funding options and coordination with stakeholders	Project Scope and Cost Estimate reduced for PayGo Option	$5M Bond	SW Rights - LADWP	Concept Plan, Grants & Project Coordination										
						PayGo	SW Rights - LADWP	Project Coordination										
Facility Improvement Program	**11**	**$ 105,000**	**$ -**	**New Roof for Old Encinal - Storage Bldg** - Reduced from $105K to $0K	Project postponed until FY 21/22	$5M Bond		RFP	Design		Bidding/Award		Construction					
						PayGo												
Rehabilitation Surge Tank at Glenwood	**12**	**$ 35,000**	**$ -**	**Rehabilitation of water surge tank** - Reduced from $35K to $0K	Project postponed until FY 21/22	$5M Bond				Design		Bidding/Award		Construction				
						PayGo												
Total - $5M Bond - Monthly		**$ 5,000,000**																
Total - $5M Bond - Cumulative																		
Total - PayGo - Monthly			**$ 2,140,000**															
Total - Pay Go - Cumulative																		

Project	Project No.	Budget FY 20/21 ($5M Bond)	Budget FY 20/21 (PayGo)	Project Description	Comment	Schedule	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June
Steel Reservoir Rehabilitation	**1**	**$ 480,000**	**$ 480,000**	**Reservoir Rehabilitation** - Structural repairs and re-coating at Rosemont Reservoir	Project scheduled to proceed based on either CIP Budget option	$5M Bond	$ 12,500	$ 12,500			$ 113,750	$ 113,750	$ 113,750	$ 113,750				
						PayGo	$ 12,500	$ 12,500			$ 113,750	$ 113,750	$ 113,750	$ 113,750				
Annual Pipeline Replacement	**2**	**$ 2,300,000**	**$ 510,000**	**Pipeline Replacement** - Reduced from 5,280 LF to 1,000 LF	Project Scope and Cost Estimate reduced for PayGo Option	$5M Bond	$ 50,000	$ 50,000	$ 50,000	$ 50,000			$ 350,000	$ 350,000	$ 350,000	$ 350,000	$ 350,000	$ 350,000
						PayGo	$ 5,000	$ 5,000	$ 35,000		$ 155,000	$ 155,000	$ 155,000					
Well Rehabilitation	**3**	**$ 95,000**	**$ 95,000**	**Well 9 Rehabilitation -** Remove Well Pump, Chemical Treatment Well Casing, New Pump & Motor	Project scheduled to proceed based on either CIP Budget option	$5M Bond			$ 7,500	$ 7,500			$ 25,000	$ 45,000	$ 10,000			
						PayGo			$ 7,500	$ 7,500			$ 25,000	$ 45,000	$ 10,000			
PRS - Zone 2 to Zone 1 & Ramsdell Mixing Station	**4**	**$ 600,000**	**$ 600,000**	**New Pressure Reducing Station & Upgrade Ramsdell Mixing Station** - New PRS & Ramsdell Mix Station Upgrade	Project scheduled to proceed based on either CIP Budget option	$5M Bond	$ 5,000	$ 5,000	$ 10,000	$ 10,000			$ 110,000	$ 110,000	$ 125,000	$ 150,000	$ 75,000	
						PayGo	$ 5,000	$ 5,000	$ 10,000	$ 10,000			$ 110,000	$ 110,000	$ 125,000	$ 150,000	$ 75,000	
Replacement - SCADA System	**5**	**$ 610,000**	**$ 105,000**	**Replacement of SCADA System** - Reduced from $600K to $105K; New Scope - Design & Replacement as needed	Project Scope and Cost Estimate reduced for PayGo Option	$5M Bond		$ 35,000	$ 50,000	$ 25,000				$ 125,000	$ 125,000	$ 125,000	$ 100,000	$ 25,000
						PayGo				$ 10,000	$ 10,000	$ 15,000	$ 15,000	$ 15,000	$ 15,000	$ 25,000		
Replacement - SCADA Communication Radio Network	**6**	**$ 260,000**	**$ 100,000**	**Replacement of SCADA Radio Communication System** - - Reduced from $266K to $100K; New Scope - Design & Replacement as needed	Project Scope and Cost Estimate reduced for PayGo Option	$5M Bond		$ 10,000	$ 10,000	$ 10,000	$ 10,000	$ 10,000			$ 65,000	$ 60,000	$ 45,000	$ 40,000
						PayGo				$ 10,000	$ 10,000	$ 10,000	$ 15,000	$ 15,000	$ 15,000	$ 25,000		
FEMA Local Hazard Mitigation Plan	**7**	**$ 165,000**	**$ 165,000**	**FEMA Grant** - $125,000 grant, $40,000 CVWD to prepare a local hazard mitigation plan	Project scheduled to proceed based on either CIP Budget option	$5M Bond		$ 5,000	$ 5,000	$ 25,000	$ 20,000	$ 5,000	$ 10,000	$ 25,000	$ 20,000	$ 20,000	$ 15,000	$ 15,000
						PayGo		$ 5,000	$ 5,000	$ 25,000	$ 20,000	$ 5,000	$ 10,000	$ 25,000	$ 20,000	$ 20,000	$ 15,000	$ 15,000
Annual Booster Pump Replacement	**8**	**$ 75,000**	**$ -**	**Booster Pump Replacement** - Reduced from $75K to $0K	Project postponed until FY 21/22	$5M Bond					$ 7,500				$ 40,000	$ 20,000	$ 7,500	
						PayGo												
Advanced Metering Infrastructure (AMI) Program	**9**	**$ 200,000**	**$ 50,000**	**Replacement of 3/4" to 1" - Smart Meters & AMI Communication Network -** Reduced from $200K to $50K; Scope - Replace 1" & 3/4" meters only	Project Scope and Cost Estimate reduced for PayGo Option	$5M Bond		$ 10,000	$ 10,000	$ 10,000			$ 10,000	$ 65,000	$ 65,000	$ 20,000	$ 10,000	
						PayGo		$ 10,000		$ 10,000			$ 10,000		$ 10,000		$ 10,000	
Stormwater Recharge Program	**10**	**$ 75,000**	**$ 35,000**	**Stormwater Recharge Project at CVC Park** - Reduced from $75K to $35K; Scope - Grant funding options and coordination with stakeholders	Project Scope and Cost Estimate reduced for PayGo Option	$5M Bond		$ 10,000	$ 5,000	$ 12,000	$ 12,000	$ 2,500	$ 6,500	$ 6,000	$ 6,000	$ 6,000	$ 6,000	$ 3,000
						PayGo		$ 10,000	$ 5,000		$ 5,000		$ 5,000		$ 5,000		$ 5,000	
Facility Improvement Program	**11**	**$ 105,000**	**$ -**	**New Roof for Old Encinal - Storage Bldg** - Reduced from $105K to $0K	Project postponed until FY 21/22	$5M Bond			$ 15,000	$ 20,000			$ 15,000	$ 30,000	$ 20,000	$ 5,000		
						PayGo												
Rehabilitation Surge Tank at Glenwood	**12**	**$ 35,000**	**$ -**	**Rehabilitation of water surge tank** - Reduced from $35K to $0K	Project postponed until FY 21/22	$5M Bond					$ 5,000			$ 30,000				
						PayGo												
Total - $5M Bond - Monthly		**$ 5,000,000**					$ 67,500	$ 137,500	$ 162,500	$ 169,500	$ 168,250	$ 131,250	$ 640,250	$ 899,750	$ 826,000	$ 756,000	$ 608,500	$ 433,000
Total - $5M Bond - Cumulative							$ 67,500	$ 205,000	$ 367,500	$ 537,000	$ 705,250	$ 836,500	$ 1,476,750	$ 2,376,500	$ 3,202,500	$ 3,958,500	$ 4,567,000	$ 5,000,000
Total - PayGo - Monthly			**$ 2,140,000**				$ 22,500	$ 47,500	$ 62,500	$ 72,500	$ 313,750	$ 298,750	$ 458,750	$ 323,750	$ 200,000	$ 220,000	$ 105,000	$ 15,000
Total - Pay Go - Cumulative							$ 22,500	$ 70,000	$ 132,500	$ 205,000	$ 518,750	$ 817,500	$ 1,276,250	$ 1,600,000	$ 1,800,000	$ 2,020,000	$ 2,125,000	$ 2,140,000


CIP Program - $5M Bond vs. PayGo Cost Allocation
$6,000,000
$5,000,000
$4,000,000
$3,000,000
$2,000,000
$1,000,000
$0
Construction Cost - $
$5M Bond - Cumulative Cost
PayGo - Cumulative Cost
Jul
Aug
Sept
Oct
Nov
Dec
Jan
Feb
Mar
Apr
May
June
Month