

SAN JOSÉ/SANTA CLARA TREATMENT PLANT ADVISORY COMMITTEE

SAM LICCARDO, CHAIR
DEBI DAVIS, VICE CHAIR
LAN DIEP, MEMBER
DAVID SYKES, MEMBER
DEV DAVIS, MEMBER

CARMEN MONTANO, MEMBER
KATHY WATANABE, MEMBER
PAUL RESNIKOFF, MEMBER
JOHN GATTO, MEMBER

SPECIAL MEETING AGENDA/TPAC

4:00 p.m.

May 28, 2020

Virtual

*** COVID-19 NOTICE ***

Consistent with the California Governor's Executive Order No. N-29-20, Resolution No. 79450 from the City of San José and the Santa Clara County Health Officer's March 16, 2020 Shelter in Place Order, the Treatment Plant Advisory Committee (TPAC) meeting will not be physically open to the public and Committee Members and staff will be teleconferencing from remote locations.

How to submit written Public Comment before the TPAC Meeting:

By email to ESDWebinar@sanjoseca.gov by 12:00 p.m. the day of the meeting. Those emails will be considered as if they were part of the meeting. Please identify the Agenda Item Number in the subject line of your email.

How to submit written Public Comment during the TPAC Meeting:

Email during the meeting to ESDWebinar@sanjoseca.gov, identifying the Agenda Item Number in the email subject line. Comments received will be included as a part of the meeting record but will not be read aloud during the meeting.

How to provide Spoken Public Comment during the TPAC Meeting:

By phone **(888) 475-4499** Meeting ID: **925 2304 7335** Click *9 to raise a hand to speak.

By online **<https://sanjoseca.zoom.us/j/92523047335>**

- a. Use a current, up-to-date browser: Chrome 30+, Firefox 27+, Microsoft Edge 12+, Safari 7+. Certain functionality may be disabled in older browsers including Internet Explorer. Mute all other audio before speaking. Using multiple devices can cause an audio feedback.
- b. Enter an email address and name. The name will be visible online and will be used to notify you that it is your turn to speak.
- c. When the Chair calls for the item on which you wish to speak, click on "raise hand." Speakers will be notified shortly before they are called to speak.
- d. When called, please limit your remarks to the time limit allotted.

1. **ROLL CALL**

2. **APPROVAL OF MINUTES**

A. May 7, 2020

3. **UNFINISHED BUSINESS/REQUEST FOR DEFERRALS**

4. **DIRECTOR'S REPORT**

- A. Director's Report (verbal)
- Monthly Progress Report (March)

5. **AGREEMENTS/ACTION ITEMS**

- A. Report on Bids and Award of Construction Contract for 8868 – Advanced Facility Control and Meter Replacement – Phase 2 Project at the San José–Santa Clara Regional Wastewater Facility

Staff Recommendation:

Report on bids and award a construction contract for the 8868 – Advanced Facility Control and Meter Replacement – Phase 2 Project to the low bidder, Kiewit Infrastructure West Co., in the amount of \$7,046,100, including Add Alternate Items No. 1 through 5, and approve a 20 percent contingency in the amount of \$1,409,220.

This item is scheduled to be heard by City Council on June 2, 2020.

- B. Amendment to Legal Services Agreement with Hawkins, Delafield & Wood LLP for Regional Wastewater Facility Capital Program

Staff Recommendation:

Approve a Fourth Amendment to the Legal Services Agreement with Hawkins, Delafield & Wood LLP, to extend the term of this agreement from June 30, 2020 through June 30, 2024, at no additional cost to the City, to support the San José–Santa Clara Regional Wastewater Facility Capital Improvement Program.

This item is scheduled to be heard by the City Council on June 2, 2020.

C. Proposed 2020-2021 O&M Budget

Staff Recommendation: TPAC approval of the San José-Santa Clara Regional Wastewater Facility Proposed 2020-2021 Operating & Maintenance Budget.

The San José-Santa Clara Regional Wastewater Facility Proposed 2020-2021 Operating & Maintenance Budget is scheduled for Council consideration on June 16, 2020, and adoption on June 23, 2020.

D. Proposed 2021-2025 CIP

Staff Recommendation: TPAC approval of the San José-Santa Clara Regional Wastewater Facility Proposed Five-Year 2021-2025 Capital Improvement Program.

The San José-Santa Clara Regional Wastewater Facility Proposed Five-Year 2021-2025 Capital Improvement Program is scheduled for Council consideration on June 16, 2020, and adoption on June 23, 2020.

6. **OTHER BUSINESS/CORRESPONDENCE**

7. **STATUS OF ITEMS PREVIOUSLY RECOMMENDED FOR APPROVAL BY TPAC**

A. Second Amendment to the Master Consultant Agreement with Cornerstone Earth Group for Environmental Support Services.

Staff Recommendation:

Approve the Second Amendment to the Master Consultant Agreement with Cornerstone Earth Group, Inc. (Master Agreement) for environmental consulting services, increasing the amount of compensation by \$500,000, for a total agreement not to exceed \$1,500,000.

This item was approved by City Council on May 12, 2020.

B. Second on Bids and Award of Contract for 9115 – Administration Building Roof Replacement Project at the San José – Santa Clara Regional Wastewater Facility

Staff Recommendation:

- a) Report on bids and award of a construction contract for 9115-Administration Building Roof Replacement Project to the low bidder, Stronger Building Services, in the amount of \$590,000, and
- b) Approve a 20 percent construction contingency in the amount of \$118,000.

This item was approved by City Council on May 19, 2020.

C. Report on Bids and Award of Construction Contract for 9394 – Legacy Lagoons Cleanup Phase 1 Project at the San José–Santa Clara Regional Wastewater Facility Project

Staff Recommendation:

- (a) Adopt a resolution adopting an Addendum to the Environmental Impact Report for the San José – Santa Clara Water Pollution Control Plant Master Plan Project in accordance with the California Environmental Quality Act (CEQA), as amended, and adopting a related Mitigation Monitoring and Reporting Program.
- (b) Report on bids and award of contract for the 9394 – Legacy Lagoons Cleanup Phase 1 Project to the low bidder, Pipe and Plant Solutions, Inc. in the amount of \$4,901,796, and approval of a 15 percent contingency in the amount of \$732,270.
- (c) Adopt the following 2019-2020 Appropriation Ordinance Amendments in the San José – Santa Clara Treatment Plant Capital Fund:
 - 1. Decrease the Support Building Improvements appropriation to the Environmental Services Department by \$8,037,066; and
 - 2. Establish the Legacy Lagoons Biosolids Remediation appropriation to the Environmental Services Department in the amount of \$8,037,066.

This item was approved by the City Council on May 12, 2020.

8. REPORTS

A. Open Purchase Orders Greater Than \$100,000 (including Service Orders)

No report attached for May: Monthly Procurement and Contract Activity Reports summarizes the purchase and contracting between \$100,000 and \$1.3 Million for Goods and \$100,000 and \$320,000 for Services.

9. MISCELLANEOUS

- A. The next TPAC Meeting is on **August 13, at 4:00 p.m.**, Virtual.

10. **OPEN FORUM**

11. **ADJOURNMENT**

NOTE: If you have any changes or questions, please contact April Kellett, Environmental Services (408) 975-2547.

To request an accommodation or alternative format for City-sponsored meetings, events or printed materials, please contact April Kellett (408) 975-2547 or (408) 294-9337 (TTY) as soon as possible, but at least three business days before the meeting/event.

Availability of Public Records. All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at San Jose City Hall, 200 East Santa Clara Street, 10th Floor, Environmental Services at the same time that the public records are distributed or made available to the legislative body.

**MINUTES OF THE
SAN JOSÉ/SANTA CLARA
TREATMENT PLANT ADVISORY COMMITTEE**

San José City Hall, Virtual
Thursday, May 7, 2020 at 4:02 p.m.

1. ROLL CALL

Minutes of the Treatment Plant Advisory Committee convened this date at 4:02p.m. Chair Liccardo called the meeting to order. Roll call was taken with the following members in attendance:

Committee Members: Debi Davis, Dev Davis, John Gatto, Sam Liccardo, Lan Diep, Rowena Turner, Dave Sykes, Kathy Watanabe

Absent: Carmen Montano

2. APPROVAL OF MINUTES

A. February 13, 2020

On a motion made by Committee Member Debi Davis and a second by Committee Member Dev Davis, TPAC recommended approval of the minutes.

Ayes – 8 (Debi Davis, Dev Davis, Diep, Gatto, Liccardo, Turner, Sykes, Watanabe)
Absent– 1 (Montano)

3. UNFINISHED BUSINESS/REQUEST FOR DEFERRALS

4. DIRECTOR'S REPORT

A. Director's Report (verbal)

ESD Director Kerrie Romanow reported that the RWF was fully operational with Operations at full staffing levels and the Maintenance team at 70 percent staffing. Referencing the March Info Memo to TPAC, Kerrie explained how we responded to some exposures and are operating under COVID conditions. Safe work practices were developed and implemented. ESD received 1,000 free cloth masks from CalWARN which are being distributed to staff. We are collaborating with BIOBOT through the City of San Jose's Emergency Operations Center doing pilot work studying the impact of COVID on wastewater facilities. No results yet, but we will share what is learned as the study continues. We are relieved and appreciative of the great work of our team as

essential workers keeping the facility running. We are getting ready to bring back almost all our Engineering staff and although planning has moved forward on Capital projects, we are looking forward to getting back to our normal CIP schedule relatively quickly.

Chair Liccardo asked if there were any questions or comments on the Directors report. There were no comments or questions.

Chair Liccardo expressed his sincere thanks to all the members of the team for their great work at considerable risk in support of all our cities. Chair Liccardo had a question regarding the work with BIOBOT commenting that his understanding was that the effort involved finding out what's happening in the aggregate regarding the viral load through the waste stream. Director Romanow responded that BIOBOT was partnering with Stanford on the study. RWF lab staff is the central point of contact as they do sampling and analysis to determine what we can learn about the virus from what is in the wastewater: its presence in the water, its prevalence, the risks and gathering data for future work on the virus including obtaining reassuring information regarding possible staff exposures.

5. AGREEMENTS/ACTION ITEMS

A. Second Amendment to the Master Consultant Agreement with Cornerstone Earth Group for Environmental Support Services

Staff Recommendation:

Approve the Second Amendment to the Master Consultant Agreement with Cornerstone Earth Group, Inc. (Master Agreement) for environmental consulting services, increasing the amount of compensation by \$500,000, for a total agreement not to exceed \$1,500,000.

This item is scheduled to be heard by City Council on May 12, 2020.

There was no presentation on this item. Assistant Director Napp Fukuda said staff was available for questions. There were no questions or comments on this item.

On a motion made by Committee Member Deb Davis and a second by Committee Member Sykes, TPAC recommended approval of item 5. A.

Ayes – 8 (Debi Davis, Dev Davis, Diep, Gatto, Liccardo, Turner, Sykes, Watanabe)
Absent– 1 (Montano)

B. Report on Bids and Award of Contract for 9115 – Administration Building Roof Replacement Project at the San José – Santa Clara Regional Wastewater Facility

Staff Recommendation:

- a) Report on bids and award of a construction contract for 9115-Administration Building Roof Replacement Project to the low bidder, Stronger Building Services, in the amount of \$590,000, and
- b) Approve a 20 percent construction contingency in the amount of \$118,000.

This item is scheduled to be heard by City Council on May 19, 2020.

There was no presentation on this item. Assistant Director Napp Fukuda said staff was available for questions. There were no questions or comments on this item. Chair Liccardo noted for the record that there were no raised hands among the public.

On a motion made by Committee Member Deb Davis and a second by Committee Member Watanabe, TPAC recommended approval of item 5. B.

Ayes – 8 (Debi Davis, Dev Davis, Diep, Gatto, Liccardo, Sykes, Turner, Watanabe)
Absent– 1 (Montano)

- C. Report on Bids and Award of Construction Contract for 9394 – Legacy Lagoons Cleanup Phase 1 Project at the San José – Santa Clara Regional Wastewater Facility Project

Staff Recommendation:

- (a) Adopt a resolution adopting an Addendum to the Environmental Impact Report for the San José – Santa Clara Water Pollution Control Plant Master Plan Project in accordance with the California Environmental Quality Act (CEQA), as amended, and adopting a related Mitigation Monitoring and Reporting Program.
- (b) Report on bids and award of contract for the 9394 – Legacy Lagoons Cleanup Phase 1 Project to the low bidder, Pipe and Plant Solutions, Inc. in the amount of \$4,901,796, and approval of a 15 percent contingency in the amount of \$732,270.
- (c) Adopt the following 2019-2020 Appropriation Ordinance Amendments in the San José – Santa Clara Treatment Plant Capital Fund:
 - 1. Decrease the Support Building Improvements appropriation to the Environmental Services Department by \$8,037,066; and
 - 2. Establish the Legacy Lagoons Biosolids Remediation appropriation to the Environmental Services Department in the amount of \$8,037,066.

This item is scheduled to be heard by the City Council on May 12, 2020.

Mathew Nguyen, Division Manager, Public Works presented on this item. The presentation was shared virtually. Sal Kumar, Senior Engineer and Khanh Nguyen,

Project Manager were also present for questions. Mr. Nguyen explained the project involves the Regional Water Board Order requiring the prioritization of the cleanup and closure of lagoons L-16 to L-19 by January 1, 2021 to meet the timeline and alignment of the US Army Corps of Engineers South Bay Shoreline Levee Project. This is Phase 1 to be completed by the end of December 2020. Committee member Debi Davis stated that it was an aggressive implementation timeline and asked if it was realistic for the project to be completed by January 2021? Mr. Nguyen explained that the upfront design work was done with the goal of maximizing construction time. The team took possible weather delays into account and the contractor is aware that they may have to double up construction team or applied time to meet the timeline. CM Debi Davis asked if the project contract would have to be amended if the timeline is not met. Assistant Director Fukuda responded that if the timeline is not met the contract may have to be amended. Further, he added, we are committed to completing the project on time per Water Board order and permits, even though the Shoreline Levee project January timeline is in some jeopardy due to other aspects of the levee project being delayed. Permits have been pre-approved. Deputy Director O'Connell said that the project involves moving a lot of dirt and a key to adhering to the timeline is close coordination with city staff and consultants keeping good daily records and responding promptly with required testing and analysis when construction contractors complete clearing and request compliance workups. He provided assurance of success. Committee member Gatto asked if this project included both Phase 1 and Phase 2. Assistant Director Fukuda said it is Phase 1 only. CM Gatto asked what happens to the holes and how deep they will be. Deputy Director O'Connell responded that they would become staging areas for the Shoreline levee project and eventually be outside the levee. The area excavated would be about twelve feet deep, the original depth of the lagoon. CM Gatto asked for timeline for Phase 2. Assistant Director Fukuda said that staff is assessing whether the City can request to defer Phase 2 as it is not needed for the Shoreline levee project. He added that deferral allows time for more Phase 2 design work and coming up with a funding plan that spreads and smooths out rate increases. Committee member Watanabe asked how likely it was that there would be something besides biosolids found in the lagoon beds. Assistant Director Fukuda responded that the sampling of the biosolids, volumes and characterizations has been going on for years. The statistically valid data collected show the levees themselves are clean and the biosolid beds have the elevated concentrations that we must deal with.

Chair Liccardo confirmed there were no additional questions from the committee or public and called for a motion.

On a motion made by Committee Member Deb Davis and a second by Committee Member Dev Davis, TPAC recommended approval of item 5. C.

Ayes – 8 (Debi Davis, Dev Davis, Diep, Gatto, Liccardo, Sykes, Turner, Watanabe)
Absent – 1 (Montano)

6. OTHER BUSINESS/CORRESPONDENCE

- A. Information Memo: Pond A-18 Negotiations
- B. Letter dated April 23, 2020 from San Francisco Bay Regional Water Quality Control Board to San José City Manager Dave Sykes and Santa Clara City Manager, Deanna J. Santana
- C. Letter dated April 3, 2020 from Valley Water, US. Corps of Engineers and California State Coastal Conservancy to San Francisco Bay Regional Water Quality Control Board
- D. Letter to IBEW and TPAC regarding Coronavirus Safety at RWF Co-generation Construction Site
- E. Information Memorandum: RWF Capital Improvement Program Semiannual Status Report

Chair Liccardo asked if anyone wanted to pull any items in Section 6, Other Business/Correspondence. There were no requests to pull items and no questions or comments on items in this Section.

7. STATUS OF ITEMS PREVIOUSLY RECOMMENDED FOR APPROVAL BY TPAC

- A. Approval of Amended and Restated Design-Build Contract for the Final Design and Construction of the Headworks Project at the San José-Santa Clara Regional Wastewater Facility

Staff Recommendation:

- 1. Approve the Amended and Restated Design-Build Contract with CH2M HILL Engineers, Inc. for the final design, construction, commissioning and acceptance testing of the Headworks Project at the San José-Santa Clara Regional Wastewater Facility with a base Guaranteed Maximum Price in an amount not to exceed \$126,874,142.
- 2. Approve a ten percent construction contingency in the amount of \$12,688,000 for adjustments to the base Guaranteed Maximum Price in accordance with the Amended and Restated Design-Build Contract.

[SJ Headworks Amended and Restated DB Contract \(2-6-20\)](#)

[SJ Headworks Amended and Restated DB Contract Appendices \(2-6-20\)](#)

- 1. [Attachment 4A_60 pct Design Completion Documents Specifications Vol 1of5](#)
- 2. [Attachment 4A_60 pct Design Completion Documents Specifications Vol 2of5](#)
- 3. [Attachment 4A_60 pct Design Completion Documents Specifications Vol 3of5](#)

[4. Attachment 4A_60 pct Design Completion Documents_Drawings_Vol 4of5](#)

[5. Attachment 4A_60 pct Design Completion Documents_Standard Details_Vol 5of5](#)

This item was approved by the City Council on February 25, 2020.

- B. [Approval of a settlement agreement between City of San José and Brown and Caldwell related to the Digester and Thickener Facilities Upgrade Project.](#)

This item was approved by the City Council on February 25, 2020.

- C. [Second Amendment to the Consultant Agreement with Brown and Caldwell for Engineering Services for the Digester and Thickener Facilities Upgrade Project](#)

Staff Recommendation:

Approve the Second Amendment to the Consultant Agreement with Brown and Caldwell for engineering services for the Digester and Thickener Facilities Upgrade project at the San José-Santa Clara Regional Wastewater Facility, modifying the scope of services, extending the term of agreement from June 30, 2020 to December 31, 2021, and increasing the amount of compensation by \$2,530,734 for a total agreement amount not to exceed \$16,548,144, subject to the appropriation of funds.

This item was approved by the City Council on February 25, 2020.

- D. [Offer to Purchase Pond A-18](#)

Staff Recommendation:

Adopt a resolution authorizing the City Manager to negotiate an agreement with Valley Water for the sale of Pond A-18 and related easements to support the Shoreline Levee Project consistent with the criteria directed by the Treatment Plant Advisory Committee (TPAC) and Council in October of 2015 and 2017.

This item was approved by the City Council on April 14, 2020.

- E. [Declare Pond A-18 as Surplus Property](#)

Staff Recommendation:

Adopt a resolution declaring the City's Pond A-18 property (Assessor's Parcel Numbers 015-32-042 and 015-32-043) as exempt surplus land under Cal. Gov. Code §54221 as the land is surplus to the needs of the City.

This item was approved by the City Council on April 14, 2020.

8. REPORTS

A. Open Purchase Orders Greater Than \$100,000 (including Service Orders)

The attached monthly Procurement and Contract Activity Report summarizes the purchase and contracting of goods with an estimated value between \$100,000 and \$1.17 million and of services between \$100,000 and \$290,000.

Chair Liccardo asked if there was any discussion or questions on any items in Section 7, Status of Items Previously Recommended for Approval by TPAC or Section 8, Purchase Order Reports. There were no questions or comments on items in these Sections.

9. MISCELLANEOUS

A. The next TPAC Meeting is on **March 28, 2020, at 4:00 p.m.**, Virtual Meeting.

10. OPEN FORUM

Chair Liccardo asked if there was any discussion or questions for Open Forum. There were no questions or comments on items in this Section. He confirmed that there were no members of the public who wanted to comment.

11. ADJOURNMENT

A. The Treatment Plant Advisory Committee adjourned at 4:32 p.m.

Sam Liccardo, Chair
TREATMENT PLANT ADVISORY COMMITTEE



San José-Santa Clara
Regional Wastewater Facility

Capital Improvement Program

Monthly Status Report: March 2020

May 14, 2020

This report summarizes the progress and accomplishments of the Capital Improvement Program (CIP) for the San José-Santa Clara Regional Wastewater Facility (RWF) for March 2020.

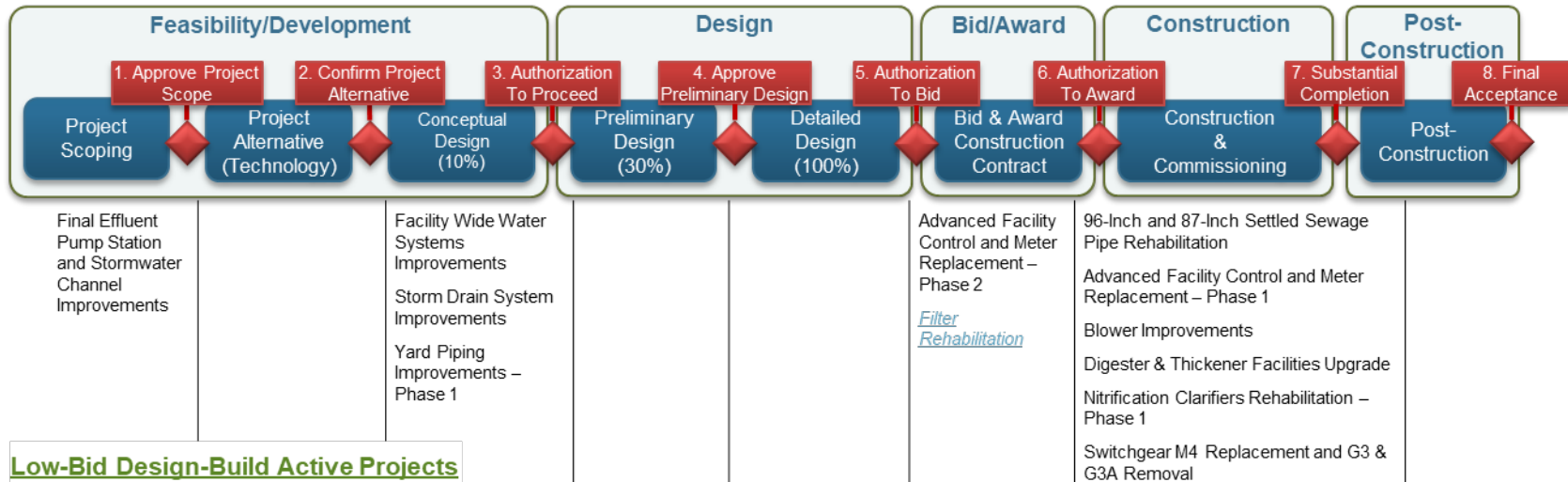
Report Contents

Project Delivery Models	2
Program Summary	3
Program Highlight – Using Drones to Monitor Construction Progress.....	4
Program Performance Summary	6
Program Budget Performance Summary	7
Project Performance Summary	9
Project Significant Accomplishments	11
Explanation of Project Performance Issues	12
Regional Wastewater Facility Treatment – Current Treatment Process Flow Diagram	14
Regional Wastewater Facility Treatment – Proposed Treatment Process Flow Diagram.....	15
Active Construction Projects – Aerial Plan.....	16

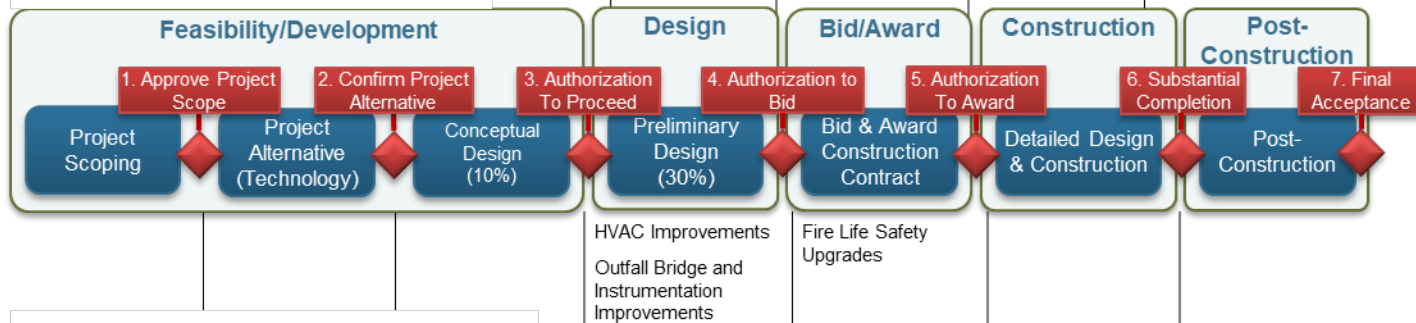


Project Delivery Models

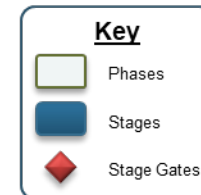
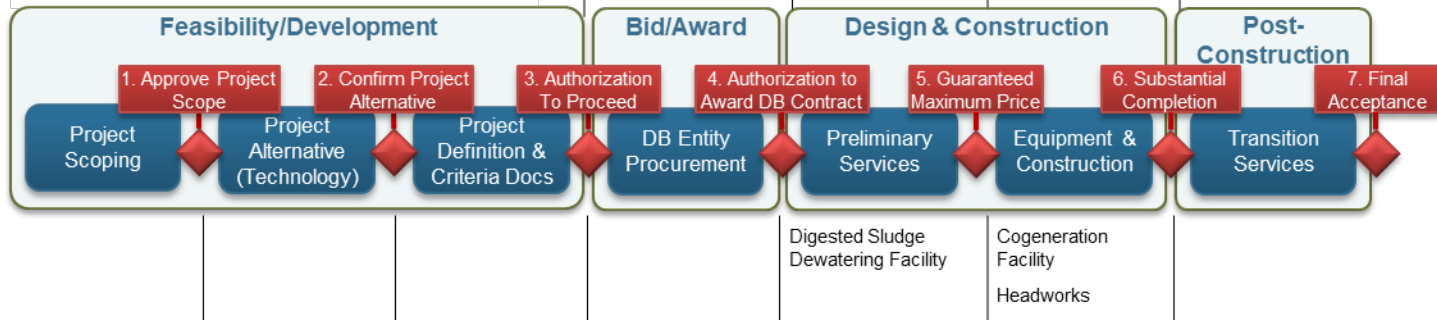
Design-Bid-Build Active Projects



Low-Bid Design-Build Active Projects



Progressive Design-Build Active Projects



*Projects shown underlined and in blue and italics have either been initiated or advanced this reporting period.



Program Summary

March 2020

In March, the COVID-19 pandemic impacted the CIP in a number of ways. In response to the Santa Clara County Public Health Officer Order of March 16, all CIP staff (except for key construction management field staff) commenced remote working. Construction continued with enhanced safety protocols enacted to be in compliance with the March 16 and subsequent County orders. Design activities also continued, with City and consultant staff adapting and learning to work effectively through virtual meetings and email communication.

The Digester and Thickener Facilities Upgrade Project contractor successfully pressure-tested the new hot water supply and return pipes along the elevated pipe rack on C Street. The contractor also completed construction of a pressure flow box for its temporary use as part of the primary effluent re-route system to allow the 96-Inch and 87-Inch Settled Sewage Pipe Rehabilitation Project to proceed. Work continued in the dissolved air flotation thickener (DAFT) gallery and tunnels in preparation for functional and operational commissioning. Operations and Maintenance (O&M) accepted the seventh of the eight remote digesters.

The Cogeneration Facility Project design-builder completed splicing the new medium-voltage (4160 volt) conductors into the existing conductors and energized the new M2 Switchgear.

The Blower Improvements Project contractor installed a local electrical control panel for one of the motors in the Process Air Building and poured an exterior wall for the new electrical room. The contractor also installed the new S11 Switchgear at the Tertiary Blower Building.

The Advanced Facility Control and Meter Replacement – Phase 1 Project contractor began functional testing of the secondary influent and return activated sludge flow meters.

The Nitrification Clarifier Rehabilitation – Phase 1 and 96-Inch and 87-Inch Settled Sewage Pipe Rehabilitation project teams reviewed and returned contractor submittals.

The City issued a Notice of Intent to Award the construction contract for the Advanced Facility Control and Meter Replacement – Phase 2 Project to the low bidder, Kiewit.

The City advertised the construction contract for the Filter Rehabilitation Project. Staff anticipates opening bids in mid-June.

The City issued the Notice to Proceed (NTP) to the design-builder on the Headworks Project to finish design and begin construction. The design-builder submitted the 90 percent design documents for Early Design Package 1 for mass excavation and utility relocations. Construction is scheduled to start in June 2020.

The design-builder for the Digested Sludge Dewatering Facility Project held a facility concepts workshop and an architectural workshop. During these workshops, O&M staff selected screw conveyors and cake bins over pumps and silos to move and store the sludge in a lower pressure, easier to operate and maintain, system. They also refined the building layout including office space and staff facility requirements.

Look Ahead

The following key activities are forecast for April and May 2020:

- The City will issue an NTP to the contractor for the Switchgear M4 Replacement and G3 & G3A Removal Project.
- Staff will recommend award of the construction contract for the Advanced Facility Control and Meter Replacement – Phase 2 Project.
- Two projects will seek to advance through the following stage gates:
 - Flood Protection Project – Stage Gate 1: Approve Project Scope
 - Yard Piping Improvements – Phase 1 Project – Stage Gate 3: Authorization to Proceed
- Two studies will seek to advance through Stage Gate 1: Approve Project Scope:
 - Process Optimization Study
 - Energy Management Strategic Plan Update Study

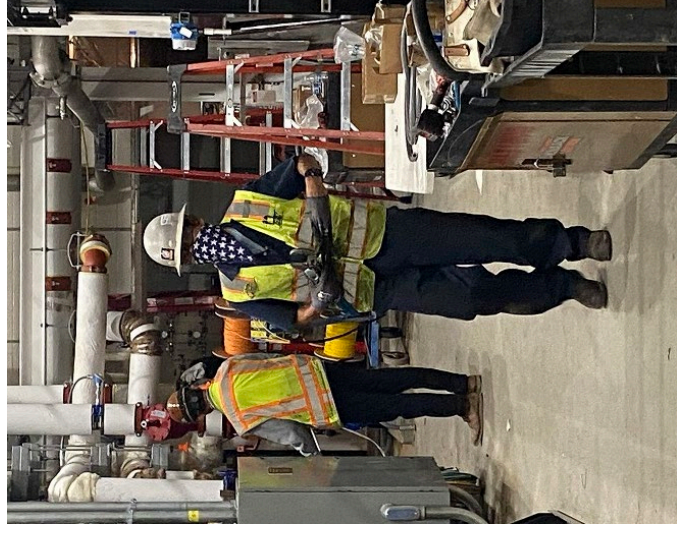


Figure 1: Construction PPE during the COVID-19 pandemic

Program Highlight – Using Drones to Monitor Construction Progress

Owners and contractors are increasingly using drones as a valuable tool to monitor construction progress through video and still photographs. The CIP started using drones to record RWF construction progress in April 2018 through the program management consultant.

The use of drones at the RWF presents unique challenges. The Facility's continuous operation, plus multiple active CIP construction projects require flight paths that do not hinder work and are also safe for all personnel working at ground level. Drones must have a high level of control and accuracy for survey-grade work, requiring an experienced and qualified drone operator. In addition, because the RWF is situated under the Norman Y. Mineta San José International Airport flight path, the Federal Aviation Authority (FAA) requires a Certificate of Waiver or Authorization before a drone can be flown over the RWF. Each drone flight is carefully planned and communicated with O&M, construction management, and the RWF Safety Management personnel. An example of a typical drone flight paths is shown in Figure 4.



Figure 2: Operator piloting drone



Figure 3: Example of drone used on the CIP

The CIP flies drones every few months to capture video and still imagery. Benefits from this regular schedule include capturing project progress from a unique perspective not previously available. Drone photos on page 5 of this report show progress on two of the CIP's largest projects over several months.

In addition to recording construction progress, drone footage is incorporated into program reporting (such as this Monthly Status Report), ESD social media, and is stored on the CIP Portal for project reference and use.

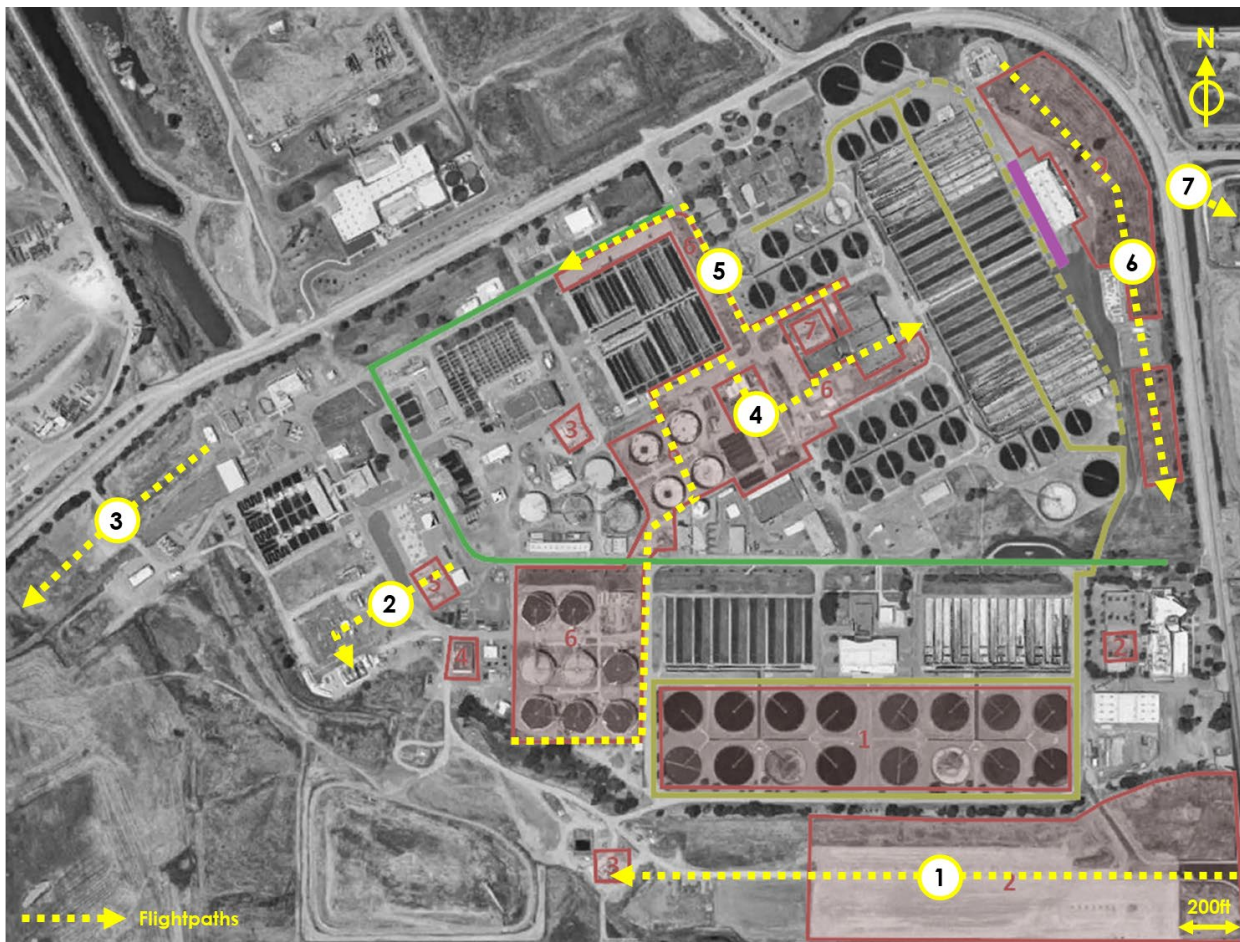
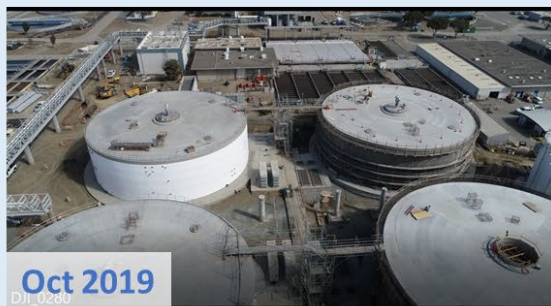


Figure 4: Example of a drone flightpath

Digester & Thickener Facilities Upgrade Project: Digesters 5-8



Cogeneration Facility Project: Engine Generator Building



























Figure 5: Examples of progress photographs captured from a drone (top to bottom)

Program Performance Summary

Eight key performance indicators (KPIs) have been established to measure overall CIP success. Each KPI represents a metric that will be monitored on a regular basis. Through the life of the CIP, KPIs that best reflect the current program will be selected and measured. KPIs are reset each fiscal year.

Program Key Performance Indicators – Fiscal Year 2019-2020

KPI	Target	Fiscal Year to Date			Fiscal Year End		
		Actual	Status	Trend	Forecast	Status	Trend
Stage Gates	90%	93% 14/15			95% 19/20		
Measurement: Percentage of initiated projects and studies that successfully pass each stage gate on their first attempt. Target: Green: >= 90%; Amber: 75% to 90%; Red: < 75%							
Schedule¹	90%	N/A 0/0	N/A	N/A	N/A 0/0	N/A	N/A
Measurement: Percentage of CIP projects delivered within 2 months of approved baseline Beneficial Use Milestone. ² Target: Green: >= 90%; Amber: 75% to 90%; Red: < 75%							
Budget³	90%	N/A 0/0	N/A	N/A	N/A 0/0	N/A	N/A
Measurement: Percentage of CIP projects that are accepted by the City within the approved baseline budget. ² Target: Green: >= 90%; Amber: 75% to 90%; Red: < 75%							
Expenditure	\$370M	\$368M			\$403M ⁴		
Measurement: CIP FY19-20 committed costs. Target: Committed costs meets or exceeds 70% of planned budget. 70% of \$528M = \$370M. Therefore Fiscal Year End Green: >=\$370M; Red: < \$370M							
Procurement	80%	83% 5/6 ⁵			100% 6/6		
Measurement: Number of consultant and contractor procurements advertised compared to planned for the fiscal year. Target: Green: >= 80%; Amber: 70% to 80%; Red: < 70%							
Safety	0	0			0		
Measurement: Number of OSHA reportable incidents associated with CIP delivery for the fiscal year. Criteria: Green: zero incidents; Amber: 1 to 2; Red: > 2							
Environmental⁶	0	1			0		
Measurement: Number of permit violations caused by CIP delivery for the fiscal year. Target: Green: zero incidents; Amber: 1 to 2; Red: > 2							
Vacancy Rate⁷	10%	15% 13/86 ⁸			9% 8/86		
Measurement: Ratio of the number of vacant approved positions to approved positions. Target: Green: <= 10%; Amber: 10% to 20%; Red: > 20%							

Notes

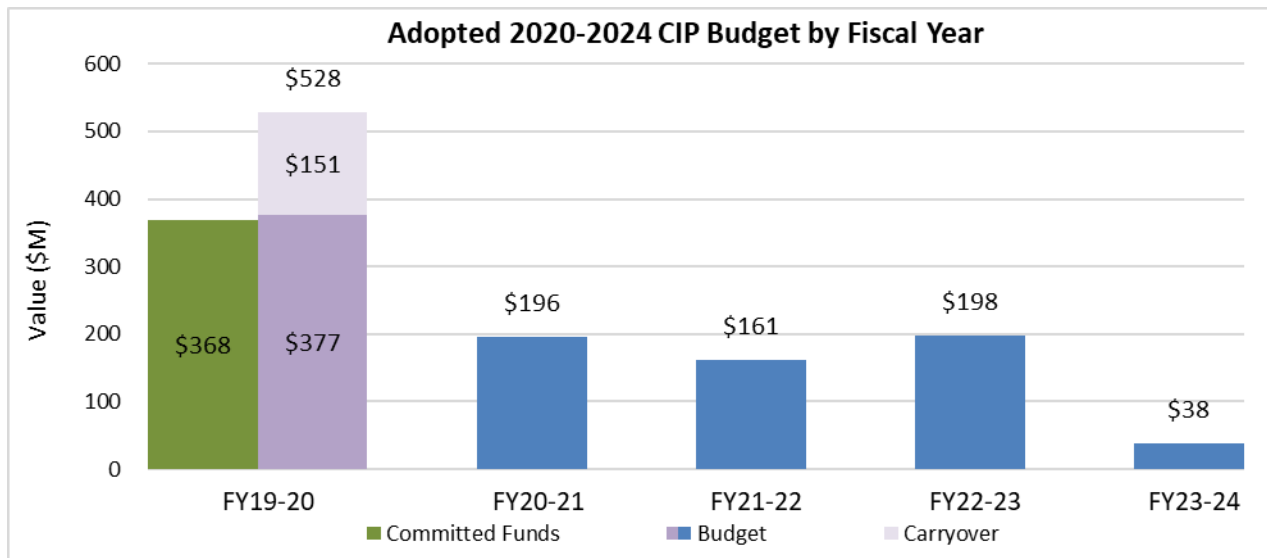
1. The CIP does not anticipate any projects reaching Beneficial Use this fiscal year.
2. The baseline Beneficial Use date and the baseline budget for each project are established at construction contract award and execution.
3. The CIP does not anticipate accepting any projects this fiscal year.
4. The CIP fiscal year-end forecast decreased \$5 million dollars due to revised encumbrance values.
5. The program advertised the Filter Rehabilitation Project construction contract this month.
6. The City has appealed a Bay Area Air Quality Management District notice of violation related to permitting procedures and is awaiting a response.
7. The vacancy rate KPI measures CIP-approved positions, including ESD, Public Works, and program management consultant full-time staff.
8. The City vacancy rate increased by one.



Program Budget Performance Summary

This section summarizes the cumulative monthly budget performance for fiscal year (FY)19-20 based on the Adopted 2020-2024 CIP.

Adopted 2020-2024 CIP Expenditure and Encumbrances



Notes:

Committed Funds: Total of expenditures and encumbrances.

Expenditure: Actual cost expended, either by check to a vendor or through the City's financial system, for expenses such as payroll or for non-personal expenses that do not require a contract.

Encumbrance: Financial commitments such as purchase orders or contracts that are committed to a vendor, consultant, or contractor. An encumbrance reserves the funding within the appropriation and project.

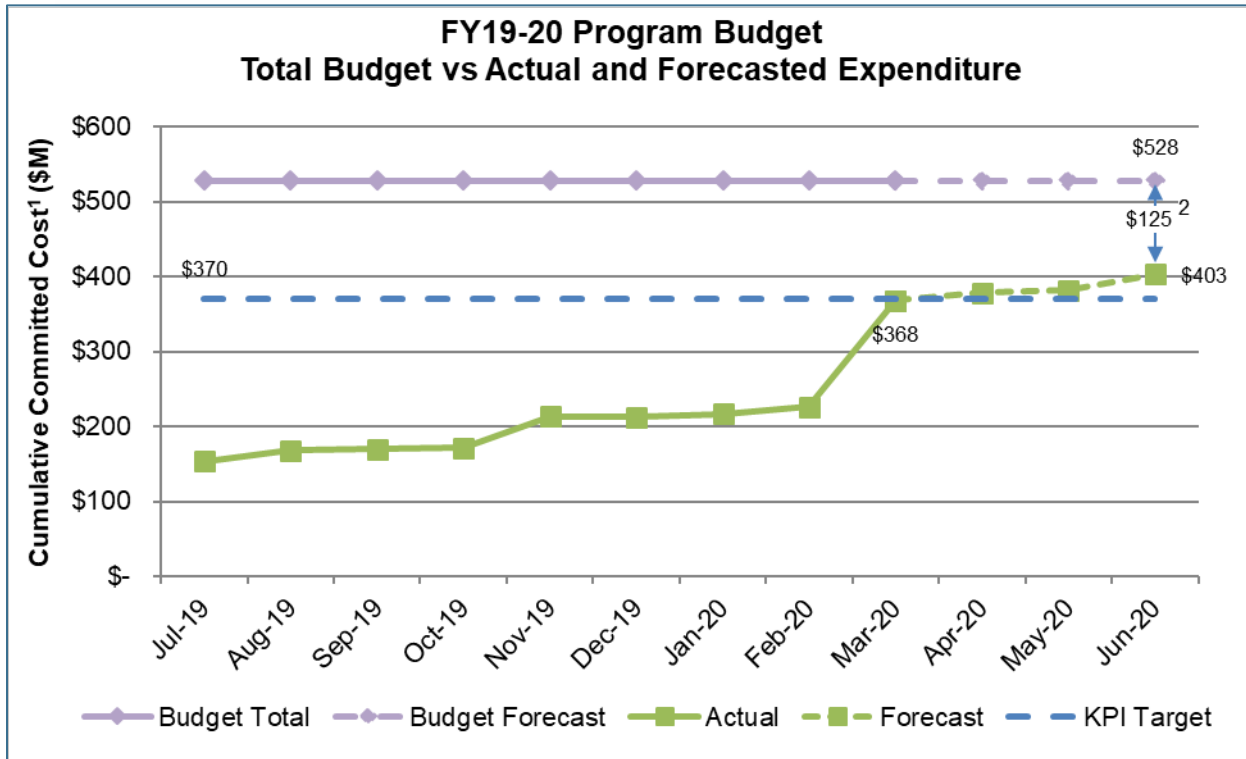
The FY19-20 budget is \$401.5 million, which consists of \$339.6 million in new funds, \$61.9 million in rebudgets. For purposes of this monthly report, the adopted FY19-20 budget is adjusted from \$401.5 million to \$377.2 million due to the exclusion of certain appropriations that are not measured as part of the expenditure KPI. Excluded appropriations include City Hall Debt Service Fund; Clean Water Financing Authority Debt Service Payment Fund; Debt Service Repayment for Plant Capital Improvement Projects (San José only debt service); Equipment Replacement Reserve; Ending Fund Balance; Public Art; City Facilities Emergency Power; and Urgent and Unscheduled Treatment Plant Rehabilitation. Similar adjustments have been made to the budgets for FY20-21 through FY23-24.

Carryover: Encumbrance balances at the end of the previous fiscal year are automatically carried forward to the current fiscal year as carryover funding to pay invoices for approved construction contracts and consultant agreements. FY19-20 carryover is \$151.0 million.

A budget of \$377.2 million and carryover of \$151.0 million totals \$528.2 million for FY19-20.

Fiscal Year 2019-2020 Program Budget Performance

The FY19-20 CIP budget is comprised of approximately \$377.2 million in new and rebudgeted funds, plus encumbered carryover of \$151.0 million, for a total of \$528.2 million. This excludes City Hall Debt Service Fund; Clean Water Financing Authority Debt Service Payment Fund; Debt Service Repayment for Plant Capital Improvement Projects (San José only debt service); Equipment Replacement Reserve; Ending Fund Balance; Public Art; City Facilities Emergency Power; and Urgent and Unscheduled Treatment Plant Rehabilitation items. Overall, the forecast fiscal year-end committed funds exceed the fiscal year-end target by \$33 million.



Notes:















1. Committed costs are expenditures and encumbrance balances, including carryover (encumbrance balances from the previous fiscal year).
2. The variance between budget and commitments can be primarily attributed to the following factors:
 - a. Four construction contracts will not be awarded in FY19-20, based on updated schedules:
 - i. Filter Rehabilitation Project
 - ii. Fire Life Safety Improvements
 - iii. HVAC Improvements
 - iv. Outfall Bridge and Instrumentation Improvements Project
 - b. Several consultant service orders are not anticipated to be awarded in FY19-20:
 - i. Aeration Tank Rehabilitation Project, conceptual through final design
 - ii. Facility Wide Water Systems Improvements Project, preliminary engineering and value engineering
 - iii. Flood Protection Project, alternatives analysis and conceptual design
 - c. The Yard Piping and Road Improvements Project was divided into multiple design-bid-build phases, resulting in different encumbrance points and values.
 - d. Construction bids for the Nitrification Clarifiers Rehabilitation – Phase 1 and Advanced Facility Control and Meter Replacement - Phase 2 projects came in under budget.
 - e. Several other minor encumbrances for consultant services are either lower than budgeted or are not anticipated to be awarded in FY19-20.
 - f. Several authorized positions remain vacant, resulting in lower personal services expenses than budgeted.



Project Performance Summary

There are currently seven projects in the construction and post-construction phases and an additional 11 projects in feasibility/development, design, bid and award, or design and construction phases (see PDM, page 2). Projects in the construction phase have established cost and schedule baselines and are monitored using the City's Capital Project Management System (CPMS). Green/red icons are included in the table below to indicate whether these projects are on budget and schedule.

Project Performance – Baselined Projects

Project Name	Phase	Estimated Beneficial Use Date ¹	Cost Performance ²	Schedule Performance ²
1. Cogeneration Facility	Design & Construction	Sep 2020		
2. 96-Inch and 87-Inch Settled Sewage Pipe Rehabilitation	Construction	Jan 2021		
3. Digester and Thickener Facilities Upgrade	Construction	Mar 2021		
4. Advanced Facility Control & Meter Replacement - Phase 1	Construction	June 2021		
5. Switchgear M4 Replacement and G3 & G3A Removal	Construction	Aug 2022 ³		
6. Blower Improvements	Construction	Sep 2022		
7. Nitrification Clarifiers Rehabilitation – Phase 1	Construction	Jan 2023		

Key:

Cost:		On Budget		>1% Over Budget	Schedule:		On Schedule		>2 months delay
--------------	---	-----------	---	-----------------	------------------	---	-------------	---	-----------------

Notes

- Beneficial Use is defined as work that is sufficiently complete, in accordance with contract documents, that it can be used or occupied by the City. Beneficial Use dates are reviewed as part of project schedule reviews.
- An explanation of cost and schedule variances on specific projects identified in this table is provided on page 12.
- The project construction Beneficial Use date will be baselined once the City issues the construction contract NTP letter.



Project Performance – Pre-Baselined Projects

Project Name	Phase	Estimated Beneficial Use Date ¹
1. Headworks	Design and Construction	Jun 2023
2. Digested Sludge Dewatering Facility	Design and Construction	Oct 2023
3. Fire Life Safety Upgrades	Bid/Award	Nov 2022
4. Advanced Facility Control & Meter Replacement - Phase 2	Bid/Award	Jan 2023
5. Filter Rehabilitation	Bid/Award	Jul 2023
6. Outfall Bridge and Instrumentation Improvements	Design	Dec 2021
7. HVAC Improvements	Design	May 2025
8. Yard Piping Improvements – Phase 1	Feasibility/Development	Nov 2021
9. Storm Drain System Improvements	Feasibility/Development	Oct 2023
10. Facility Wide Water Systems Improvements	Feasibility/Development	Jan 2025
11. Final Effluent Pump Station and Stormwater Channel Improvements	Feasibility/Development	May 2026

Notes

1. Beneficial Use is defined as work that is sufficiently complete, in accordance with contract documents, that it can be used or occupied by the City. Beneficial Use dates are reviewed as part of project schedule reviews.



Project Significant Accomplishments

Biosolids Package

Digested Sludge Dewatering Facility Project

- Design-builder Walsh Construction Company II (Walsh) held a facility concepts workshop at which O&M identified preferences for cake bins and screw conveyors, which will be incorporated into the dewatering building layout.
- Walsh also held a workshop with the City on architectural options and resulting O&M staffing estimates. During the workshop, the City provided direction to further refine the building layout, office space requirements, and staff facilities.

Digester and Thickener Facilities Upgrade Project

- Contractor Walsh successfully pressure-tested the new hot water supply and return pipes along the C Street section of the elevated pipe rack. Walsh also began installing digester gas and hot water piping along the next section of the rack.
- Walsh completed construction of pressure flow box #2, successfully hydro-tested it and began backfilling around it in preparation for another project, which will install pumps for a temporary re-route.
- Walsh installed a 4,000-pound check valve, new pipe supports, and pressure flow tank 6 control panel in the DAFT gallery and tunnels.
- The City's Process Control System staff confirmed instrument communications for the seventh of eight remote digesters. This confirmation enabled Walsh to transfer operations of that digester gas system from the tunnel to the elevated pipe rack and remove most of the temporary digester gas re-route piping.

Liquids Package

Advanced Facility Control and Meter Replacement – Phase 1 Project

- Contractor Overaa began functional testing 25 secondary influent and return-activated sludge flow meters. Overaa will complete the testing with RWF treated effluent in April.

Advanced Facility Control and Meter Replacement – Phase 2 Project

- The City issued a Notice of Intent to Award. The project team will recommend that Council award the construction contract to the lowest bidder, Kiewit, in May.

Blowers Improvements Project

- Contractor Monterey Mechanical Company installed the Process Air Building motor No. 2 local electrical control panel and poured the exterior wall for the new electrical room.
- The contractor also installed the new Switchgear S11 at the Tertiary Blower Building.

Filter Rehabilitation Project

- The City advertised the construction contract on Bidding on March 11, 2020. Due to COVID-19, staff extended the bid period. Bids are expected to be opened in mid-June and the construction contract awarded in October 2020.

Final Effluent Pump Station and Stormwater Channel Improvement Project

- Staff held a workshop in March to shortlist four alternatives to move forward with further evaluation.
- Consultant Brown and Caldwell will identify alternative evaluation criteria and develop a life cycle cost for each shortlisted alternative. Staff will hold a second workshop in April to score and select the preferred alternative.

Headworks Project

- The City issued an NTP to contractor CH2M for final design and construction. The 90 percent design documents for Early Design Package 1 for mass excavation and utility relocations were submitted. Construction is scheduled to start in June 2020.

Nitrification Clarifier Rehabilitation - Phase 1 Project

- The City reviewed and returned submittals including baseline schedule, MCC enclosure, panelboards, operator control stations, industrial coatings, switchgear, stainless steel pipe, and ductile iron pipe.

Power and Energy Package

Cogeneration Facility Project

- Design-builder CH2M completed splicing the new medium-voltage (4160 volt) conductors into the existing conductors inside multiple manholes and energized Switchgear M2.



Explanation of Project Performance Issues

Digester and Thickener Facilities Upgrade Project

This project encountered numerous unforeseen conditions at the beginning of construction in 2016, including corroded underground pipe and other obstructions for new building foundations. A temporary reroute system was installed to enable replacement of a 78-inch settled sewage pipeline and junction structure during the 2018 dry season.

In 2017, design modifications were required to address seismic risks, control system changes, additional underground obstructions, pipe anchorage, and new fire department requirements. Discovery of hazardous materials required submittal of an extensive cleanup proposal to the federal Environmental Protection Agency (EPA) for approval. Once mitigation was completed in 2019, the City submitted another report to the EPA that detailed how it met each EPA cleanup permit requirement.

To pay for the additional work to address unforeseen conditions, Council approved a construction contingency increase of \$15 million in November 2017 and another contingency increase of \$25 million in June 2018.

Delays for these conditions have amounted to 273 working days. The original construction completion and Beneficial Use date of September 2019 has been delayed and rescheduled to November 2020. Currently, the City is evaluating Walsh's request for additional delays due to numerous design related change orders. This may delay the project an additional 71 working day, moving completion to March 2021.



Page Left Intentionally Blank



Regional Wastewater Facility Treatment – Current Treatment Process Flow Diagram

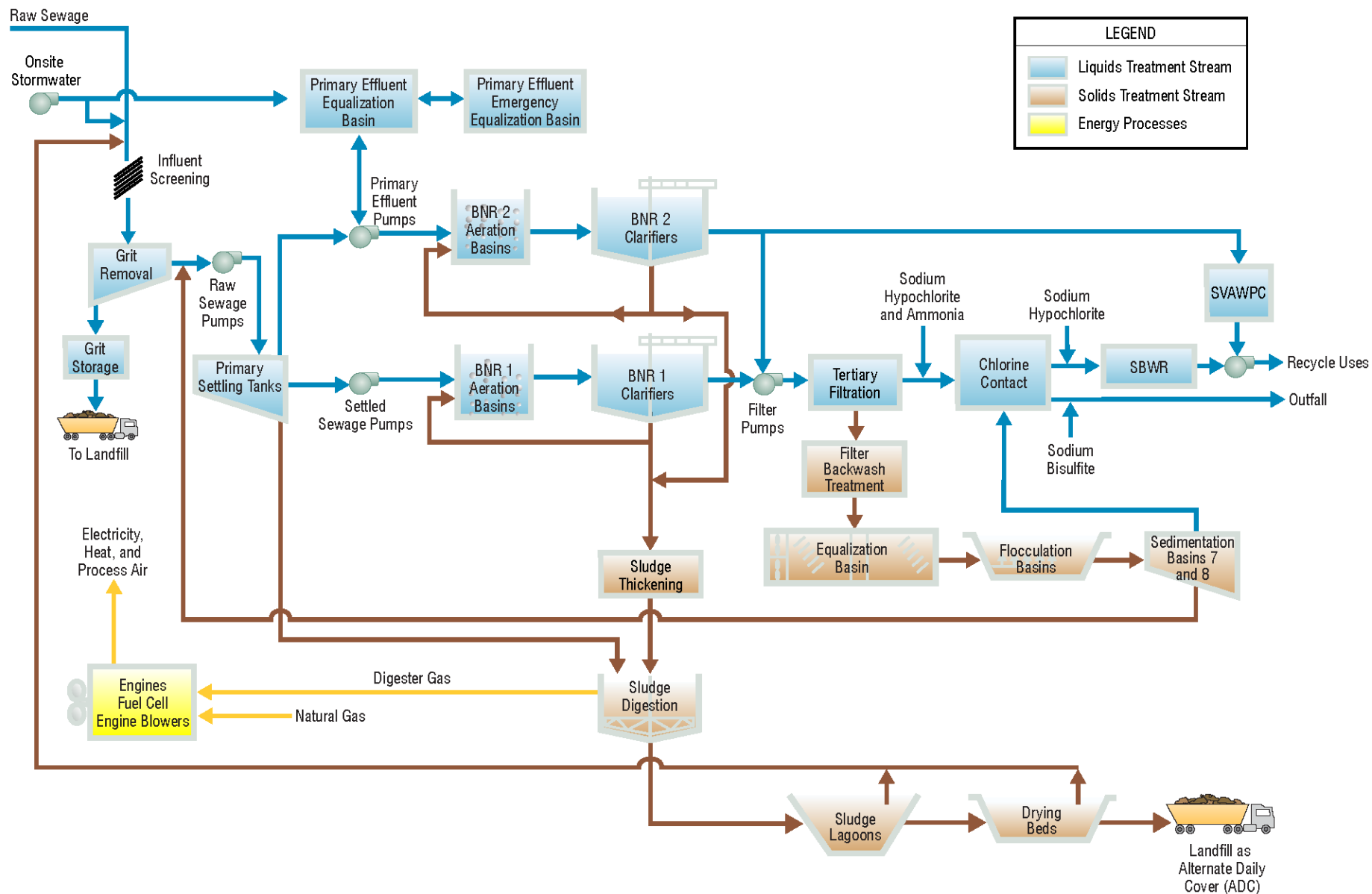


Figure 6 – Current Treatment Process Flow Diagram

Regional Wastewater Facility Treatment – Proposed Treatment Process Flow Diagram

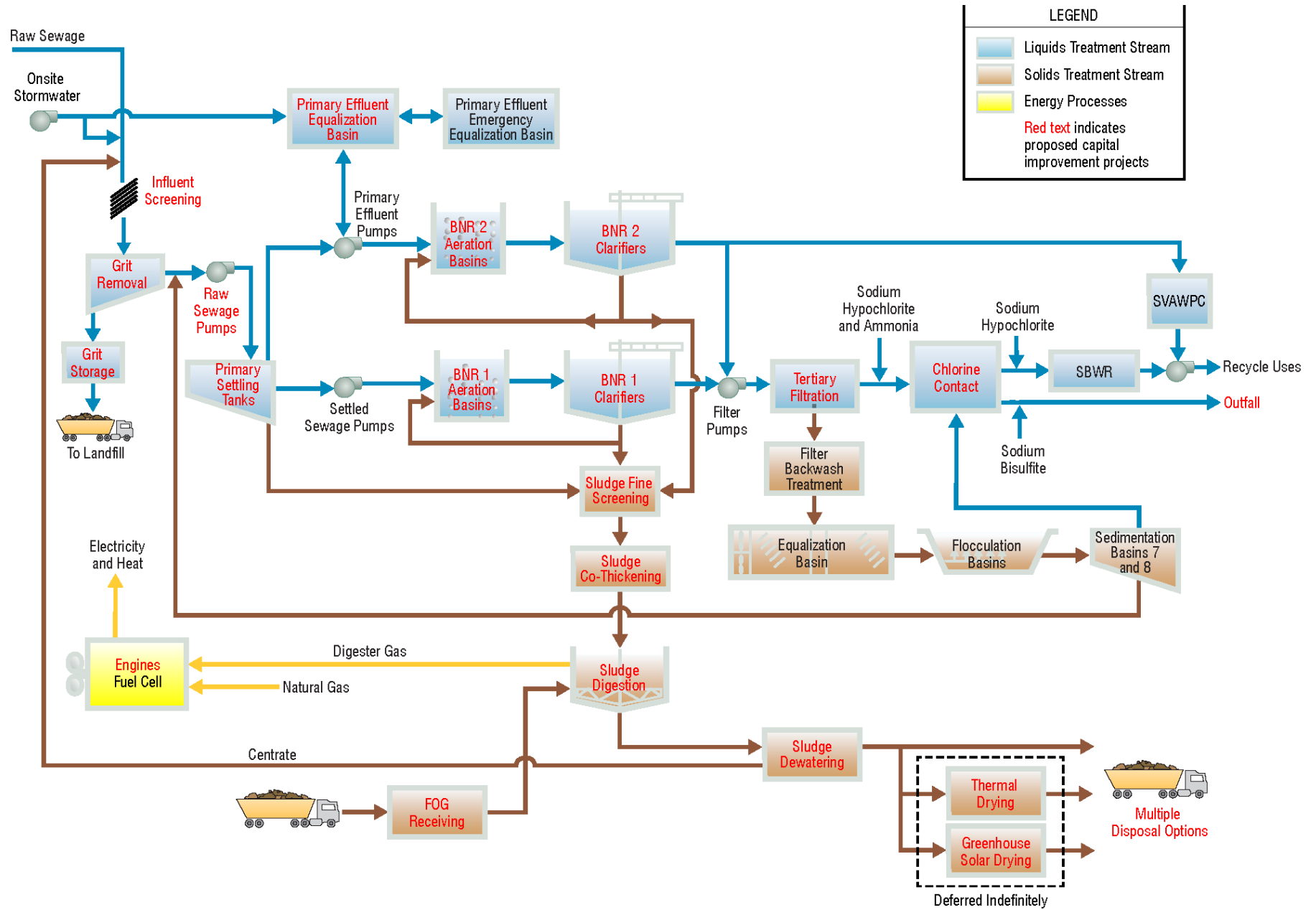


Figure 7 – Proposed Treatment Process Flow Diagram

Active Construction Projects – Aerial Plan

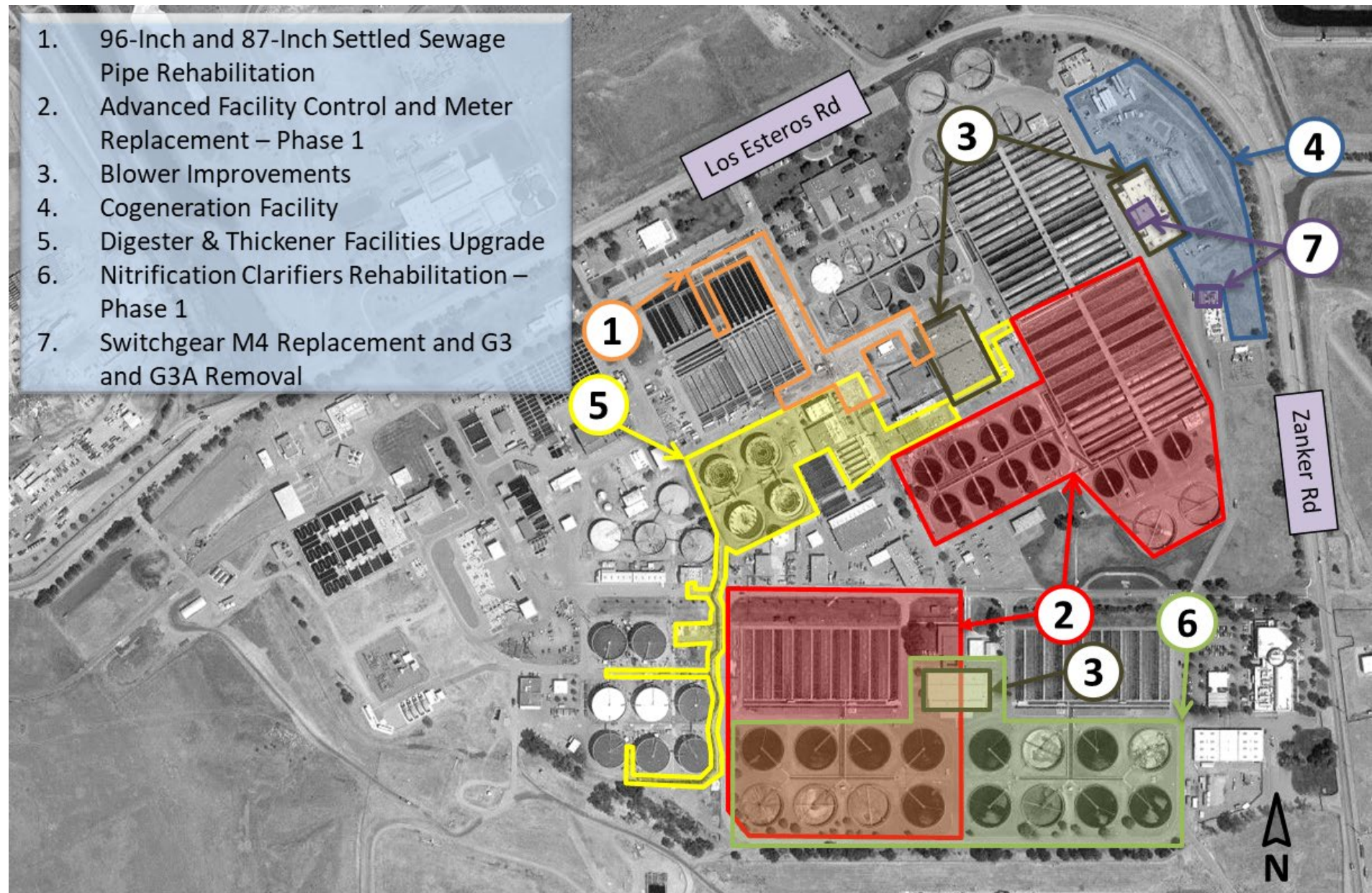


Figure 8: Active Construction Projects



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Kerrie Romanow
Matt Cano

SUBJECT: SEE BELOW

DATE: May 17, 2020

Approved

Date

05/21/20

SUBJECT: REPORT ON BIDS AND AWARD OF CONSTRUCTION CONTRACT FOR 8868 – ADVANCED FACILITY CONTROL AND METER REPLACEMENT - PHASE 2 PROJECT AT THE SAN JOSÉ-SANTA CLARA REGIONAL WASTEWATER FACILITY

RECOMMENDATION

Report on bids and award a construction contract for the 8868 – Advanced Facility Control and Meter Replacement – Phase 2 Project to the low bidder, Kiewit Infrastructure West Co., in the amount of \$7,046,100, including Add Alternate Items No. 1 through 5, and approve a 20 percent contingency in the amount of \$1,409,220.

OUTCOME

Award of the construction contract to Kiewit Infrastructure West Co. (Kiewit) will allow for the construction and completion of the Advanced Facility Control and Meter Replacement – Phase 2 Project (Project) at the San José-Santa Clara Regional Wastewater Facility (RWF), which will improve its operational reliability and efficiency. Approval of a 20 percent construction contingency will provide funding for unanticipated work necessary for the proper and timely completion of the Project.

BACKGROUND

The RWF relies on control equipment, such as flow meters, valves and actuators, sensors and transmitters, for process monitoring and control to maintain safe and efficient operation of the RWF and full compliance with its National Pollutant Discharge Elimination System (NPDES) permit. Most of the control equipment at the RWF was installed during the 1960s and 1970s and is in poor condition and requires excessive maintenance. Some of the control equipment is difficult to repair because it is no longer supported by the manufacturers, and replacement parts are scarce or not available. Therefore, there is an urgent need to replace the control equipment to increase equipment and data reliability and integrity, and to improve the RWF's overall operations and efficiency.

The Project will replace and/or upgrade the control equipment in the Secondary A Battery, Nitrification A Battery, East Primaries and Filtration treatment areas, as shown in Attachment A. The project scope includes replacing 52 flow meters, 24 valves, 12 valve actuators, 60 sensors and transmitters, associated piping modifications, and electrical improvements.

Construction is scheduled to begin in July 2020, with substantial completion in December 2022. Major construction work will be performed during the planned annual maintenance shutdown periods for Nitrification A and Secondary A batteries in 2021 and 2022, respectively. Other construction work, in the Filtration and East Primary treatment areas, will be performed during contractor coordinated process shutdowns in winter 2020 and summer 2021 or summer 2022, respectively.

Council Resolution No. 71816, adopted on November 4, 2003, requires pre-qualification of contractors on all public works projects in which the Engineer's Estimate is \$10 million or more. The Engineer's Estimate for this project is \$11.3 million, and the Project will be delivered using a conventional design-bid-build delivery method. Based on these factors, staff conducted a pre-qualification process in July 2019. Three general contractors submitted pre-qualification packages. Staff evaluated the packages and determined that all three general contractors met the pre-qualification requirements. Of the three pre-qualified contractors who were invited to bid on the Project, two submitted bids.

ANALYSIS

Bids were opened on February 20, 2020 with the following results:

Contractor	Base Bid Amount	Add Alt Total	Total Bid	Variance Amount	Over/ (Under) Percent
Kiewit Infrastructure West Co. (Fairfield)	\$5,969,100	\$1,077,000	\$7,046,100	(\$4,207,227)	(37.4%)
C. Overaa & Co. (Richmond)	\$7,244,000	\$1,170,000	\$8,414,000	(\$2,839,327)	(25.2%)
Engineer's Estimate	\$8,648,141	\$2,605,186	\$11,253,327		

In addition to the base bid scope of work there are five Add Alternate bid items as follows:

1. Replacement of East Primary Battery A&B and C&D Flowmeters, East Primary Battery A, B, C, and D Density Meters and all other associated modification work.
2. Replacement of Secondary Tank A-5 West End Feed 36" Influent and 30" RAS Influent Flow Meters, DO Sensors and Transmitters, and all other associated modification work.
3. Replacement of Secondary Tank A-6 West End Feed 36" Influent and 30" RAS Influent Flow Meters, DO Sensors and Transmitters, and all other associated modification work.

4. Replacement of analyzers in Filter Tanks, Filter Building, and Service Wing, Effluent Structure No. 2 and all other associated modification work.
5. Replacement of analyzers in Filter Diversion Shed and all other associated modification work.

Contractor	Add Alt No. 1	Add Alt No. 2	Add Alt No. 3	Add Alt No. 4	Add Alt No. 5
Kiewit Infrastructure West Co.	\$322,000	\$235,000	\$213,000	\$265,000	\$42,000
C. Overaa & Co.	\$347,000	\$210,000	\$190,000	\$365,000	\$58,000
Engineer's Estimate	\$805,211	\$530,011	\$490,156	\$710,481	\$69,327

A total of two bids were received and both bids were below the Engineer's Estimate. The discrepancy between the engineer's estimate and the bid amounts may be attributed to the following factors:

- Equipment vendor quotes used on the bid are likely lower than the quotes used in the Engineer's Estimate due to the competitive nature of the bidding process,
- The Engineer's Estimate for mitigation costs for known hazardous materials may have been more conservative than the contractors' estimates, and
- Lower mobilization and staffing costs as Kiewitt and Overaa both already have active construction projects at the RWF.

The low bid submitted by Kiewit is 37 percent below the Engineer's Estimate. Staff considers Kiewit's bid to be acceptable for the work involved and recommends awarding a construction contract to Kiewit. Add Alternates Nos. 1, 2, 3, 4 and 5 are recommended for award because the Project budget is sufficient to accommodate these additions.

Staff recommends a 20 percent construction contingency for this Project. This contingency is recommended to account for the challenge of maintaining continuous operations at the RWF during construction, complex project interfaces with existing electrical and process control facilities, potential utility conflicts, access constraints, and the potential for conflicts with other concurrent capital improvement and annual maintenance projects.

Project Labor Agreement Applicability

The Director of Public Works determined that a project labor agreement (PLA) is applicable to this project because the engineer's estimate is over three million dollars.

Local and Small Business Outreach

Neither Kiewit nor its subcontractors are small businesses. While Kiewit submitted the bid from their Fairfield office, the company does have a local office in Santa Clara County. None of the subcontractors listed in the bid are local companies. Although the City cannot limit bidding to local firms, the RWF CIP has held an annual vendor open house to increase awareness in the

contractor and consultant community about upcoming opportunities. The last open house prior to bid advertisement, was held in November 2018 and attended by 48 companies. One third were small businesses and half were local businesses.

CONCLUSION

Based on staff's evaluation of the bids, staff considers the bid submitted by the low bidder to be acceptable for the work involved and recommends awarding the construction contract for the Project to Kiewit.

EVALUATION AND FOLLOW-UP

No follow-up action with City Council is expected at this time. A progress report on this and other RWF capital projects will be made to the Transportation and Environment Committee and the City Council on a semiannual basis. Monthly progress reports of the RWF Capital Improvement Program (CIP) will also be submitted to the Treatment Plant Advisory Committee (TPAC) and posted on the City's website.

CLIMATE SMART SAN JOSE

This project will replace equipment with like-for-like equipment and will not affect energy or water consumption. The recommendations in this memo will have no effect on Climate Smart San José energy, water, or mobility goals.

PUBLIC OUTREACH

This project was advertised on Biddingo.com on January 22, 2020 and in the San José Post Record. This memorandum will be posted on the City's Council Agenda website for the June 2, 2020 City Council meeting.

COORDINATION

This Project and memorandum have been coordinated with the Departments of Planning, Building and Code Enforcement, Fire, Finance, the City Manager's Budget Office, and the City Attorney's Office.

COMMISSION RECOMMENDATION/INPUT

This item is scheduled to be heard at the May 28, 2020 TPAC meeting. A supplemental memo with the committee's recommendation will be included in the amended June 2, 2020 City Council meeting agenda.

FISCAL/POLICY ALIGNMENT

This Project is consistent with the Council-approved focus on rehabilitating aging RWF infrastructure, improving efficiency, and reducing operating costs. This Project is also consistent with the budget strategy principle of focusing on protecting our vital core services.

COST SUMMARY/IMPLICATIONS

1. AMOUNT OF RECOMMENDATION/COST OF PROJECT: \$7,046,100

Project Delivery \$4,524,944

Construction \$7,046,100

Contingency (20%) \$1,409,220

Total Project Costs \$12,980,264

Prior Year Expenditures \$541,350

REMAINING PROJECT COSTS **\$12,438,914**

** Project delivery includes \$493,059 for project management during design, \$196,618 for bid and award, \$3,571,210 for construction management, and \$264,057 for post-construction and project closeout.*

The estimated project delivery cost is 64% of the construction cost, which is in line with project delivery costs for capital projects at other wastewater facilities.

2. COST ELEMENTS OF AGREEMENT/CONTRACT: \$ 7,046,100
This is a lump sum contract.

3. SOURCE OF FUNDING: Fund 512 – San José-Santa Clara Treatment Plant Capital Fund. Fund 570 – South Bay Water Recycling Operating Fund.

4. FISCAL IMPACT: The Project will have no additional impact on the San José-Santa Clara Treatment Plant Operating Fund (Fund 513), South Bay Water Recycling Operating Fund (Fund 570) or the General Fund.

5. **OPERATING COSTS:** The annual costs to operate and maintain the upgraded facilities are not anticipated to impact the San José-Santa Clara Treatment Plant Operating Fund as this is an equipment replacement project, and therefore there will be no additional annual operations and maintenance costs.
6. **PROJECT COST ALLOCATION:** In accordance with the recommendations set forth in Capital Project Cost Allocations Technical Memorandum (Carollo Engineers, March 2016), this project will be allocated between the four billable parameters relative to the rolling weighted average distribution of all RWF assets.

BUDGET REFERENCE

The table below identifies the fund and appropriations to fund the contract recommended as part of this memo and remaining project costs, including project delivery, construction, and contingency costs.

Fund #	Appn #	Appn. Name	Total Appn	Amt. for Contract	2019-2020 Adopted Capital Budget Page	Last Budget Action (Date, Ord. No.)
Remaining Project Costs			\$12,941,647			
Remaining Funding Available						
512	7224	Advanced Facility Control and Meter Replacement	\$15,495,000	\$7,004,100	V-125	06/18/2019 Ord. No. 30286
570 ¹	0762	Non-Personal Equipment	\$3,855,958	\$42,000	X-87	10/22/2019 Ord. No. 30325
Total Current Funding Available			\$19,350,958			

1. The project includes removal and replacement of three (3) instruments owned by South Bay Water Recycling but operated by RWF Operations. This portion of the scope will be funded through Fund 570 - South Bay Water Recycling Operating Fund. The included page reference for this portion is to the 2019-2020 Adopted Operating Budget rather than the 2019-2020 Adopted Capital Budget.

HONORABLE MAYOR AND CITY COUNCIL

May 17, 2020

Subject: 8868 – Advanced Facility Control and Meter Replacement – Phase 2 Project

Page 7

CEQA

Exempt, File No. PP16-130, CEQA Guidelines Section 15301, Existing Facilities

/s/

KERRIE ROMANOW

Director, Environmental Services Department

/s/

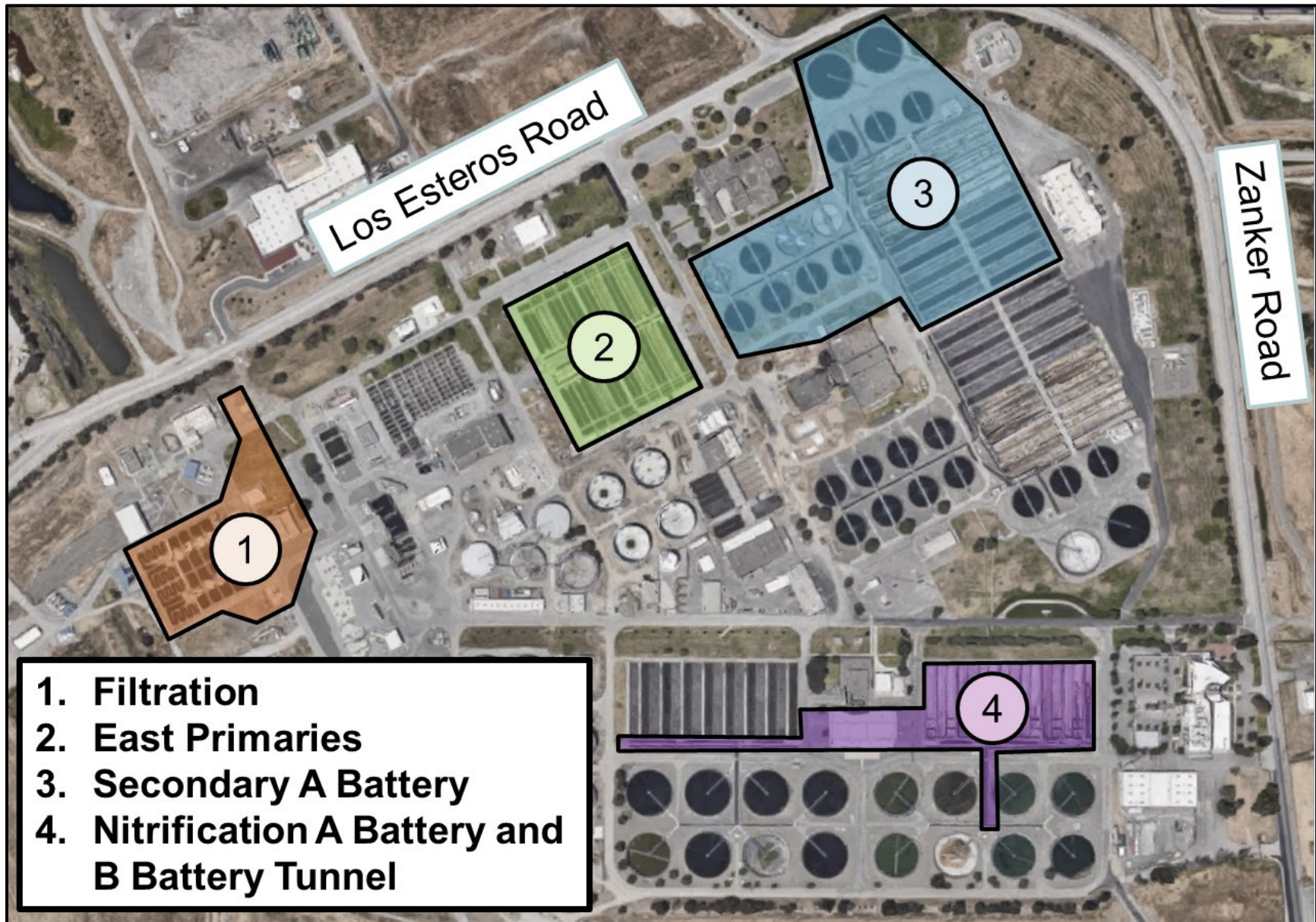
MATT CANO

Director of Public Works

For questions, please contact Napp Fukuda, Assistant Director, Environmental Services Department at (408) 793-5353.

Attachment A – Advanced Facility Control and Meter Replacement - Phase 2 Project Map

Attachment A – Advanced Facility Control and Meter Replacement – Phase 2 Project Map





Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Richard Doyle
City Attorney

SUBJECT: Fourth Amendment to Legal
Services Agreement for
Regional Wastewater Facility
Capital Program

DATE: May 21, 2020

RECOMMENDATION

Approve a Fourth Amendment to the legal services agreement with Hawkins, Delafield & Wood LLP, to extend the term of the agreement through June 30, 2024 and revise the scope of services, at no additional cost to the City, to support the San José-Santa Clara Regional Wastewater Facility ("RWF") Capital Improvement Program.

OUTCOME

The outcome of the recommended action will allow Hawkins, Delafield and Wood LLP ("Hawkins Delafield") to continue to provide legal services related to the design and construction of design-build projects at the RWF, including the Headworks and Dewatering projects, while ensuring that Hawkins Delafield will be able to seamlessly continue providing legal support for the design and construction of the Cogeneration Facility Project, as well as the development of a bank of forms, documents and information that can be used to support the Capital Improvement Program ("CIP") in the future.

BACKGROUND

The RWF is owned jointly by the cities of San José and Santa Clara. The ownership agreement designates San José as having primary responsibility for administering, operating and maintaining the RWF. It expressly states that San José has the power to "make, award and enter into contracts with third parties for the construction, improvement, replacement, expansion, or repair" of the RWF.

Over the years, San José and Santa Clara have entered into a variety of separate agreements to provide wastewater treatment services to the cities of Milpitas, Cupertino, Campbell, Los Gatos, Monte Sereno and Saratoga, and to unincorporated areas of Santa Clara County. Currently, the RWF provides tertiary treatment of up to

167 million gallons of wastewater a day to approximately 1.4 million residents and about 17,000 commercial/industrial sewer connections. It operates 24 hours a day, 7 days a week.

The RWF uses a five-year capital improvement program to plan and identify capital improvement projects. Historically, the total cost of the capital improvement projects identified in the five-year capital improvement program has ranged from 50 to 150 million dollars.

The RWF is now over 50 years old and is in need of significant capital improvements. Following an extensive master planning and program validation effort, the RWF is undertaking a major capital improvement program involving an increased level of capital investment to fund significant infrastructure rehabilitation projects. The program is anticipated to increase the five-year capital improvement program to upwards of one billion dollars.

The Office of the City Attorney provides legal support services to City staff administering the RWF. Given the large volume of construction work planned for the RWF in a relatively short period of time, and the size and complexity of the projects, City staff requested the City Attorney's Office to engage outside legal counsel with an expertise in primarily the following areas to work with the City Attorney's Office in:

1. Advising the City with the analysis of the various alternative methods available to it for delivering major public works construction projects, including design-build projects; and
2. Advising the City on implementing, administering and managing major public works construction projects undertaken at the RWF using various project delivery methods, including design-build projects.

ANALYSIS

Following a request for qualifications process held earlier in 2014, on November 24, 2014, the City entered into a contract for legal services with Hawkins Delafield to provide the above-referenced services. Compensation and the term of the original agreement were as follows:

- The initial term of the contract was one year (commencing on December 2, 2014 and ending on December 1, 2015), with maximum compensation not to exceed \$180,000.
- There were two one-year options to extend the term of the agreement, with the maximum compensation for each option year not to exceed \$160,000.

- The City Attorney was authorized to exercise each of the options subject to the appropriation of funds.

Due to an increase in the amount of legal services requested by the City and provided by Hawkins Delafield in the first months of the contract, a First Amendment was approved by the City Council on May 20, 2015, which modified the original agreement as follows:

- The initial term of the contract was one year (commencing on December 2, 2014 and ending on December 1, 2015), with maximum compensation not to exceed \$400,000.
- There were two one-year options to extend the term of the agreement, with the maximum compensation for each option year not to exceed \$300,000.
- The City Attorney was authorized to exercise each of the options subject to the appropriation of funds by the Council.

In order for Hawkins Delafield to continue providing legal services through the contract negotiations with the successful design-builder for the City's Cogeneration Facility Project, a Second Amendment was approved by the City Council on December 1, 2015, which modified the amended agreement as follows:

- The initial term of the contract was one year and seven months (commencing on December 2, 2014 and ending on June 30, 2016), with maximum compensation not to exceed \$700,000.
- There was one one-year option to extend the term of the agreement, with maximum compensation for the option year not to exceed \$300,000.
- The City Attorney was authorized to execute the Second Amendment subject to the appropriation of funds.

In order for Hawkins Delafield to continue to provide legal services related to the Cogeneration Facility Project and to provide legal services related to the Headworks, Dewatering, and Yard Piping design-build projects, a Third Amendment was approved by the City Council on June 13, 2017 extending the term for an additional three-year period through June 30, 2020 in an amount not to exceed \$1,500,000 for Fiscal Years 2017-2018, 2018-2019, and 2019-2020. The combined estimated total capital cost for these projects is estimated at \$481.2 million¹ and are scheduled to be procured on an overlapping and concurrent basis.

¹ As reflected in the proposed 2018-22 CIP.

A fourth amendment is necessary in order for Hawkins Delafield to continue to provide legal services related to the Cogeneration Facility Project and to provide legal services related to the Headworks and Dewatering design-build projects, extending the term for one additional four-year period, through June 30, 2024, at no additional cost to the City. Additionally, the scope of services will be revised to remove the Yard Piping project, as that project is moving ahead as a traditional design-bid-build project, in multiple phases, and should not require any services from Hawkins Delafield. The compensation amount of \$100,000 originally designated for the Yard Piping project will be moved to the appropriation for the Cogeneration Facility Project.

CONCLUSION

To ensure the continued delivery of legal services in support of the RWF Capital Improvement Program, staff recommends a fourth amendment to the agreement with Hawkins Delafield revising the scope of services to remove the Yard Piping project and extending the term through June 30, 2024, at no additional cost to the City.

CLIMATE SMART SAN JOSE

The recommendation in this memo has no effect on Climate Smart San José energy, water, or mobility goals.

PUBLIC OUTREACH

This memorandum will be posted on the City's website as part of the June 2, 2020 City Council Agenda.

COORDINATION

This memorandum has been coordinated with the Department of Public Works, Department of Environmental Services, and the City Manager's Budget Office.

FISCAL/POLICY ALIGNMENT

The recommended action is consistent with the City Council approved budget strategy to focus on rehabilitating aging facility infrastructure, improve efficiency, and reduce operating costs. The recommended action is also consistent with the budget strategy principle of focusing on protecting vital core services.

COST SUMMARY/IMPLICATIONS

1. AMOUNT OF RECOMMENDATION: N/A

Initial Term (12/02/14 – 06/30/16)	\$700,000
Option No. 1 (07/01/16 – 06/30/17)	\$300,000
Additional Term (07/01/17 – 06/30/24)	\$1,500,000
TOTAL	\$2,500,000

2. COST ELEMENTS OF LEGAL SERVICES AGREEMENT: The legal services are reimbursed on an hourly rate as set forth in the legal services agreement.

3. SOURCE OF FUNDING: Fund 512 - San José-Santa Clara Treatment Plant Capital Fund.

4. FISCAL IMPACT: The consultant contract has been reviewed and was determined that it will have no significant adverse impact on the San José-Santa Clara Treatment Plant Operating Fund or General Fund operating budgets.

OPERATING COSTS: Approval of the recommendation will have no significant adverse impact on the San José-Santa Clara Treatment Plant Operating Fund or General Fund operating budgets.

BUDGET REFERENCE

The table below identifies the fund and appropriations proposed to fund the contracts recommended as part of this memorandum.

Fund #	Appn #	Appn. Name	Total Appn.	Amount for Contract	2019-2020 Adopted Capital Budget Page	Last Budget Action (Date, Ord. #)
512	7454	Energy Generation Improvements	\$3,833,000	\$100,000	V-130	10/22/2019 Ord. No. 30325

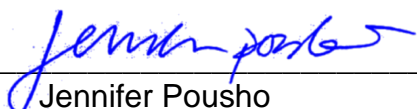
*While there is no increase to the City in this contract amendment, \$100,000.00 will be reallocated to the Cogeneration Facility project which will require a new encumbrance of Energy Generation Improvements funds.

CEQA

Not a Project, File No. PP17-003, Agreements/Contracts (New or Amended) resulting in no physical changes to the environment.

HONORABLE MAYOR AND CITY COUNCIL
May 21, 2020
Subject: Regional Wastewater Facility Capital Program
Page 6

RICHARD DOYLE
City Attorney

By 
Jennifer Pousho
Sr. Deputy City Attorney

cc: David Sykes

For questions please contact Jennifer Pousho, Sr. Deputy City Attorney, at 408-535-1900.

**FOURTH AMENDMENT TO
AGREEMENT FOR LEGAL SERVICES
BETWEEN
THE CITY OF SAN JOSE
AND
HAWKINS DELAFIELD & WOOD LLP**

This FOURTH AMENDMENT TO AGREEMENT is entered into this ____ day of _____, 2020, by the CITY OF SAN JOSE, a municipal corporation ("CITY"), and HAWKINS DELAFIELD & WOOD LLP, a New York limited liability partnership ("ATTORNEY").

RECITALS

WHEREAS, on November 24, 2014, CITY and ATTORNEY entered into an agreement entitled "AGREEMENT FOR LEGAL SERVICES BETWEEN THE CITY OF SAN JOSE AND HAWKINS DELAFIELD & WOOD LLP" ("AGREEMENT"); and

WHEREAS, on May 20, 2015, CITY and ATTORNEY entered into a First Amendment to the AGREEMENT to increase the maximum amount of compensation and to revise the members of ATTORNEY set forth in the Scope of Services; and

WHEREAS, on December 2, 2015, CITY and ATTORNEY entered into a Second Amendment to the AGREEMENT to modify the period of the INITIAL TERM and options in the AGREEMENT without increasing the total amount of compensation; and

WHEREAS, on June 3, 2016, CITY exercised its option to extend the AGREEMENT through June 30, 2017; and

WHEREAS, on June 13, 2017, CITY and ATTORNEY entered into a Third Amendment to the AGREEMENT to extend the term, revise the scope of services, and increase the amount of total compensation allowed; and

WHEREAS, CITY and ATTORNEY desire to further amend the amended AGREEMENT to extend the term through June 30, 2024 and revise the scope of services to remove the Yard Piping project, with no increase in the amount of total compensation allowed;

NOW, THEREFORE, the parties agree to further amend the amended AGREEMENT as follows:

SECTION 1. SECTION 2, "TERM OF AGREEMENT" is amended to read as follows:

- "A. The initial term shall be from December 1, 2014 to June 30, 2016, inclusive ("INITIAL TERM").
- B. Subject to the appropriation of funds by the City Council, the CITY has the option of extending the term of the AGREEMENT from July 1, 2016 through June 30, 2017, inclusive ("FIRST OPTION YEAR"). The CITY will exercise its option by giving ATTORNEY written notice at least fourteen (14) calendar days before the end of the INITIAL TERM.
- C. Subject to the appropriation of funds by the City Council, the term of the AGREEMENT shall be extended for an additional three (3) year period following the FIRST OPTION YEAR, from July 1, 2017 through June 30, 2020, inclusive, and an additional four (4) year period, from July 1, 2020 through June 30, 2024, inclusive ("ADDITIONAL TERM")."

SECTION 2. SECOND REVISED EXHIBIT A, "SCOPE OF SERVICES", is amended to read as shown in THIRD REVISED EXHIBIT A, attached and incorporated into this Fourth Amendment.

SECTION 3. SECOND REVISED EXHIBIT B, "COMPENSATION", is amended to read as shown in THIRD REVISED EXHIBIT B, attached and incorporated into this Fourth Amendment.

SECTION 4. All of the terms and conditions of the amended AGREEMENT not specifically modified by the First Amendment, the Second Amendment, the Third Amendment, or this Fourth Amendment shall remain in full force and effect.

WITNESS THE EXECUTION HEREOF on the day and year first written above.

“CITY”

APPROVED AS TO FORM:

CITY OF SAN JOSE, a municipal
corporation

JENNIFER POUSHO
Sr. Deputy City Attorney

By _____
TONI J. TABER, CMC
City Clerk

“ATTORNEY”

HAWKINS DELAFIELD & WOOD LLP, a
New York limited liability partnership

By _____
ERIC SAPIR, ESQ.
Partner

THIRD REVISED EXHIBIT A
SCOPE OF SERVICES

- A. At the request of the City Attorney or an authorized deputy of the City Attorney, ATTORNEY shall provide services related to the following CITY projects:
1. Cogeneration Facility Project
 2. Headworks Project
 3. Dewatering Project
 4. INTENTIONALLY OMITTED
 5. Miscellaneous
 - a. Advise the CITY on various alternative methods available to it for delivering major public works construction projects at the San José-Santa Clara Regional Wastewater Facility; and
 - b. Advise the CITY on implementing, administering and managing major public works construction projects undertaken at the San José-Santa Clara Regional Wastewater Facility using various project delivery methods, including design-build projects.
- B. At the request of the City Attorney or an authorized deputy of the City Attorney, ATTORNEY shall perform the following tasks related to the projects listed in paragraph A above:

TASK 1: PROCUREMENT

- a. Review procurement documents
- b. Conference calls
- c. As-needed legal advice

TASK 2: DESIGN-BUILD (“DB”) CONTRACT EXECUTION

- a. Conference calls with CITY and Design-Builder
- b. Negotiation meetings with Design-Builder
- c. Manage DB Contract editing through negotiations
- d. Finalize DB Contract

TASK 3: EARLY WORK PACKAGES (“EWP”)

- a. Conference calls with CITY and Design-Builder
- b. Negotiation meetings with Design-Builder
- c. Manage EWP editing through negotiations
- d. Finalize EWP

TASK 4: DEFINITIVE CONTRACT AMENDMENT (“DCA”)

- a. Conference calls with CITY and Design-Builder
- b. Negotiation meetings with Design-Builder
- c. Manage DCA editing through negotiations
- d. Finalize DCA

- C. The members of ATTORNEY responsible for providing services under this AGREEMENT are Eric Petersen and Rick Sapis. Additional members of ATTORNEY may provide services under this AGREEMENT upon written approval by the City Attorney or an authorized deputy of the City Attorney.

THIRD REVISED EXHIBIT B
COMPENSATION

- A. CITY agrees to compensate ATTORNEY for professional services performed in accordance with the terms and conditions of this AGREEMENT at the “blended” hourly rate of \$420.00 for any attorney. The parties agree that the “blended” hourly rate set forth herein may be changed no more than once during the FIRST OPTION YEAR and no more than once during the ADDITIONAL TERM. No adjustment in the hourly rate may exceed the percentage change in the national Consumer Price Index (CPI-U) between the day that this AGREEMENT is made and entered into, and the effective date of the adjustment.

An adjustment in the hourly rate may be made without formal amendment to this AGREEMENT. ATTORNEY shall submit any proposed change to the City Attorney. The City Attorney must affirmatively accept said modification in writing before it becomes binding under the terms of this AGREEMENT.

- B. In addition to the above compensation, CITY shall reimburse ATTORNEY for actual out-of-pocket costs and expenses reasonably incurred in connection with providing CITY the services specified in this AGREEMENT, including but not limited to the following:
- Proofreading at a rate not to exceed \$60.00 an hour;
 - Duplicating at a rate not to exceed \$.20 per page;
 - Faxes at a rate not to exceed \$1.75 per page;
 - Word processing at a rate not to exceed \$20.72 an hour;
 - Postage and deliveries at actual cost;
 - Overtime expenses, but only if preapproved by the CITY; and
 - Travel expenses not to exceed amounts reimbursable to CITY employees pursuant to the Employee Travel Policy (City Policy Manual, Sections 1.8.2 and 1.8.3).

REVISED EXHIBIT B-1
COMPENSATION TABLE

Column 1	Column 2	Column 3	Column 4
Project Nos.	Basis of Compensation	Invoice Period	Compensation
1, 5	<input checked="" type="checkbox"/> Time & Materials <input type="checkbox"/> Fixed Fee	<input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Completion of Task(s) <input type="checkbox"/> Completion of Work	\$1,100,000
2, 5	<input checked="" type="checkbox"/> Time & Materials <input type="checkbox"/> Fixed Fee	<input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Completion of Task(s) <input type="checkbox"/> Completion of Work	\$700,000
3, 5	<input checked="" type="checkbox"/> Time & Materials <input type="checkbox"/> Fixed Fee	<input checked="" type="checkbox"/> Monthly <input type="checkbox"/> Completion of Task(s) <input type="checkbox"/> Completion of Work	\$700,000
Maximum Total Compensation:			\$2,500,000



Memorandum

**TO: TREATMENT PLANT ADVISORY
COMMITTEE**

FROM: Kerrie Romanow

**SUBJECT: PROPOSED 2020-2021
OPERATING & MAINTENANCE
BUDGET**

DATE: May 21, 2020

This memorandum serves to transmit the San José-Santa Clara Regional Wastewater Facility (RWF) Proposed 2020-2021 Operating and Maintenance Budget. The RWF is jointly owned by the cities of San José and Santa Clara and is administered and operated by the City of San José Environmental Services Department. As a regional-serving facility, the RWF provides wastewater treatment services to other cities and sanitary districts in the South Bay including: City of Milpitas, Cupertino Sanitary District, West Valley Sanitation District (representing cities of Campbell, Los Gatos, Monte Sereno, and Saratoga), County Sanitation District 2-3, and Burbank Sanitary District.

The City-Wide Overhead allocation for this proposed budget does not reflect the fully allocable overhead for 2020-2021. The City is applying the capital program from 2018-2019 until an analysis can be completed on how significant increases in the capital program impacts allocable overhead on a year-to-year basis. The time to complete the review will extend beyond the current budget cycle. If a determination is made that the same methodology for allocating overhead costs to other Departments receiving central services should continue to also be applied to the Fund, the amount of deferred overhead revenue in 2020-2021 will be recovered from the Fund in future years.

The Proposed Operating and Maintenance Budget is provided to the Treatment Plant Advisory Committee's review and for a recommendation to the San José City Council for approval.

If you should have any questions, please contact Napp Fukuda at 408-793-5353.

/s/

KERRIE ROMANOW
Director, Environmental Services

PROPOSED

SAN JOSE / SANTA CLARA

WATER POLLUTION CONTROL PLANT

700 Los Esteros Road
San José, California 95134

2020-2021

Operating & Maintenance Budget

Submitted by
Kerrie Romanow, Director
Environmental Services Department
City of San José

TO: Treatment Plant Advisory Committee

Sam Liccardo	(Chair) Mayor, City of San José
Debi Davis	(Vice-Chair) Councilmember, City of Santa Clara
Kathy Watanabe	Councilmember, City of Santa Clara
John M. Gatto	Board Member, Cupertino Sanitary District
Carmen Montano	Councilmember, City of Milpitas
Paul Resnikoff	Board Member, West Valley Sanitation District
David Sykes	City Manager, City of San José
Lan Diep	Councilmember, City of San José
Dev Davis	Councilmember, City of San José

**SAN JOSE / SANTA CLARA
WATER POLLUTION CONTROL PLANT**

700 Los Esteros Road
San José, California 95134

2020-2021

PROPOSED

Operating & Maintenance Budget

Environmental Services Department
City of San José

San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

Page No.

SUMMARY INFORMATION

<i>Budget Summary & Highlights</i>	<i>1</i>
<i>Budget & Estimated Cost Distribution</i>	<i>2</i>
<i>Overview</i>	<i>3</i>
<i>Budget Proposals</i>	<i>6</i>

PROGRAM BUDGET DETAILS

<i>Treatment Plant O&M</i>	<i>9</i>
<i>Watershed Protection.....</i>	<i>12</i>
<i>South Bay Water Recycling.....</i>	<i>14</i>
<i>Management & Administrative Services.....</i>	<i>16</i>
<i>CIP Engineering Services</i>	<i>18</i>
<i>Environmental Compliance & Safety.....</i>	<i>20</i>
<i>Office of Sustainability.....</i>	<i>22</i>
<i>Communications</i>	<i>23</i>

SOUTH BAY WATER RECYCLING OPERATING FUND

<i>SBWR Program Budget Details</i>	<i>24</i>
<i>Source and Use Statement</i>	<i>28</i>

San José/Santa Clara Water Pollution Control Plant
Environmental Services Department

BUDGET SUMMARY

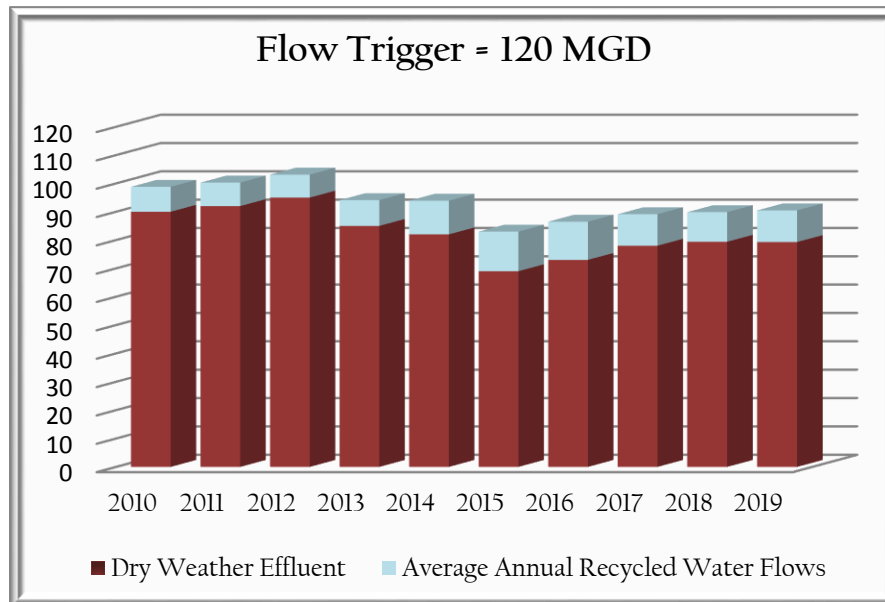
	Adopted 19-20	Proposed 20-21	% Change
Treatment Plant Operating Fund Budget	111,332,443	154,422,555	38.7%
ESD Authorized Positions	367.89	368.16	0.1%

BUDGET HIGHLIGHTS 2020-2021

- The addition of professional and technical staff to the Environmental Services IT Team that will support a variety of IT efforts such as software and equipment modernization, development and implementation of digital document management, business process automation, project management, and inter-departmental coordination.
- The additional funding for Phase II of the remediation of 25 abandoned biosolids storage basins, the maintenance of the new Cogen Facility, upgrading the Plant's Radio System, upgrading the LIMS system, and the support of the Biosolid Transition Strategy.

Budget
Byte

**10-year History of Average Dry Weather Flow
(in millions of gallons per day)**



San José/Santa Clara Water Pollution Control Plant
Environmental Services Department

TREATMENT PLANT OPERATING FUND
BUDGET SUMMARY

Budget Summary	2018-2019 Actual Expenses	2019-2020 Adopted Budget	2020-2021 Base Budget	2020-2021 Proposed Budget
Personal Services	55,313,312	62,171,402	62,493,227	62,263,776
Non-personal Expenses	26,177,191	32,584,558	31,625,607	75,377,159
Equipment	493,968	906,000	906,000	906,000
Inventory	622,292	600,000	600,000	600,000
Department Expenses	82,606,762	96,261,960	95,624,834	139,146,935
Overhead	11,919,978	12,459,172	12,888,925	12,888,925
City Hall Debt Service	1,057,934	1,015,299	988,825	988,825
Workers' Compensation	(434,389)	605,000	605,000	605,000
City Services	793,083	991,012	804,475	792,870
City Expenses	13,336,606	15,070,483	15,287,225	15,275,620
TOTAL EXPENSES	\$ 95,943,368	\$ 111,332,443	\$ 110,912,059	\$ 154,422,555

ESTIMATED COST DISTRIBUTION

2020-2021 Estimated Total Gallons Treated (MG)	(1) Percent of Total Sewage Treated	City / District	2020-2021 Proposed
25,000.953	63.155	City of San Jose	\$97,525,565
4,944.990	14.891	City of Santa Clara	\$22,995,063
29,945.943	78.046	Sub-Total	\$120,520,627
3,441.998	9.102	West Valley Sanitation District	\$14,055,541
1,996.009	5.582	Cupertino Sanitary District	\$8,619,867
2,275.250	6.099	City of Milpitas	\$9,418,232
348.408	0.939	Sanitation District # 2 - 3	\$1,450,028
86.180	0.232	Burbank Sanitary District	\$358,260
8,147.845	21.954	Sub-Total	\$33,901,928
38,093.788	100.0	TOTAL	\$154,422,555

San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

OVERVIEW

This year's Water Pollution Control Plant Operating Budget recommends a 38.7% increase over the 2019-2020 Adopted Budget. This increase is largely due to Phase II of the Biosolids Remediation Project, as mandated by the Regional Water Quality Control Board Site Cleanup Requirements (Order No. R2-2019-0026). The Order requires cleanup activities of 25 abandoned biosolids storage basins (Legacy Lagoons) by 2023.

With the adoption of the Plant Master Plan (PMP) in 2013 by the San José and Santa Clara City Councils, over \$2.1 billion in long-term capital improvement projects were identified to upgrade and rebuild the San José/Santa Clara Water Pollution Control Plant (Plant) over 30 years, covering an implementation schedule of 2010 through 2040. The PMP guided the development of the Proposed 2020-2021 Capital Budget and 2021-2025 Capital Improvement Program (CIP), which provides funding of \$1.1 billion for critical capital improvements to address aging infrastructure, future regulations, population growth, and treatment technology improvements. A CIP of this size and complexity requires significant resources in order to ensure successful and timely project delivery. The program continues to operate under an integrated project delivery model using a combination of City staff and consultants. Over the past several years, the program has added a variety of professional and technical positions to support the implementation of capital improvement projects.

The 2020-2021 Proposed Operating Budget includes recommended additional non-personal funding for various upgrades to ensure a continued high level of service for daily operations located on site. The Plant's radio system is a critical means of communication between the communication control center and personnel working out in the field. The current system is in need of replacement as parts are no longer available and utilizes technology that is no longer supported by vendors. Implementation of system upgrades will ensure communication reliability and expanded coverage when compared with the current system.

The Proposed Operating Budget also includes the recommended addition of non-personal funding to support the operations and on-going maintenance of the Energy Cogeneration Facility. To ensure engines operate at peak performance, scheduled annual maintenance will require crucial engine parts, specialty tools and emission control system components to be on hand and readily available.

The Plant is transitioning its solids treatment process in accordance with the Plant Master Plan adopted in 2013 and Biosolids Transition Strategy approved in 2015. As part of this transition, a new mechanical dewatering facility is being constructed to replace open-air lagoons and drying beds. This proposed budget includes non-personal funding for consultant services to support the implementation of the Biosolids Transition Strategy, including providing subject matter expertise during the development of the procurement documents (e.g., drafting scope of services and creating price forms to determine the best pricing and tonnage allocation among the proposals) and during the negotiation of final contract terms.

San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

OVERVIEW (cont'd)

The Laboratory Information Management System (LIMS) does not have the capability and flexibility to meet the new laboratory accreditation standard requirements administered by the California State Water Board's ELAP (Environmental Laboratory Accreditation Program). The new standard requires increased traceability and documentation in all laboratory facets including but not limited to operations, analyses, instrumentation, supporting equipment and peripherals, personnel, materials, and quality control and assurance. Implementation of upgrades to the LIMS system will ensure the Plant's laboratory continues to provide critical services and be efficient and effective in its data management and analysis functions.

The Water Pollution Control Plant Operating and Capital Budgets intend to maintain adequate operational capacity for wastewater treatment. Adopting and implementing new technologies for wastewater to achieve greater safety, energy efficiency, and environmental benefit; and maintaining and operating the Plant in compliance with all applicable local, state, and federal regulatory requirements remains as a top priority. The following sections provide the budget proposal descriptions and a breakdown by program of all associated expenditures and detail-specific budgets.

San José/Santa Clara Water Pollution Control Plant
Environmental Services Department

OVERVIEW CONTINUED

DEPARTMENT BUDGET SUMMARY

Budget Summary	2018-2019 Actual 1	2019-2020 Adopted 2	2020-2021 Base 3	2020-2021 Proposed 4	% Change (2 to 4)
Dollars by Program					
Treatment Plant O&M	55,009,451	62,735,378	62,650,504	104,644,242	66.8%
Watershed Protection	8,095,597	9,632,906	9,937,638	10,573,517	9.8%
South Bay Water Recycling	7,742,767	8,244,757	7,818,129	7,782,922	(5.6%)
CIP-Engineering Services	3,858,364	5,341,370	6,061,720	6,826,948	27.8%
Mgmt & Admin Svcs	4,710,173	5,574,894	5,006,667	5,195,850	(6.8%)
Envmtl Compliance & Safety	1,919,521	2,410,030	2,299,577	2,287,380	(5.1%)
Office of Sustainability	864,360	1,494,472	1,032,159	1,020,815	(31.7%)
Communications	406,529	828,153	818,440	815,261	(1.6%)
Total	\$ 82,606,762	\$ 96,261,960	\$ 95,624,834	\$ 139,146,935	44.6%
Dollars by Category					
Personal Services					
Salaries	30,071,139	35,749,320	36,213,089	36,335,730	1.6%
Pension	18,984,863	20,676,312	20,140,295	19,759,376	(4.4%)
Medical	4,235,999	5,094,103	5,488,176	5,517,003	8.3%
Overtime	2,021,311	651,667	651,667	651,667	0.0%
Subtotal	\$ 55,313,312	\$ 62,171,402	\$ 62,493,227	\$ 62,263,776	0.1%
Non-Personal/Equipment					
Energy	6,909,177	7,355,230	7,772,000	7,772,000	5.7%
Supplies & Materials	4,675,784	5,067,871	5,066,871	7,917,060	56.2%
Chemicals	2,596,652	2,607,000	2,717,000	2,717,000	4.2%
Contractual Services	7,928,229	13,125,644	11,892,375	52,142,375	297.3%
All Others	5,183,609	5,934,813	5,683,361	6,334,724	6.7%
Subtotal	\$ 27,293,450	\$ 34,090,558	\$ 33,131,607	\$ 76,883,159	125.5%
Total	\$ 82,606,762	\$ 96,261,960	\$ 95,624,834	\$ 139,146,935	44.6%
Authorized Positions	360.87	367.89	366.93	368.16	0.07%

San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

Budget Proposals

Proposed Program Changes	Positions	Treatment Plant Appropriations
1. Regional Wastewater Facility Legacy Lagoons Remediation		39,300,000
<p>This action adds \$39,000,000 in one-time non-personal/equipment funding in the San José-Santa Clara Treatment Plant Operating Fund to fund phase II project of the cleanup of biosolids from the legacy lagoons. The Regional Water Quality Control Board issued a Site Cleanup Requirements Order (Order) for the legacy lagoons at Regional Wastewater Facility residual solids management (RSM) area. The order requires cleanup activities of previously abandoned 25 biosolids storage basins (lagoons) by 2023. The order allows the project to be completed in phases. Phase 1, which includes 4 lagoons (L16-L19), must be completed by January 2021 because the area is proposed to be included in the upcoming shoreline levee project. Phase 2, which includes the remaining lagoons, must be completed by November 2023. Phase 1 is currently under final design and the construction contract is expected to be awarded by May of 2020. Phase 2 design and schedule is currently preliminary. The final Phase 2 plans are expected to be submitted in Fall 2020 so that the City can retain a contractor to begin work in Summer 2021.</p>		
2. Regional Wastewater Facility Radio Systems Upgrade		1,700,000
<p>This action adds \$1.7 million in one-time non-personal/equipment funding in the San José-Santa Clara Treatment Plant Operating Fund to upgrade the Regional Wastewater Facility (RWF) radio system. The existing radio system at the RWF is at the end of its expected lifetime, and costs associated with maintenance and service have escalated in recent years. The radio system needs to be replaced, as parts are no longer available, and the current technology is no longer supported by any of the vendors. This funding will ensure uninterrupted communications across the entire facility. (Ongoing costs: \$0)</p>		
3. Regional Wastewater Facility Cogeneration Engine Facility Maintenance		1,300,000
<p>This action adds \$1.3 million in one-time non-personal/equipment funding in the San José-Santa Clara Treatment Plant Operating Fund for supplies and contractual services associated with maintenance and operation of the Energy Cogeneration Facility at the Regional Wastewater Facility. With the completion of the Energy Cogeneration Project, an inventory of new specialized equipment, tools, and parts must be established to ensure that maintenance schedules can be met. (Ongoing costs: \$750,000)</p>		
4. Biosolids Management Transition Planning and Implementation		800,000
<p>This action adds \$800,000 in one-time non-personal/equipment funding for consultant services in the San José-Santa Clara Treatment Plant Operating Fund to support the implementation of the Biosolids Transition Strategy. Consultant services are necessary to support the existing</p>		

San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

Environmental Services Program Manager in providing subject matter expertise for continued research and development of a comprehensive Biosolids Transition Strategy. It is expected that procurement of biosolids disposition service providers will proceed through 2020-2021, with the execution of contracts planned for the summer of 2021. Given this timeframe, the expertise provided by consultant support has been determined to be the most cost and time-effective course of action. (Ongoing costs: \$0)

5. Laboratory Information Management System Replacement 700,000

This action adds \$700,000 in one-time non-personal/equipment funding in the San José-Santa Clara Treatment Plant Operating Fund to upgrade the Laboratory Information Management System (LIMS). The LIMS is a system used by Regional Wastewater Facility (RWF) Laboratory staff to record, maintain, and analyze data regarding RWF treatment operations. This funding will enable the Environmental Services Department to comprehensively upgrade and modernize the LIMS and ensures that the RWF's Laboratory continues to be efficient and effective in its data management and analysis functions. Ongoing costs may be necessary in future years and will be brought forward in future budget processes if necessary. (Ongoing costs: \$0)

6. Management Information Systems Infrastructure and Program Implementation Staffing 1.26 224,915

This action adds 0.63 Senior Systems Applications Programmer position, 0.63 Information Systems Analyst position, and associated non-personal/equipment funding of \$6,522 across a variety of ESD funds (60% in the San José-Santa Clara Treatment Plant Operating Fund, and 3% in the South Bay Water Recycling Operating Fund) to support a variety of IT efforts throughout the Department. This Senior Systems Application Programmer will be dedicated to developing and implementing a variety of solutions incorporating business/functional needs into existing Office 365 infrastructure, while the Information Systems Analyst position will take over project management and inter-departmental coordination duties that are currently being absorbed by existing staff. (Ongoing costs: \$219,275)

7. Legislative Monitoring and Advocacy Reduction (0.03) (4,357)

This action eliminates 0.03 Associate Environmental Services Specialist position from the San José-Santa Clara Treatment Plant Operating Fund. This position was tasked with researching, investigating, and pursuing legislative advocacy opportunities at the local, State, and federal levels to support the City's utility provision and environmental protection goals. (Ongoing savings: \$4,357)

8. Vehicle Maintenance and Operations (Fuel Savings) (55,000)

This action decreases the ongoing funding for vehicle operations costs by \$55,000 in the San José-Santa Clara Treatment Plant Operating Fund, to reflect estimated savings from the significant declines in fuel prices since the beginning of calendar year 2020. These declines are largely attributable to the unforeseen increase in crude oil supply and global economic

San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

contraction during the COVID-19 pandemic, following the release of the 2021-2025 Five-Year Forecast and Revenue Projections in February 2020. Based on recent fuel price trends and the Short-Term Energy Outlook released by the United States Energy Information Administration in April 2020, revised projections result in citywide savings of \$1.24 million, of which \$940,000 is from the General Fund. In consideration of the recent economic volatility and sudden global supply changes, a Fuel Usage Reserve totaling \$300,000 is set aside within the Vehicle Maintenance and Operations Fund to address upward price fluctuation. (Ongoing savings: \$55,000)

9. City Retirement Contributions Pre-Funding (437,097)

This action reduces the Environmental Services Department's Personal Services appropriation by \$437,097 to reflect the anticipated expenditure savings associated with lower retirement contributions from the prepayment of the City's retirement costs for both the Tier 1 pension costs and the Unfunded Actuarial Liability in the Federated City Employees' Retirement System Plan and the Police and Fire Department Retirement Plan. By the City making annual payments of its employer contributions to the Retirement Plans in lieu of biweekly contributions, this will generate approximately \$13.9 million in savings in all funds, \$11.4 million in the General Fund. In the General Fund, these savings will be offset by an estimated loss in interest earnings of \$2.6 million and costs in TRANs debt service of \$1.4 million, giving a total net savings of \$7.4 million. (Ongoing savings: \$437,097)

10. Citywide API Reorganization (6,360)

This action reduces administrative support to the City Manager's Office of Administration, Policy, and Intergovernmental (API) Relations. This action is not expected to have significant service impacts as these duties will be absorbed by remaining staff in the City Manager's Office. (Ongoing savings: \$6,360)

2020-2021 Total Department Proposals	1.23	43,522,101
---	-------------	-------------------

San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

PROGRAM:

TREATMENT PLANT O&M

RESPONSIBLE MANAGER:

AMIT MUTSUDDY

PROGRAM PURPOSE AND DESCRIPTION

This program is responsible for the technologically advanced and cost-effective treatment of an average wastewater flow of over 100 million gallons per day. With a management focus on three primary areas: operations and maintenance; compliance with the Facility's three permits – National Pollution Discharge Elimination System (NPDES), and Air (Bay Area Air Quality Management); and equipment reliability, the Plant is able to produce an effluent that regularly meets or exceeds all NPDES permit conditions and represents the City's largest asset and critical public health service. The end results are a high quality effluent discharge to the Bay, and user rates that reflect a commitment to cost-efficient operations.

PERSONNEL SUMMARY				
Full Time Positions	2018-2019	2019-2020	2020-2021	2020-2021
	Adopted	Adopted	Base	Proposed
Air Conditioning Mech	3.00	3.00	3.00	3.00
Analyst II C	1.00	1.00	1.00	1.00
Assist Hvy Dsl Eq Op Mech	1.00	0.91	0.91	0.91
Assoc Engineer	1.00	1.00	1.00	1.00
Assoc Engineering Tech	3.00	3.00	3.00	3.00
Deputy Dir U	1.00	1.00	1.00	1.00
Division Manager	3.00	1.90	1.90	1.90
Engineerg Technician II	1.85	1.85	1.85	1.85
Geographic Systms Spec II	2.50	2.00	2.00	2.00
Groundsworker	0.95	0.95	0.00	0.00
Heavy Equip Oper	5.00	5.00	5.00	5.00
Industrial Electrician Supervisor	1.00	1.00	1.00	1.00
Industrial Process Cntrl Spec I-III	4.00	4.00	4.00	4.00
Industrial Process Control Supervisor	1.00	1.00	1.00	1.00
Industrial Electrician	8.55	10.55	10.55	10.55
Instrument Control Supvr	0.85	0.85	0.85	0.85
Instrument Control Technician I-IV	10.80	10.00	10.20	10.20
Maintenance Worker I	1.00	1.00	1.95	1.95
Network Engineer	1.00	1.00	1.00	1.00
Office Specialist I/II	2.00	2.00	2.00	2.00
Painter Supvr WPCP	1.00	1.00	1.00	1.00
Painter WPCP	6.00	6.00	6.00	6.00

San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

PERSONNEL SUMMARY (continued)				
Full Time Positions	2018-2019	2019-2020	2020-2021	2020-2021
	Adopted	Adopted	Base	Proposed
Principal Engineer/Architect	1.00	1.00	1.00	1.00
Prin Office Specialist	1.00	1.00	1.00	1.00
Senr Air Cond Mechanic	1.00	1.00	1.00	1.00
Senr Analyst	1.00	1.00	1.00	1.00
Senr Engineer	1.00	1.00	1.00	1.00
Senr Engineering Tech	4.00	4.00	4.00	4.00
Senr Geographic Syst Spec	1.00	1.00	1.00	1.00
Senr Hvy Equipment Oper	2.00	2.00	2.00	2.00
Senr Industrial Electrician	1.90	1.90	1.90	1.90
Senr Maintenance Worker	0.95	1.00	1.00	1.00
Senr Office Specialist				
Senr Painter	1.00	1.00	1.00	1.00
Senr Warehouse Worker	0.93	0.93	0.93	0.93
Supervg Applicat Analyst				0.00
Supply Clerk	1.00	1.00	1.00	1.00
Warehouse Supervisor	0.93	0.93	0.93	0.93
Warehouse Worker I/II	2.79	2.79	2.79	2.79
Wastewater Attendant	19.00	19.00	19.00	19.00
Wastewater Facility Ops Mgr		1.00	1.00	1.00
Wastewater Maintenance Supt	2.85	2.80	2.85	2.85
Wastewater Mechanic II	30.75	28.62	28.67	28.67
Wastewater Mechanical Supvr I-II	6.00	5.71	5.71	5.71
Wastewater Operations Supt I-II	7.00	7.00	7.00	7.00
Wastewater Operator I-III	36.00	35.32	36.32	36.32
Wastewater Ops Foreperson I/II	20.00	17.85	17.85	17.85
Wastewater Senior Mechanic I/II	11.00	10.23	10.33	10.33
Total Full-Time Positions	214.60	209.09	210.49	210.49

San José/Santa Clara Water Pollution Control Plant
Environmental Services Department

DETAILED PROGRAM BUDGET				
Detail/Category	2018-2019	2019-2020	2020-2021	2020-2021
	Actual	Adopted	Base	Proposed
Salaries-Reg-Full Time	17,300,406	20,368,483	20,405,417	20,405,417
Salaries-Reg-Part Time	64,025			
Salaries - Overtime	1,873,760	611,791	611,791	611,791
Other Personnel	(435)		12,000	12,000
Benefits: Retirement Contrib	9,459,896	10,643,694	10,352,869	10,099,306
Other Fringe Benefits	2,616,721	3,189,922	3,482,663	3,482,663
OPEB (Other Post Employment Benefits)	1,943,479	1,244,342	1,107,906	1,107,906
Sub Total	\$ 33,257,853	\$ 36,058,232	\$ 35,972,646	\$ 35,719,083
Utilities: Gas	1,684,811	1,600,000	2,100,000	2,100,000
Utilities: Electricity	3,989,080	4,388,920	4,500,000	4,500,000
Supplies and Materials	3,747,588	4,202,662	4,202,662	7,052,662
Comm Expnse: Telephne-Telegrph	60,402	43,305	43,305	43,305
Comm Expnse: Postage	787	6,000	6,000	6,000
Print/Adv-Outside Vendors	6,574	5,750	5,750	5,750
Utilities: Other	362,441	139,000	139,000	139,000
Chemicals	2,596,652	2,607,000	2,607,000	2,607,000
Rent: Equipment & Vehicles	420,456	336,546	336,546	336,546
Trans/Travel: In County	149	14,144	14,144	14,144
Trans/Travel: Out of County	5,123	28,395	28,395	28,395
Trans/Travel: Out of State	22,533	51,069	51,069	51,069
Training	92,989	137,404	137,404	137,404
Mileage Reimbursement	1,001	150	150	150
Vehicle Operating Costs	778,974	825,201	898,749	846,050
Dues & Subscriptions	1,210,455	1,124,973	1,124,973	1,124,973
Computer Data Processing	263,900	354,000	354,000	354,000
Prof & Consultant Svcs	5,660,229	9,498,035	8,814,119	48,264,119
Insurance	138,522	564,592	564,592	564,592
Taxes	332,664			
Capital Outlay				
Machnry/Equipmt: Machinery	376,270	750,000	750,000	750,000
Sub Total	\$ 21,751,598	\$ 26,677,146	\$ 26,677,858	\$ 68,925,159
Combined Totals	\$ 55,009,451	\$ 62,735,378	\$ 62,650,504	\$ 104,644,242

San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

PROGRAM:

WATERSHED PROTECTION

RESPONSIBLE MANAGER:

SHARON NEWTON

PROGRAM PURPOSE AND DESCRIPTION

Provides environmental enforcement and technical support functions to support Department programs, enforce Federal, State, and local regulations pertaining to industrial and commercial waste discharges to the sanitary system. The Source Control/Pretreatment Program provides engineering evaluation, permitting, inspection, and monitoring of industrial waste dischargers and ensures that industrial discharges to the SJ/SC Water Pollution Control Plant comply with all applicable industrial waste ordinances within San José and the tributary agencies. The Laboratory Services Program provides analytical support to monitor wastewater treatment processes and NPDES compliance and support related special projects.

PERSONNEL SUMMARY				
Full Time Positions	2018-2019	2019-2020	2020-2021	2020-2021
	Adopted	Adopted	Base	Proposed
Analyst II C	0.50	0.50	0.50	0.50
Assoc Engineer	1.00	1.00	1.00	1.00
Biologist	1.00	1.00	1.00	1.00
Chemist	9.00	9.00	9.00	9.00
Deputy Dir U	0.50	0.50	0.50	0.50
Environment Insp, Assistant	3.00	3.00	3.00	3.00
Environment Inspector I/II	12.00	12.00	12.00	12.00
Environment Inspector, Sr	2.00	2.00	2.00	2.00
Environment Serv Prog Mgr	1.00	1.00	1.00	1.00
Environmental Laboratory Mgr	1.00	1.00	1.00	1.00
Environmental Laboratory Supvr	3.00	3.00	3.00	3.00
Laboratory Tech I/ II	13.00	13.00	13.00	13.00
Microbiologist	1.00	1.00	1.00	1.00
Office Specialist II	2.52	2.52	2.52	2.52
Prin Office Specialist	0.85	0.85	0.85	0.85
Sanitary Engineer	3.00	3.00	3.00	3.00
Senr Office Specialist	1.52	1.52	1.52	1.52
Staff Specialist	0.76	0.76	0.76	0.76
Total Full-Time Positions	56.65	56.65	56.65	56.65

San José/Santa Clara Water Pollution Control Plant
Environmental Services Department

DETAILED PROGRAM BUDGET				
Detail/Category	2018-2019	2019-2020	2020-2021	2020-2021
	Actual	Adopted	Base	Proposed
Salaries-Reg-Full Time	4,199,061	4,873,113	5,047,680	5,047,680
Salaries - Overtime	11,050	27,733	27,733	27,733
Other Personnel	93			
Benefits: Retirement Contrib	2,001,234	2,487,483	2,541,704	2,479,342
Other Fringe Benefits	513,347	570,313	655,683	655,683
OPEB (Other Post Employment Benefits)	455,360	295,716	271,635	271,635
Sub Total	\$ 7,180,146	\$ 8,254,358	\$ 8,544,435	\$ 8,482,073
Supplies and Materials	391,596	501,466	501,466	501,466
Comm Expnse: Telephne-Telegrph	25,980	32,340	32,340	32,340
Comm Expnse: Postage	896	11,500	11,500	11,500
Print/Adv-Outside Vendors	1,624	15,000	15,000	15,000
Rent: Land & Buildings		315	315	315
Rent: Equipment & Vehicles	16,799	35,000	35,000	35,000
Trans/Travel: In County	131	9,700	9,700	9,700
Trans/Travel: Out of County	-	26,234	26,234	26,234
Trans/Travel: Out of State	2,946	30,200	30,200	30,200
Training	17,775	36,430	36,430	36,430
Mileage Reimbursement	594	4,825	4,825	4,825
Vehicle Operating Costs	20,280	27,545	30,000	28,241
Dues & Subscriptions	17,728	8,027	20,227	20,227
Computer Data Processing	18,666	57,375	57,375	757,375
Prof & Consultant Svcs	295,947	432,591	432,591	432,591
Machnry/Equimt: Machinery	104,491	150,000	150,000	150,000
Sub Total	\$ 915,451	\$ 1,378,548	\$ 1,393,203	\$ 2,091,444
Combined Totals	\$ 8,095,597	\$ 9,632,906	\$ 9,937,638	\$ 10,573,517

San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

PROGRAM:

SOUTH BAY WATER RECYCLING

RESPONSIBLE MANAGER:

JEFF PROVENZANO

PROGRAM PURPOSE AND DESCRIPTION

This program is responsible for coordinating the operations, maintenance and capital improvements of the water recycling system in the three cities it serves; providing customer support and Site Supervisor training; planning and implementing SBWR system improvements; facilitating compliance with local and State regulations; coordinating with regional agencies; and implementing practices to increase water reuse in order to achieve maximum revenue with existing infrastructure and continued wastewater diversion.

PERSONNEL SUMMARY				
Full Time Positions	2018-2019	2019-2020	2020-2021	2020-2021
	Adopted	Adopted	Base	Proposed
Analyst II C	0.30	0.30	0.30	0.30
Assist Hvy Dsl Eq Op Mech		0.09	0.09	0.09
Assoc Construction Insp	0.70	0.70	0.70	0.70
Assoc Engineer	3.15	3.15	3.15	3.15
Assoc Engineering Tech	1.00	1.00	1.00	1.00
Cross Connection Spec	0.15	0.30	0.30	0.30
Deputy Dir	0.30	0.35	0.35	0.35
Division Manager		0.10	0.10	0.10
Engineer I/II	0.35	0.20	0.20	0.20
Engineerg Technician II	0.20	0.40	0.40	0.40
Environmental Inspector I/II	0.40	0.50	0.50	0.50
Environment Serv Prog Mgr	0.50	0.50	0.50	0.50
Environment Serv Spec	0.50	1.00	1.00	1.00
Geographic Systms Spec I	1.00	0.50	0.50	0.50
Groundswoker	0.05	0.05	0.00	0.00
Industrial Electrician	0.45	0.45	0.45	0.45
Instrument Control Supvr	0.15	0.15	0.15	0.15
Instrument Control Technician I-IV	1.20	2.00	1.80	1.80
Maintenance Worker			0.05	0.05
Prin Construction Inspect	0.30	0.30	0.30	0.30
Principal Engineer/Architect	0.40	0.40	0.40	0.40
Senior Industrial Electrician	0.10	0.10	0.10	0.10
Senr Construction Insp	0.30	0.30	0.30	0.30
Senr Engineer	1.00	1.00	1.00	1.00
Senr Engineering Tech	1.00	1.00	1.00	1.00
Senr Maintenance Worker	0.05			
Wastewater Maintenance Supt	0.15	0.20	0.15	0.15
Wastewater Mechanic I/II	0.25	2.38	2.33	2.33
Wastewater Mechanical Supvr II		0.29	0.29	0.29
Wastewater Operator I-III		6.68	5.68	5.68
Wastewater Ops Foreperson I/II		2.15	2.15	2.15
Wastewater Senr Mechanic I/II		0.77	0.67	0.67
Water Syst Op Foreperson I/II	0.15	0.15	0.15	0.15
Water Systems Operator II	0.50	0.50	0.50	0.50
Water Syt Op Assistant II	0.20	0.15	0.15	0.15
Water Syt Op Superintendent I	0.10	0.20	0.20	0.20
Water Syt Operations Manager		0.10	0.10	0.10
Total Full-Time Positions	14.90	28.41	27.01	27.01

San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

DETAILED PROGRAM BUDGET				
Detail/Category	2018-2019	2019-2020	2020-2021	2020-2021
	Actual	Adopted	Base	Proposed
Salaries-Reg-Full Time	2,260,442	2,825,994	2,859,683	2,859,683
Compensated Absence	3,424.40			
Salaries-Reg-Part Time	24,448			
Salaries - Overtime	117,263			
Other Personnel	10		1,000	1,000
Benefits: Retirement Contrib	1,166,277	1,480,649	1,444,868	1,409,661
Other Fringe Benefits	328,536	454,616	431,182	431,182
OPEB (Other Post Employment Benefits)	228,093	173,625	155,186	155,186
Sub Total	\$ 4,128,493	\$ 4,934,884	\$ 4,891,919	\$ 4,856,712
Utilities: Gas	194,289	160,000	265,000	265,000
Utilities: Electricity	1,235,285	1,366,310	907,000	907,000
Supplies and Materials	434,665	230,575	230,575	230,575
Comm Expnse: Telephne-Telegrph	50,002	11,200	11,200	11,200
Comm Expnse: Postage	320	2,000	2,000	2,000
Print/Adv-Outside Vendors	518	11,720	11,720	11,720
Utilities: Other	5,588			
Chemicals	125,302	110,000	110,000	110,000
Rent: Equipment & Vehicles	3,670	7,000	7,000	7,000
Trans/Travel: In County	4	3,500	3,500	3,500
Trans/Travel: Out of County	541	5,200	5,200	5,200
Trans/Travel: Out of State	2,908	7,000	7,000	7,000
Training	18,242	11,000	11,000	11,000
Mileage Reimbursement	636	2,400	2,400	2,400
Vehicle Operating Costs	6,718	40,000	10,000	10,000
Dues & Subscriptions	22,515	41,000	41,000	41,000
Computer Data Processing	106,441	16,200	16,200	16,200
Prof & Consultant Svcs	1,391,832	1,278,768	1,279,415	1,279,415
PW Capital Support Charge				
Taxes	1,591			
Capital Outlay				
Machnry/Equint: Machinery	13,206	6,000	6,000	6,000
Sub Total	\$ 3,614,274	\$ 3,309,873	\$ 2,926,210	\$ 2,926,210
Combined Totals	\$ 7,742,767	\$ 8,244,757	\$ 7,818,129	\$ 7,782,922

San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

PROGRAM:

MGMT & ADMINISTRATIVE SERVICES

RESPONSIBLE MANAGER:

LINDA CHARFAUROS

PROGRAM PURPOSE AND DESCRIPTION

Provides support services including: financial and accounting services, human resources, information technology services, contract administration, grant administration, capital improvements and operating budget management.

PERSONNEL SUMMARY				
Full Time Positions	2018-2019	2019-2020	2020-2021	2020-2021
	Adopted	Adopted	Base	Proposed
Account Clerk II	0.69	0.69	0.62	0.62
Accountant II	1.69	1.69	1.24	1.24
Accounting Tech	1.38	1.38	1.24	1.24
Administrative Assist C	0.69	0.69	0.62	0.62
Administrative Officer	0.69	0.69	0.62	0.62
Analyst I/ II C	2.76	2.76	2.48	2.48
Assist DirU	0.69	0.69	0.62	0.62
Dept Information Tech Mgr	0.66	0.66	0.66	0.66
Dir Environmental Serv U	0.69	0.69	0.62	0.62
Division Manger	0.82	0.82	0.75	0.75
Information Sys Analyst	1.20	1.20	1.20	1.83
Network Engineer	0.68	0.68	0.68	0.68
Network Technician II-III	1.28	1.28	1.28	1.28
Office Specialist II	1.38	1.38	1.24	1.24
Prin Accountant	0.69	0.69	0.62	0.62
Prin Office Specialist	1.38	1.38	1.24	1.24
Program Manager I	0.69	0.69	0.62	0.62
Senr Account Clerk	2.76	2.76	2.48	2.48
Senr Accountant	2.76	2.76	2.48	2.48
Senr Analyst	2.76	2.76	2.48	2.48
Senr Systms Apps Prgmr				0.63
Staff Specialist	2.07	2.07	1.86	1.86
Staff Technician				
Systems Apps Prognr II	1.30	1.30	1.30	1.30
Total Full-Time Positions	29.71	29.71	26.95	28.21

San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

DETAILED PROGRAM BUDGET				
Detail/Category	2018-2019	2019-2020	2020-2021	2020-2021
	Actual	Adopted	Base	Proposed
Salaries-Reg-Full Time	2,369,694	3,055,177	2,782,656	2,908,004
Salaries-Reg-Part Time				
Salaries - Overtime	16,759	12,143	12,143	12,143
Other Personnel	14,180	13,000	13,000	13,000
Benefits: Retirement Contrib	1,554,773	1,609,729	1,410,335	1,431,469
Other Fringe Benefits	308,954	323,283	306,766	335,871
OPEB (Other Post Employment Benefits)	268,253	187,788	146,974	154,018
Sub Total	\$ 4,532,614	\$ 5,201,120	\$ 4,671,874	\$ 4,854,505
Supplies and Materials	30,877	35,430	35,430	35,619
Comm Expnse: Telephne-Telegrph	32,868	30,722	30,722	31,037
Comm Expnse: Postage	3,786	15,640	15,640	15,640
Print/Adv-Outside Vendors	2,184	4,591	4,591	4,591
Rent: Equipment & Vehicles	10,653	21,138	21,138	21,138
Trans/Travel: In County	51	1,370	1,370	1,370
Trans/Travel: Out of County	3,887	2,720	2,720	2,720
Trans/Travel: Out of State	1,531	2,040	2,040	2,040
Training	9,018	28,971	28,971	33,003
Mileage Reimbursement	835	1,803	1,803	1,929
Vehicle Operating Costs	519			
Dues & Subscriptions	5,732	8,331	8,331	8,331
Computer Data Processing	30,743	128,044	89,063	90,953
Prof & Consultant Svcs	44,875	92,974	92,974	92,974
Sub Total	\$ 177,559	\$ 373,774	\$ 334,793	\$ 341,345
Combined Totals	\$ 4,710,173	\$ 5,574,894	\$ 5,006,667	\$ 5,195,850

San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

PROGRAM:

CIP-ENGINEERING SVCS

RESPONSIBLE MANAGER:

MARIANA CHAVEZ-VAZQUEZ

PROGRAM PURPOSE AND DESCRIPTION

This program provides services for both capital project planning, design and construction of major projects as well as process engineering services within the Water Pollution Control Plant. With the adoption of the Plant Master Plan in 2013, which identified over \$2.1 billion in long-term capital projects over the next thirty years, the group's primary responsibility is to deliver the projects to address critical aging infrastructure, future regulatory requirements, and improved performance needs. Additional responsibilities include troubleshooting and improving the treatment process, primarily through research and development projects, to ensure efficient and cost effective operations of the Plant.

PERSONNEL SUMMARY				
Full Time Positions	2018-2019	2019-2020	2020-2021	2020-2021
	Adopted	Adopted	Base	Proposed
Analyst II C	1.30	1.30	1.30	1.30
Assoc Engineer	5.50	5.50	6.30	6.30
Assoc Engineering Tech	1.50	1.50	1.50	1.50
Deputy DirU	1.00	1.00	1.00	1.00
Division Manager	1.00	1.00	1.00	1.00
Engineer II	0.60	0.60	0.60	0.60
Environment Serv Prog Mgr	1.00	1.00	1.00	1.00
Office Specialist II	1.00	1.00	1.00	1.00
Principal Engineer	1.80	2.10	2.10	2.10
Sanitary Engineer	3.30	3.30	3.30	3.30
Senr Engineer	4.50	4.50	4.50	4.50
Senr Engineering Tech	0.90	0.90	0.90	0.90
Senr Office Specialist	0.30	0.30	0.30	0.30
Staff Specialist	1.00	1.00	1.00	1.00
Staff Technician	0.30	0.30	0.30	0.30
Supervg Environ Serv Spe	0.30	0.30	0.30	0.30
Total Full-Time Positions	25.30	25.60	26.40	26.40

San José/Santa Clara Water Pollution Control Plant
Environmental Services Department

DETAILED PROGRAM BUDGET				
Detail/Category	2018-2019	2019-2020	2020-2021	2020-2021
	Actual	Adopted	Base	Proposed
Salaries-Reg-Full Time	2,095,460	2,579,825	3,026,103	3,026,103
Compensated Absence	4,456			
Salaries-Reg-Part Time	681			
Salaries - Overtime	1,630			
Benefits: Retirement Contrib	840,546	1,267,439	1,464,785	1,430,377
Other Fringe Benefits	250,494	306,673	381,520	381,520
OPEB (Other Post Employment Benefits)	224,511	156,602	161,473	161,473
Sub Total	\$ 3,417,778	\$ 4,310,539	\$ 5,033,881	\$ 4,999,473
Supplies and Materials	67,719	42,881	41,881	41,881
Comm Expnse: Telephone	35,180	3,500	3,500	3,500
Comm Expnse: Postage	-	1,000	1,000	1,000
Print/Adv-Outside Vendors	6,485	5,000	5,000	5,000
Rent: Land & Buildings	-			
Rent: Equipment & Vehicles	6,709	29,000	29,000	29,000
Trans/Travel: In County	-	3,500	3,500	3,500
Trans/Travel: Out of County	5,644	5,000	5,000	5,000
Trans/Travel: Out of State	9,695	9,000	9,000	9,000
Training	7,564	25,750	24,750	24,750
Mileage Reimbursement	752	2,000	2,000	2,000
Vehicle Operating Costs	14,553	5,700	6,208	5,844
Dues & Subscriptions	1,871	5,000	5,000	5,000
Computer Data Processing	63,047	43,500	42,000	42,000
Prof & Consultant Svcs	219,787	850,000	850,000	1,650,000
PW CAP Support Charge	1,581			
Machinery/ Equipment: Machinery				
Sub Total	\$ 440,586	\$ 1,030,831	\$ 1,027,839	\$ 1,827,475
Combined Totals	\$ 3,858,364	\$ 5,341,370	\$ 6,061,720	\$ 6,826,948

San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

PROGRAM:

ENVIRONMENTAL COMPLIANCE /SAFETY

RESPONSIBLE MANAGER:

JENNIFER BROWN

PROGRAM PURPOSE AND DESCRIPTION

Provides general regulatory compliance (NPDES, Title V, OSHA, etc.) and environmental health and safety support (EH&S) to the Plant and the rest of the department, as needed, through a variety of programs as required by Local, State, and Federal regulations. The desired outcome is to protect environmental and public health, create a safe working environment for employees, and maintain compliance with all Local, State, and Federal regulations pertaining to environmental compliance and occupational safety.

PERSONNEL SUMMARY				
Full Time Positions	2018-2019	2019-2020	2020-2021	2020-2021
	Adopted	Adopted	Base	Proposed
Assoc Engineer	0.30	0.30	0.30	0.30
Assoc Environ Serv Spec	1.00	2.00	2.00	2.00
Biologist	1.82	1.82	1.82	1.82
Engineer II	1.00	1.00	1.00	1.00
Environment Compl Officer	0.63	0.63	0.63	0.63
Environment Serv Prog Mgr	0.91	0.91	0.91	0.91
Environment Serv Spec	3.12	2.12	2.12	2.12
Principal Engineer/ Architect			1.00	1.00
Senr Analyst	0.10	0.10	0.10	0.10
Senr Engineer	1.00	1.00	0.00	0.00
Supervg Environ Serv Spec	0.91	0.91	0.91	0.91
Total Full-Time Positions	10.79	10.79	10.79	10.79

San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

DETAILED PROGRAM BUDGET				
Detail/Category	2018-2019	2019-2020	2020-2021	2020-2021
	Actual	Adopted	Base	Proposed
Salaries-Reg-Full Time	970,974	1,127,618	1,135,746	1,135,746
Salaries-Reg-Part Time				
Salaries - Overtime	840			
Other Personnel				
Benefits: Retirement Contrib	380,549	563,330	537,196	524,999
Other Fringe Benefits	127,523	146,179	149,875	149,875
OPEB (Other Post Employment Benefits)	100,956	73,626	60,578	60,578
Sub Total	\$ 1,580,842	\$ 1,910,753	\$ 1,883,395	\$ 1,871,198
Supplies and Materials	2,050	26,250	22,875	22,875
Comm Expnse: Telephne-Telegrph	6,817	231	231	231
Comm Expnse: Postage	44	268	268	268
Print/Adv-Outside Vendors	322	16,715	225	225
Rent: Land & Buildings		935	210	210
Rent: Equipment & Vehicles			65	65
Trans/Travel: In County	81	2,393	518	518
Trans/Travel: Out of County	525	4,765	1,765	1,765
Trans/Travel: Out of State	87	6,685	3,685	3,685
Training	4,677	6,914	4,664	4,664
Mileage Reimbursement	2,747	1,314	939	939
Vehicle Operating Costs	5,982			-
Dues & Subscriptions	348	53,388	51,318	51,318
Computer Data Processing	3,024	25,443	25,443	25,443
Prof & Consultant Svcs	310,399	351,276	301,276	301,276
Taxes	1,575	2,700	2,700	2,700
Machnry/Equipmt: Machinery	-			-
Sub Total	\$ 338,679	\$ 499,277	\$ 416,182	\$ 416,182
Combined Totals	\$ 1,919,521	\$ 2,410,030	\$ 2,299,577	\$ 2,287,380

San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

PROGRAM:

OFFICE OF SUSTAINABILITY

RESPONSIBLE MANAGER:

JENNIFER BROWN

PROGRAM PURPOSE AND DESCRIPTION

Provides support and technical expertise to the Water Pollution Control Plant to advance efforts related to renewable energy, zero waste, and wastewater reuse. In addition, staff focuses on supporting programs related to energy and water efficiency at the Plant, renewable energy technologies, and greenhouse gas emissions.

PERSONNEL SUMMARY				
Full Time Positions	2018-2019	2019-2020	2020-2021	2020-2021
	Adopted	Adopted	Base	Proposed
Assoc Environment Serv Spec		0.03	0.03	0
Environment Serv Prog Mgr	0.39	0.39	0.39	0.39
Environment Serv Spec	2.06	1.75	1.75	1.75
Environmntl Sustainability Mgr	0.39	0.39		
Division Manager			0.39	0.39
Planner III	1.00	1.00	1.00	1.00
Supervg Environ Serv Spec	1.66	1.66	1.66	1.66
Total Full-Time Positions	5.50	5.22	5.22	5.19

DETAILED PROGRAM BUDGET				
Detail/Category	2018-2019	2019-2020	2020-2021	2020-2021
	Actual	Adopted	Base	Proposed
Salaries-Reg-Full Time	488,922	594,691	613,209	610,502
Salaries-Reg-Part Time	-			
Salaries - Overtime	9			
Benefits: Retirement Contrib	224,710	291,651	289,892	281,856
Other Fringe Benefits	50,526	47,157	37,073	36,795
OPEB (Other Post Employment Benefits)	56,285	35,359	31,958	31,813
Sub Total	\$ 820,452	\$ 968,858	\$ 972,132	\$ 960,966
Supplies and Materials	1,066	3,812	7,187	7,187
Comm Expnse: Telephne- Telegrph	448	300	300	300
Comm Expnse: Postage	-	325	325	325
Print/Adv-Outside Vendors	36,008	659	17,149	17,149
Rent: Land & Buildings		-	935	935
Rent: Equipment & Vehicles				
Trans/Travel: In County	106	624	2,499	2,499
Trans/Travel: Out of County	748	1,057	4,057	4,057
Trans/Travel: Out of State	33	-	3,000	3,000
Training	477	3,849	6,099	6,099
Mileage Reimbursement	199	689	1,064	1,064
Vehicle Operating Costs		2,000	3,043	2,865
Dues & Subscriptions	292	11,646	13,716	13,716
Computer Data Processing	2,633	653	653	653
Prof & Consultant Svcs	1,897	500,000		
Sub Total	\$ 43,908	\$ 525,614	\$ 60,027	\$ 59,849
Combined Totals	\$ 864,360	\$ 1,494,472	\$ 1,032,159	\$ 1,020,815

San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

PROGRAM:

COMMUNICATIONS

RESPONSIBLE MANAGER:

JENNIE LOFT

PROGRAM PURPOSE AND DESCRIPTION

This program manages the media relations and public outreach needs for the San Jose/Santa Clara Water Pollution Control Plant, the wastewater pre-treatment, pollution prevention, and recycled water programs. This includes responding to media inquiries and seeking media coverage; sharing utility and capital improvement information to neighbors and the public, representing the Department at community meetings; developing and maintaining best management practice materials including information to regulated businesses; publicizing and conducting community events to collect pharmaceuticals; supporting outreach efforts; providing information to recycled water customers; and emergency preparedness communications support.

PERSONNEL SUMMARY				
Full Time Positions	2018-2019	2019-2020	2020-2021	2020-2021
	Adopted	Adopted	Base	Proposed
Analyst II C	0.38			
Division Manager			0.00	0.00
Public Information Rep I-II	1.52	1.90	1.90	1.90
Public Information Mgr	0.38	0.38	0.38	0.38
Senr Public Information Rep	0.76	0.76	0.76	0.76
Staff Specialist	0.38	0.38	0.38	0.38
Total Full-Time Positions	3.42	3.42	3.42	3.42

DETAILED PROGRAM BUDGET				
Detail/Category	2018-2019	2019-2020	2020-2021	2020-2021
	Actual	Adopted	Base	Proposed
Salaries-Reg-Full Time	263,602	311,419	316,595	316,595
Salaries-Reg-Part Time	11,695			
Salaries - Overtime	0.36			
Other Personnel				
Benefits: Retirement Contrib	48,996	146,442	146,029	142,850
Other Fringe Benefits	39,898	55,960	43,414	43,414
OPEB (Other Post Employment Benefits)	30,943	18,837	16,907	16,907
Sub Total	\$ 395,135	\$ 532,658	\$ 522,945	\$ 519,766
Supplies and Materials	223	24,795	24,795	24,795
Comm Expnse: Telephone-Telegraph	799	222	222	222
Comm Expnse: Postage	89	14,000	14,000	14,000
Print/Adv-Outside Vendors	397	129,700	129,700	129,700
Trans/Travel: In County	-	463	463	463
Trans/Travel: Out of County	543	105	105	105
Trans/Travel: Out of State	2,516			
Training	68	2,349	2,349	2,349
Mileage Reibursement	65			
Dues & Subscriptions	792	467	467	467
Computer Data Processing	2,640	1,394	1,394	1,394
Prof & Consultant Svcs	3,263	122,000	122,000	122,000
Sub Total	\$ 11,394	\$ 295,495	\$ 295,495	\$ 295,495
Combined Totals	\$ 406,529	\$ 828,153	\$ 818,440	\$ 815,261

SAN JOSE / SANTA CLARA
WATER POLLUTION CONTROL PLANT

2020-2021

PROPOSED

South Bay Water Recycling Operating Fund
Fund 570

Environmental Services Department
City of San José

San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

PROGRAM: SOUTH BAY WATER RECYCLING
RESPONSIBLE MANAGER: JEFF PROVENZANO

PROGRAM PURPOSE AND DESCRIPTION

The SBWR Operating Fund is the depository of revenues from the sale of wholesale water produced by the SBWR program. This fund provides monies for the operations and maintenance of the SBWR system. The personnel summary and detailed program budget shown below reflect the department costs in the fund to effectively operate and maintain the SBWR program.

PERSONNEL SUMMARY				
Full Time Positions	2018-2019	2019-2020	2020-2021	2020-2021
	Adopted	Adopted	Base	Proposed
Account Clerk II	0.05	0.05	0.04	0.04
Accountant II	0.05	0.05	0.08	0.08
Accounting Tech	0.10	0.1	0.08	0.08
Administrative Assist C	0.05	0.05	0.04	0.04
Administrative Officer	0.05	0.05	0.04	0.04
Analyst II C	0.50	0.50	0.46	0.46
Assist Dir U	0.05	0.05	0.04	0.04
Assist Hvy Dsl Eq Op Mech	0.09	0.09	0.09	0.09
Assoc Construction Insp	0.70	0.70	0.70	0.70
Assoc Engineer	3.15	3.15	3.15	3.15
Assoc Engineering Tech	1.00	1.00	1.00	1.00
Cross Connection Spec	0.30	0.30	0.30	0.30
Dept Information Tech Manager	0.02	0.02	0.02	0.02
Deputy Dir U	0.35	0.35	0.35	0.35
Dir Environmental Serv U	0.05	0.05	0.04	0.04
Division Manager	0.15	0.16	0.14	0.14
Engineer I-II	0.20	0.20	0.20	0.20
Engineerg Technician II	0.40	0.40	0.40	0.40
Environment Inspector I-II	0.50	0.50	0.50	0.50
Environment Serv Prog Mgr	0.55	0.55	0.55	0.55
Environment Serv Spec	1.00	1.00	1.00	1.00
Geographic Sysms Spec I	0.50	0.50	0.50	0.50
Groundswoker	0.05	0.05		

San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

Industrial Electrician	0.40	0.45	0.45	0.45
Info Systs Analyst				0.03
Instrument Control Supvr II	0.15	0.15	0.15	0.15
Instrument Control Tech I-IV	1.00	2.00	1.80	1.80
Instrument Control Technician	0.75			0.00
Maintenance Worker I			0.05	0.05
Network Engineer	0.02	0.02	0.02	0.02
Network Technician II	0.04	0.04	0.04	0.04
Office Specialist II	0.10	0.10	0.08	0.08
Prin Accountant	0.05	0.05	0.04	0.04
Prin Construction Inspect	0.30	0.30	0.30	0.30
Prin Office Specialist	0.10	0.10	0.08	0.08
Principal Engineer/Architect	0.40	0.40	0.40	0.40
Program Manager I	0.05	0.05	0.04	0.04
Public Information Manager			0.01	0.01
Public Information Rep I			0.03	0.03
Public Information Rep II			0.02	0.02
Senr Account Clerk	0.20	0.20	0.16	0.16
Senr Accountant	0.20	0.20	0.16	0.16
Senr Analyst	0.20	0.20	0.16	0.16
Senr Construction Insp	0.30	0.30	0.30	0.30
Senr Engineer	1.00	1.00	1.00	1.00
Senr Engineering Tech	1.00	1.00	1.00	1.00
Senr Industrial Electrician	0.10	0.10	0.10	0.10
Senr Public Information Rep			0.02	0.02
Senr Systs Apps Prgmr				0.03
Senr Maintenance Worker	0.05	0.00		
Staff Specialist	0.15	0.15	0.13	0.13
Supervg Environ Serv Spec	0.05	0.05	0.05	0.05
Wastewater Maintenance Supt	0.15	0.20	0.15	0.15
Wastewater Mechanic I-II	2.38	2.43	2.33	2.33
Wastewater Mechanical Supvr II	0.29	0.29	0.29	0.29
Wastewater Operator I-III	2.16	5.68	5.68	5.68
Wastewater Ops Foreperson I_II	2.15	2.15	2.15	2.15
Wastewater Senr Mechanic I-II	0.67	0.67	0.67	0.67
Water Syst Op Assistant II	0.15	0.15	0.15	0.15
Water Systems Operator III	0.50	0.50	0.50	0.50
Water Syst Op Foreperson I	0.15	0.15	0.15	0.15
Water Syst Op Superintendent II	0.20	0.20	0.20	0.20
Water Syst Operations Manager	0.10	0.10	0.10	0.10
Total Full-Time Positions	25.37	29.25	28.68	28.74

San José/Santa Clara Water Pollution Control Plant
Environmental Services Department

DETAILED PROGRAM BUDGET				
Detail/Category	2018-2019	2019-2020	2020-2021	2020-2021
	Actual	Adopted	Base	Proposed
Salaries-Reg-Full Time	2,250,913	3,018,437	3,030,311	3,036,279
Compensated Absence				
Salaries-Reg-Part Time	24,448			
Salaries - Overtime	116,703			
Benefits: Other Personnel	10		1,000	1,000
Benefits: Retirement Contrib	1,162,073	1,582,077	1,531,251	1,496,572
Other Fringe Benefits	327,037	475,322	450,310	451,698
OPEB (Other Post Employment Benefits)	227,046	185,138	164,206	164,542
Sub Total	\$ 4,108,230	\$ 5,260,974	\$ 5,177,078	\$ 5,150,091
Utilities: Gas	194,289	160,000	265,000	265,000
Utilities: Electricity	1,235,285	1,366,310	907,000	907,000
Supplies and Materials	434,665	231,915	231,915	231,924
Comm Expnse: Telephne-Telegrph	46,872	11,395	11,395	11,410
Comm Expnse: Postage	320	2,177	2,177	2,177
Print/Adv-Outside Vendors	518	29,730	29,730	29,730
Utilities: Other	5,588			
Chemicals	125,302	110,000	110,000	110,000
Rent: Equipment & Vehicles	3,670	8,268	8,268	8,268
Trans/Travel: In County	4	3,521	3,521	3,521
Trans/Travel: Out of County	541	5,414	5,414	5,414
Trans/Travel: Out of State	2,908	7,179	7,179	7,179
Training	18,242	11,321	11,321	11,513
Mileage Reimbursement	170	2,449	2,449	2,455
Vehicle Operating Costs	6,718	40,000	10,000	10,000
Dues & Subscriptions	22,515	41,202	41,202	41,202
Computer Data Processing	106,441	17,113	17,113	17,203
Prof & Consultant Svcs	1,508,434	1,299,264	1,299,911	1,299,911
PW Capital Support Charge				-
Taxes	376	2,700	2,700	2,700
Capital Outlay				-
Machnry/Equint: Machinery	13,206	6,000	6,000	6,000
Sub Total	\$ 3,726,065	\$ 3,355,958	\$ 2,972,295	\$ 2,972,607
Combined Totals	\$ 7,834,294	\$ 8,616,932	\$ 8,149,373	\$ 8,122,698

San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

Below is Source and Use of Funds Statement for the South Bay Water Recycling Operating Fund from the City's 2020-2021 Proposed Operating Budget¹.

South Bay Water Recycling Operating Fund (570)

STATEMENT OF SOURCE AND USE OF FUNDS

	2018-2019 Actuals *	2019-2020 Adopted	2019-2020 Modified	2019-2020 Estimate	2020-2021 Proposed
SOURCE OF FUNDS					
Beginning Fund Balance					
Operations and Maintenance Reserve (Source)	0	1,287,815	1,287,815	1,287,815	1,533,214
Reserve for Encumbrances (Source)	0	0	509,808	509,808	509,808
Unrestricted Beginning Fund Balance (Source)	0	785,996	259,533	259,534	431,859
Total Beginning Fund Balance	0	2,073,811	2,057,156	2,057,157	2,474,881
Revenue from the Use of Money/Property					
Interest	55,896	49,185	49,185	49,185	49,185
Total Revenue from the Use of Money/Property	55,896	49,185	49,185	49,185	49,185
Fees, Rates, and Charges					
Recycled Water Sales - Santa Clara	4,779,479	5,421,186	5,421,186	4,755,091	4,908,916
Recycled Water Sales - San Jose Water Company	2,672,036	3,009,911	3,009,911	2,851,305	3,071,363
Recycled Water Sales - Milpitas	1,329,239	1,642,706	1,642,706	1,347,352	1,347,163
Recycled Water Sales - San Jose Municipal Water System	5,056,109	5,091,615	5,091,615	4,790,891	4,859,064
Total Fees, Rates, and Charges	13,836,864	15,165,418	15,165,418	13,744,639	14,186,506
TOTAL SOURCE OF FUNDS	13,892,759	17,288,414	17,271,759	15,850,981	16,710,572
USE OF FUNDS					
Expenditures					
ESD Non-Personal/Equipment	3,726,065	3,355,958	3,855,958	3,778,839	2,972,607
ESD Personal Services	4,108,230	5,260,974	5,257,300	3,990,867	5,150,091
ITD Non-Personal/Equipment	0	11,579	11,579	11,579	521
Overhead	861,331	696,612	696,612	696,612	633,064
SCVWD - Advanced Water Treatment	3,139,977	1,000,000	1,000,000	3,083,238	1,000,000
Total Expenditures	11,835,603	10,325,123	10,821,449	11,561,135	9,756,283
Transfers					
Transfer to the City Hall Debt Service Fund	0	48,390	48,390	48,390	44,565
Transfer to the Sewer Service and Use Charge Fund	0	2,266,575	2,266,575	1,766,575	1,116,344
Total Transfers	0	2,314,965	2,314,965	1,814,965	1,160,909
Ending Fund Balance					
Operations and Maintenance Reserve (Use)	1,287,815	1,533,214	1,533,214	1,533,214	1,467,432
Reserve for Encumbrances (Use)	509,808	0	509,808	509,808	509,808
Unrestricted Ending Fund Balance (Use)	259,533	3,115,112	2,092,323	431,859	3,816,140
Total Ending Fund Balance	2,057,156	4,648,326	4,135,345	2,474,881	5,793,380
TOTAL USE OF FUNDS	13,892,759	17,288,414	17,271,759	15,850,981	16,710,572

¹ This Enterprise Fund accounts for the monies received from the sale of wholesale recycled water produced by the South Bay Water Recycling (SBWR) program for the operations and maintenance of the SBWR system.

Memorandum

**TO: TREATMENT PLANT ADVISORY
COMMITTEE**

FROM: Kerrie Romanow

**SUBJECT: PROPOSED FIVE-YEAR 2021-2025
CAPITAL IMPROVEMENT
PROGRAM**

DATE: May 21, 2020

This memorandum serves to transmit the San José/Santa Clara Regional Wastewater Facility Proposed Five-Year 2021-2025 Capital Improvement Program (CIP). The Proposed Five-Year CIP is provided to the Treatment Plant Advisory Committee's review and for a recommendation to the San José City Council for approval.

Included with this packet as Attachment A is a ten-year (2020-2021 through 2029-2030) forecast of CIP allocations based on the assumption that all agencies will fund their respective share of capital costs through cash contributions.

See Attachment A – 2021-25 CIP Agency Allocations for updated information on agency allocations. Please note that the 2021-2025 Proposed Capital Improvement Program line item “WPCP Projects and Equipment Replacement” on page V-75 of the budget needs to be adjusted to match Attachment A. Updates to this allocation were inadvertently excluded from the budget. This change, along with any other changes that may occur during the budget process will be reflected in the Adopted Capital Budget which is scheduled to be reviewed and approved by the City Council on June 16, 2020. Agencies are billed for capital costs based upon the Adopted Capital Budget.

The adjustments to the WPCP Projects and Equipment Replacement allocations in the Proposed Capital Improvement Program are:

	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025
2021-2025 Proposed	57,154,000	30,656,000	79,703,000	33,046,000	40,457,000
2021-2025 Revised	57,245,912	30,642,079	79,873,120	33,142,885	40,613,107
Adjustment	91,912	(13,921)	170,120	96,885	156,107

If you should have any questions, please contact Napp Fukuda at 408-793-5353.

/s/

KERRIE ROMANOW
Director, Environmental Services

PROPOSED
SAN JOSE / SANTA CLARA
WATER POLLUTION CONTROL PLANT

700 Los Esteros Road
San Jose, California 95134

Five-Year 2021-2025
Capital Improvement Program

Submitted by

Kerrie Romanow, Director

Environmental Services Department

City of San Jose

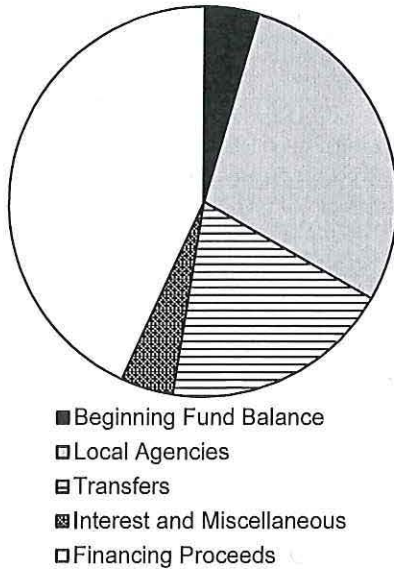
TO: Treatment Plant Advisory Committee

Sam Liccardo	(Chair) Mayor, City of San Jose
Debi Davis	(Vice-Chair), City of Santa Clara
Carmen Montano	Councilmember, City of Milpitas
Paul Resnikoff	Boardmember, West Valley Sanitation District
John M. Gatto	Boardmember, Cupertino Sanitary District
David Sykes	City Manager, City of San Jose
Lan Diep	Councilmember, City of San Jose
Dev Davis	Councilmember, City of San Jose
Kathy Watanabe	Councilmember, City of Santa Clara

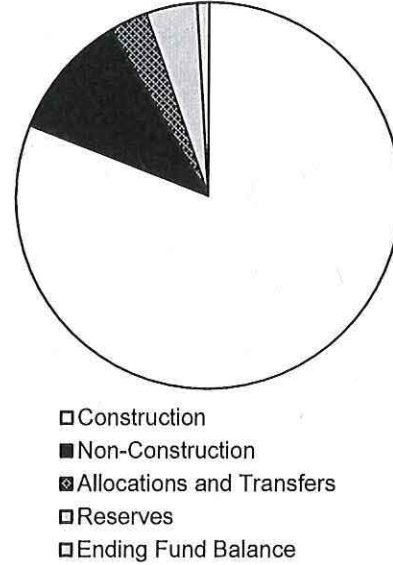
WATER POLLUTION CONTROL

2021-2025 Capital Improvement Program

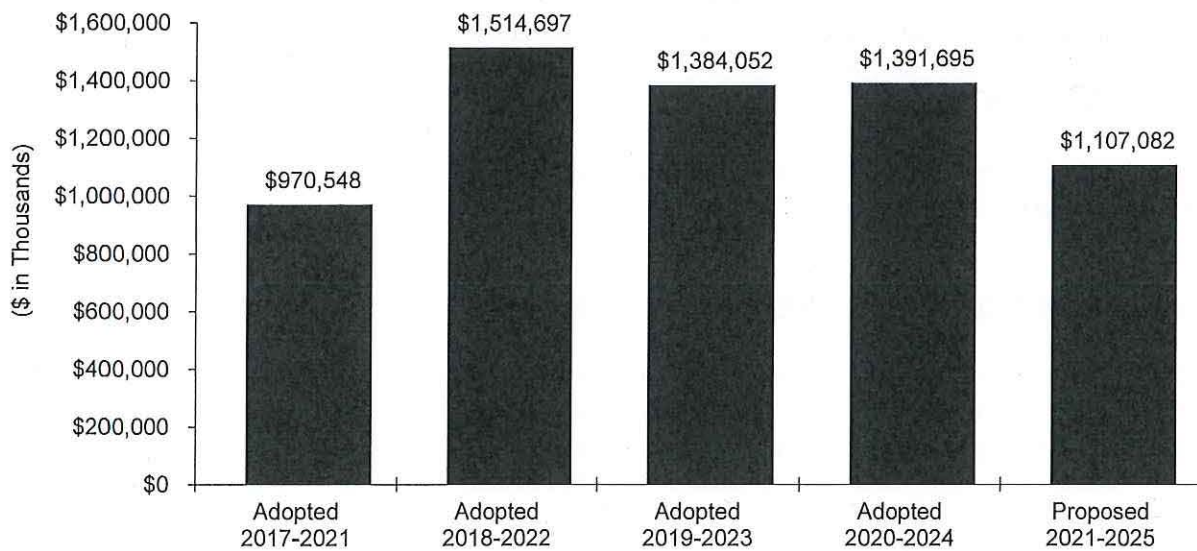
**2020-2021 Proposed
Source of Funds**



**2020-2021 Proposed
Use of Funds**



CIP History



Water Pollution Control Capital Program

2021-2025 Proposed Capital Improvement Program

Overview

INTRODUCTION

The San José-Santa Clara Water Pollution Control Plant (Plant) is a regional wastewater treatment facility serving eight South Bay cities and four special districts including: San José, Santa Clara, Milpitas, Cupertino Sanitary District (Cupertino), West Valley Sanitation District (Campbell, Los Gatos, Monte Sereno, and Saratoga), County Sanitation Districts 2-3 (unincorporated), and Burbank Sanitary District (unincorporated). The Plant is jointly owned by the cities of San José and Santa Clara and is administered and operated by the City of San José's Environmental Services Department (ESD). ESD is also responsible for planning, designing, and constructing capital improvements at the Plant, including water reuse facilities. On March 26, 2013, the City Council approved to change the name of the Plant to the San José-Santa Clara Regional Wastewater Facility (RWF) for use in public communications and outreach.

PLANT INFRASTRUCTURE	
ACRES OF LAND	2,684
AVERAGE DRY WEATHER INFLUENT CAPACITY (MILLIONS OF GALLONS PER DAY)	167
AVERAGE DRY WEATHER INFLUENT FLOW (MILLIONS OF GALLONS PER DAY)	110
DRY METRIC TONS OF BIOSOLIDS HAULED EACH YEAR	43,500
AVERAGE MEGAWATTS PRODUCED	5.6

The 2021-2025 Proposed Capital Improvement Program (CIP) provides funding of \$1.1 billion, of which \$199.4 million is allocated in 2020-2021. The five-year CIP is developed by City staff, reviewed by the Treatment Plant Advisory Committee (TPAC), and approved by the San José City Council. The budgeted costs are allocated to each agency based on its contracted-for capacity in the Plant. Each agency is responsible for its allocated share of Plant costs, as well as the operation, maintenance, and capital costs of its own sewage collection system; debt service on bonds issued by the agency for sewer purposes; and any other sewer service related costs. Each agency is also responsible for establishing and collecting its respective sewer service and use charges, connection fees, or other charges for sewer service.

This program is part of the Environmental and Utility Services City Service Area (CSA) and supports the following outcomes: *Reliable Utility Infrastructure* and *Healthy Streams, Rivers, Marsh, and Bay*.

PROGRAM PRIORITIES AND OBJECTIVES

The 2021-2025 Proposed CIP is consistent with the goals and policies outlined in the City's Envision San José 2040 General Plan. These include maintaining adequate operational capacity for wastewater treatment to accommodate the City's economic and population growth; adopting and implementing new technologies for wastewater to achieve greater safety, energy efficiency, and environmental benefit; and maintaining and operating the Plant in compliance with all applicable local, state, and federal regulatory requirements.

Water Pollution Control Capital Program

2021-2025 Proposed Capital Improvement Program

Overview

PROGRAM PRIORITIES AND OBJECTIVES

The development of the Proposed CIP is guided by the Plant Master Plan (PMP), a 30-year planning-level document focused on long-term rehabilitation and modernization of the Plant. On April 19, 2011, the City Council approved a preferred alternative for the Draft PMP and directed staff to proceed with a program-level environmental review of the preferred alternative. In November 2013, the City Council approved the PMP and certified the final Environmental Impact Report. In December 2013, Santa Clara's City Council took similar actions.



San José-Santa Clara Regional Wastewater Facility

The PMP recommends more than 114 capital improvement projects to be implemented over a 30-year planning period at an estimated investment level of approximately \$2 billion. The PMP assumed an implementation schedule of 2010 through 2040.

On September 24, 2013, the City Council approved a multi-year master services agreement with MWH Americas, Inc. for program management consultant services to assist with managing and implementing the RWF CIP¹. By February 2014, the consultant program management team, along with City staff, completed a project validation process that included a review and prioritization of PMP projects, along with gap projects identified through discussions with Operations and Maintenance staff. The projects included with this Proposed CIP are based on the outcome of that project validation and the completion of various programmatic studies. On October 17, 2017, the City Council approved an amendment to extend the consultant program management services through 2023 to align with the implementation of the ten-year capital program.

Program priorities for the near term include: managing long-term financing (for San José only); continuing to focus on program and project delivery; and actively managing project risks and variables to inform timing and amount of major encumbrances.

Program Funding: In early 2014, staff began working with representatives from the City of Santa Clara and the tributary agencies to develop a ten-year funding strategy for the CIP. On May 14, 2015, TPAC recommended approval of, and on June 2, 2015, the City Council approved the Ten-Year Funding Strategy. An update on the Ten-Year Funding Strategy was recommended for approval by TPAC on December 10, 2015 and approved by the City Council on January 12, 2016.

¹ Effective January 1, 2017, MWH Americas, Inc. was acquired and merged with Stantec Consulting Services, Inc.

Water Pollution Control Capital Program

2021-2025 Proposed Capital Improvement Program

Overview

PROGRAM PRIORITIES AND OBJECTIVES

In August 2017, staff provided an update on Clean Water State Revolving Fund (SRF) funding to the City Council, which included news that the State Water Resources Control Board (SWRCB) would not be funding the Digester and Cogeneration projects. Staff continues to monitor the issue and evaluate further SRF opportunities as appropriate. However, based on the City's recent experience with this program, unless significant changes are made to the funding level, program priorities, program resources, and loan agreement terms, SRF loans do not appear to be a potential source of funding for the RWF CIP.

In October 2017, the City Council approved the establishment of a \$300 million interim financing facility (Wastewater Revenue Notes) to finance San José's portion of the capital costs. As the CIP progresses, the City will periodically pay off the interim financing facility with long-term bonds (Bond Proceeds). This strategy provides funding for the CIP at the lowest possible cost with the least amount of risk. The 2021-2025 Proposed CIP assumes the issuance of long-term bonds in 2022-2023 and the establishment of a second interim financing facility in 2023-2024. In addition, staff continues to build the operating reserves needed for issuing long-term bonds.

Program/Project Delivery and Implementation: Successful delivery of this large, multi-disciplinary CIP requires an integrated team of City staff, outside consultants, and contractors. The program is being delivered using a mix of City staff from the Environmental Services Department, the Public Works Department, the Planning, Building and Code Enforcement Department, the Finance Department, and the City Attorney's Office, as well as program management consultant staff and various other consultant firms.

With roughly two dozen large projects moving through the feasibility/development, design, and construction phases, the program continues to draw from the professional consultant and/or contractor community for program management, project management, subject-matter technical expertise, engineering design, and construction management services. In particular, to address the ramp up in large-scale construction projects, City staff developed a construction management strategy that has been incorporated into the 2021-2025 Proposed CIP. This includes increasing the construction management budget to provide the necessary support from Public Works and/or third-party construction management and controls consultants required for projects of this magnitude and complexity.

Program/Project Delivery Variables: The program team continues to develop and refine project schedules and budgets and implement regular reporting and centralized document management systems for consistent and efficient program and project delivery. The program team continues to work on developing standardized project delivery tools, design standards and specifications, control system and integration strategies, startup, commissioning, and training.

Water Pollution Control Capital Program

2021-2025 Proposed Capital Improvement Program

Overview

PROGRAM PRIORITIES AND OBJECTIVES

On the project delivery front, it is important to recognize that several projects in the Proposed CIP are in the feasibility/development or design phases. Staff will continue to develop and refine project scope, schedules, and budgets as the projects progress through scoping, preliminary engineering, detailed design, and bid award. To the extent possible, staff will continue to monitor and implement mitigation measures to minimize impacts to project delivery schedule and cost caused by various factors such as changes in project delivery staffing resources, long lead time items, external permit reviews and approvals, and construction bidding climate.

The spread of the novel coronavirus (COVID-19) in early 2020 has impacted capital projects citywide, particularly active construction projects. At the RWF, CIP staff have been working with contractors to continue construction where it possible to do so safely, but activity on a number projects has been halted or slowed. Given the uncertainty of COVID-19, the impact to project budgets and schedules is unknown at this time, but staff will attempt to mitigate the effect of the delays.

SOURCES OF FUNDING

Revenues for the 2021-2025 Proposed CIP are derived from several sources: transfers from the Sewer Service and Use Charge (SSUC) Fund, contributions from the City of Santa Clara and other tributary agencies, interest earnings, Calpine Metcalf Energy Center Facilities repayments, and debt-financing proceeds. Occasional transfers from the Sewage Treatment Plant Connection Fee Fund are programmed as needed per the receipt of connection fee revenue in that fund.

The SSUC Fund derives its revenues from fees imposed on San José users of the residential, commercial, and industrial sanitary sewer system. Transfers from this fund to the Plant CIP over the five years total \$227.5 million, which represents a \$24.8 million (9.8%) decrease as compared to the 2020-2024 Adopted CIP.

Contributions from the City of Santa Clara and other agencies are determined according to agreements with the participating agencies, based on financing plans, anticipated Plant expenditures, and the amount and characteristics of flows from each agency's connections to the Plant. These contributions reimburse the City for actual project expenditures. In this Proposed CIP, contributions from the City of Santa Clara and other agencies total \$241.2 million, which represents a \$73.6 million (23.4%) decrease compared to the 2020-2024 Adopted CIP.

Water Pollution Control Capital Program

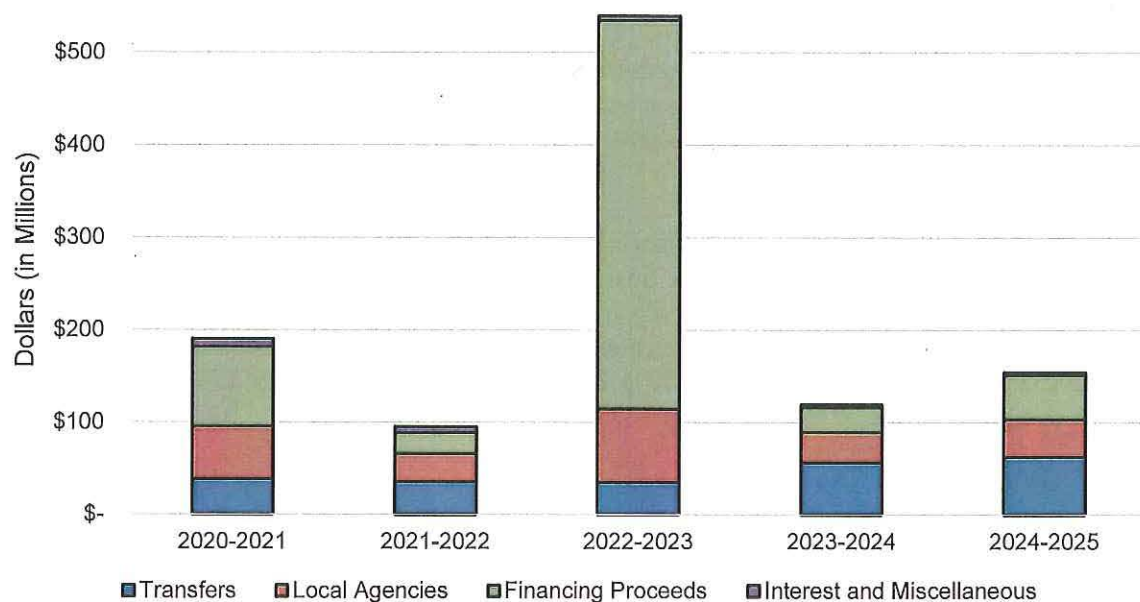
2021-2025 Proposed Capital Improvement Program

Overview

SOURCES OF FUNDING

To accommodate San José's portion of the project costs for the RWF, Financing Proceeds (Wastewater Revenue Notes and Bond Proceeds) are assumed to cover costs of the RWF improvements in the Proposed CIP. The establishment of an interim financing program, in the form of Wastewater Revenue Notes, was approved in 2017-2018 and provides up to \$300 million in interim financing capacity. The Notes provide periodic, short-term, flexible funding to meet the cash flow needs of the RWF improvement project. Generally, the notes are repaid within a 3-year period and offer lower interest costs than fixed rate bonds. In 2022-2023, bonds will be issued in the amount of \$385 million to both repay the Wastewater Revenue Notes issued since 2017-2018 and to cover other CIP project and financing costs within that fiscal year. Associated debt service for the Wastewater Revenue Notes and debt service for the bonds is estimated to be \$2.9 million in 2020-2021, \$4.2 million in 2021-2022, \$303.8 million in 2022-2023 (\$300.0 million for the repayment of Wastewater Revenue Notes and an additional \$3.8 million for debt service), \$25.2 million in 2023-2024, and \$26.7 in 2024-2025. The estimated size of the debt financings and the related debt service are scheduled to cover external third-party capital costs programmed in the 2021-2025 Proposed CIP while avoiding large rate increases that would be required to fund the PMP in a "pay-as-you-go" scenario. City of San José staff costs will be cash-funded and not included in either the Wastewater Revenue Notes program or long-term debt financing. Additional debt financing, in the form of notes and bonds, will likely be needed to fund project costs beyond the Proposed CIP period.

Summary of Revenues



Water Pollution Control Capital Program

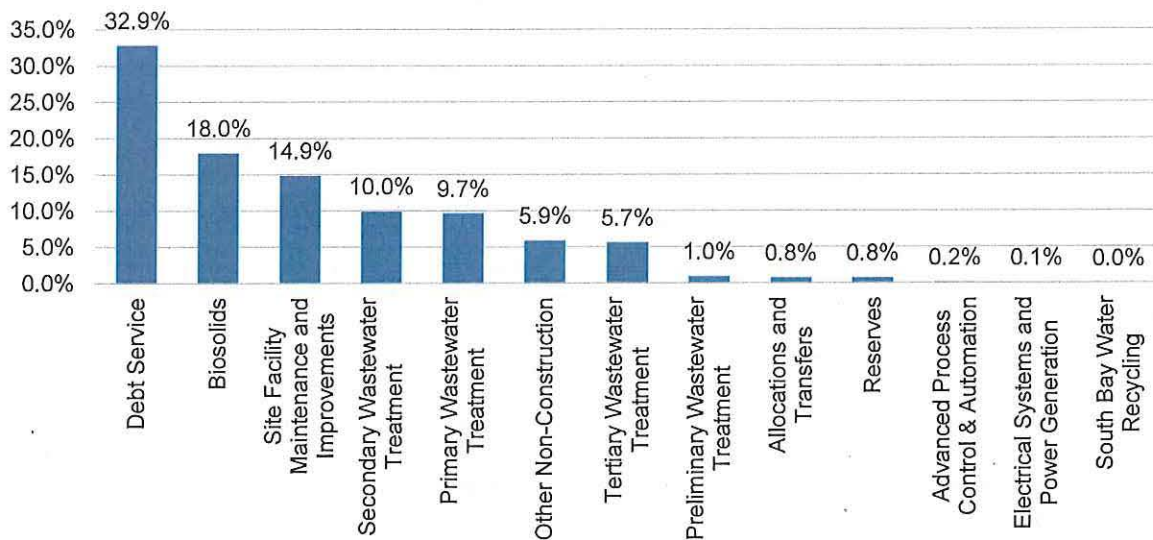
2021-2025 Proposed Capital Improvement Program

Overview

PROGRAM HIGHLIGHTS

The Water Pollution Control Capital Program's expenditures are organized to show the use of funds in several categories. The following highlights the major projects in the program. For further information on the program's individual projects, please refer to the Detail Pages.

**2021-2025 Water Pollution Control
Capital Program Expenditures
\$1,103.5 million
(excludes Ending Fund Balance)**



Ongoing Projects

Ongoing construction and non-construction projects are included in the funds within the Water Pollution CIP. Due to the ongoing nature of these projects, detail pages do not accompany the items. Brief descriptions of these projects are provided in the table below.

Construction Projects

Project Name	\$ (CIP)	Description
Equipment Replacement	\$8.3 million	This allocation provides for the urgent replacement of equipment at the Plant that is not identified in any other project.

Water Pollution Control Capital Program

2021-2025 Proposed Capital Improvement Program

Overview

Project Name	\$ (CIP)	Description
Urgent and Unscheduled Treatment Plant Rehabilitation	\$7.5 million	This ongoing allocation is used to investigate, prioritize, and rehabilitate structures and systems at the Water Pollution Control Plant.
Plant Infrastructure Improvements	\$5.0 million	This allocation provides for improvements, rehabilitation, or replacement of existing Plant infrastructure. Examples of the ongoing replacement and rehabilitation work include handrail replacement, concrete repairs, telecommunication systems upgrade, and Plant support system improvements.
Hydraulic Capacity Engineering	\$125,000	This allocation funds the expansion of the South Bay Water Recycling system through the construction of pipeline and ancillary distribution system projects. No revenue from Plant Tributary Agencies or City Sanitary Sewer rate payers will be used to fund this project.

Non-Construction Projects

Project Name	\$ (CIP)	Description
Debt Service Repayment for Plant Capital Improvement Projects	\$362.8 million	This allocation provides for the repayment of financing proceeds, including short-term wastewater revenue notes and long-term bonds, drawn for the Plant Capital Improvement Projects.
Program Management - Water Pollution Control	\$42.2 million	This allocation funds the administration and management of the Water Pollution Control CIP.
Clean Water Financing Authority Debt Service Payment Fund	\$5.5 million	This funding provides for the payment of the 1995 Series A and B Revenue Bonds. The moneys are transferred to the Clean Water Financing Authority Debt Service Payment Fund.
Preliminary Engineering - Water Pollution Control	\$5.0 million	This allocation provides funding to support preliminary engineering for Plant-related projects, including studies, pilots, and field verifications to evaluate impacts on operations.
Payment for Clean Water Financing Authority Trustee	\$10,000	This allocation provides for administrative costs of the San José/Santa Clara Clean Water Financing Authority related to bond issuances.

Water Pollution Control Capital Program

2021-2025 Proposed Capital Improvement Program

Overview

MAJOR CHANGES FROM THE 2020-2024 ADOPTED CIP

The overall size of the Water Pollution Control CIP has decreased by \$285 million from \$1.392 billion in the 2020-2024 Adopted CIP to \$1.107 billion in the 2021-2025 Proposed CIP. The following table outlines the most significant changes to project budgets, including new/augmented allocations and reduced/eliminated allocations.

Project Name	Incr/(Decr)
Additional Digester Upgrades	\$51.6 million
Digested Sludge Dewatering Facility	\$14.1 million
Filter Rehabilitation	(\$23.3 million)
Debt Service Repayment for Plant Capital Improvement Projects	(\$28.3 million)
Nitrification Clarifiers Rehabilitation	(\$53.4 million)
New Headworks	(\$124.5 million)

OPERATING BUDGET IMPACT

Several projects in this Proposed CIP are expected to introduce new operating costs to the Operating Budget. These include: Digester and Thickener Facilities Upgrade, Digested Sludge Dewatering Facility, Energy Generation Improvements, and New Headworks. The operation and maintenance impacts are due to chemical, labor, maintenance consumables (e.g. parts, oil), electrical, and hauling & tipping costs.

The Digester and Thickener Facilities Upgrade project will include a new chemical dosing station and new sludge screening facility, which are expected to be in operation by late 2020.

A new Digested Sludge Dewatering Facility is anticipated to be in operation by mid-2023, which will include new mechanical dewatering units, feed tank, sludge storage, conveyance, and chemical dosing facilities to be housed in a new building. This facility will allow for the eventual retirement of the current lagoons and sludge drying beds.

A new Cogeneration Facility (part of the Energy Generation Improvements appropriation) is expected to come online in mid-2020 that will introduce a new generator building, new engine generators, a gas treatment system, boilers, chillers, and other ancillary equipment. Depending on the timing of when new facilities come online and existing facilities are decommissioned, there may be a temporary increase in operating costs due to the dual operations.

Net operating cost impacts will continue to be evaluated and updated based on final design and operation configurations. The table below summarizes the operating and maintenance impact to the San Jose-Santa Clara Treatment Plant Operating Fund for several projects.

Water Pollution Control Capital Program
2021-2025 Proposed Capital Improvement Program
Overview

Net Operating Budget Impact Summary

	2021-2022	2022-2023	2023-2024	2024-2025
New Headworks		\$9,000	\$26,000	\$27,000
Digested Sludge Dewatering Facility		\$3,062,000	\$12,251,000	\$12,599,000
Digester and Thickener Facilities Upgrade	\$2,123,000	\$2,203,000	\$2,285,000	\$2,370,000
Energy Generation Improvement	\$92,000	\$95,000	\$97,000	\$100,000
	\$2,215,000	\$5,369,000	\$14,659,000	\$15,096,000

Note: The estimated operating costs have been provided by the Environmental Services Department and have not yet been fully analyzed by the City Manager's Budget Office. That analysis may result in different costs when the actual budget for the year in question is developed.

Water Pollution Control
2021-2025 Proposed Capital Improvement Program
Source of Funds (Combined)

	Estimated 2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	5-Year Total
TOTAL SOURCES	549,204,349	199,441,267	96,899,267	542,634,267	123,546,267	157,883,267	1,107,082,267
San José-Santa Clara Treatment Plant Capital Fund (512)							
Beginning Balance	66,898,939	5,122,292	1,773,292	2,789,292	3,908,292	3,539,292	5,122,292 *
Reserve for Encumbrance	153,850,435						
Transfers							
Transfer for 2009 Debt Service from the Sewer Service and Use Charge Fund (541)	5,372,000	5,371,000					5,371,000
Transfer for Plant CIP Debt Service from Sewer Service and Use Charge Fund (541)	2,625,000	2,926,000	4,169,000	3,835,000	25,225,000	26,675,000	62,830,000
Transfer for Capital Projects from Sewer Service and Use Charge Fund (541)	27,000,000	30,000,000	30,000,000	30,000,000	30,000,000	35,000,000	155,000,000
Transfer for Equipment Replacement from Sewer Service and Use Charge Fund (541)			1,083,000	1,083,000	1,083,000	1,083,000	4,332,000
TOTAL Transfers	34,997,000	38,297,000	35,252,000	34,918,000	56,308,000	62,758,000	227,533,000
Revenue from Use of Money and Property							
Interest Income	6,507,000	8,368,000	5,497,000	4,461,000	2,479,000	2,282,000	23,087,000
TOTAL Revenue from Use of Money and Property	6,507,000	8,368,000	5,497,000	4,461,000	2,479,000	2,282,000	23,087,000
Revenue from Local Agencies							
2009 Bond Debt Repayment	155,000	155,000					155,000

Water Pollution Control
2021-2025 Proposed Capital Improvement Program
Source of Funds (Combined)

	Estimated						
	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	5-Year Total
WPCP Projects and Equipment Replacement	101,028,000	57,154,000	30,656,000	79,703,000	33,046,000	40,457,000	241,016,000
TOTAL Revenue from Local Agencies	101,183,000	57,309,000	30,656,000	79,703,000	33,046,000	40,457,000	241,171,000
Revenue from the Federal Government							
U.S. Bureau of Reclamation Grant	2,465,000						
TOTAL Revenue from the Federal Government	2,465,000						
Other Revenue							
Calpine Metcalf Energy Center Facilities Repayment	389,000	389,000	389,000	389,000	389,000	389,000	1,945,000
TOTAL Other Revenue	389,000	389,000	389,000	389,000	389,000	389,000	1,945,000
Financing Proceeds							
Wastewater Revenue Notes	179,000,000	86,000,000	23,000,000	35,000,000	27,000,000	48,000,000	219,000,000
Bond Proceeds				385,000,000			385,000,000
TOTAL Financing Proceeds	179,000,000	86,000,000	23,000,000	420,000,000	27,000,000	48,000,000	604,000,000
Total San José-Santa Clara Treatment Plant Capital Fund (512)	545,290,374	195,485,292	96,567,292	542,260,292	123,130,292	157,425,292	1,102,858,292 *
South Bay Water Recycling Capital Fund (571)							
Beginning Balance	3,832,975	3,888,975	264,975	306,975	348,975	390,975	3,888,975 *
Revenue from Use of Money and Property							
Interest Income	81,000	67,000	67,000	67,000	67,000	67,000	335,000

Water Pollution Control
2021-2025 Proposed Capital Improvement Program
Source of Funds (Combined)

	Estimated						
	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	5-Year Total
TOTAL Revenue from Use of Money and Property	81,000	67,000	67,000	67,000	67,000	67,000	335,000
Total South Bay Water Recycling Capital Fund (571)	3,913,975	3,955,975	331,975	373,975	415,975	457,975	4,223,975 *

* The 2021-2022 through 2024-2025 Beginning Balances are excluded from the FIVE-YEAR TOTAL SOURCE OF FUNDS to avoid multiple counting of the same funds.

Water Pollution Control

2021-2025 Proposed Capital Improvement Program Use of Funds (Combined)

	Estimated 2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	5-Year Total
<u>Water Pollution Control</u>							
Headworks Improvements	16,274,657	822,000	165,000	65,000	4,000		1,056,000
New Headworks	133,477,891	7,896,000	1,361,000	611,000	22,000		9,890,000
Preliminary Wastewater Treatment	149,752,548	8,718,000	1,526,000	676,000	26,000		10,946,000
East Primary Rehabilitation, Seismic Retrofit, and Odor Control	1,000,000		10,885,000	94,530,000	686,000	684,000	106,785,000
Primary Wastewater Treatment	1,000,000		10,885,000	94,530,000	686,000	684,000	106,785,000
Aeration Tanks and Blower Rehabilitation	47,239,047		7,857,000	1,074,000	707,000	58,419,000	68,057,000
Nitrification Clarifier Rehabilitation	54,703,182	1,602,000	2,518,000	30,929,000	2,152,000	1,874,000	39,075,000
Secondary Clarifier Rehabilitation					565,000	2,833,000	3,398,000
Secondary Wastewater Treatment	101,942,228	1,602,000	10,375,000	32,003,000	3,424,000	63,126,000	110,530,000
Filter Rehabilitation	36,815,304	13,968,000	1,244,000	1,102,000	101,000		16,415,000
Final Effluent Pump Station & Stormwater Channel Improvements	902,000	2,009,000	4,503,000	880,000	35,975,000	1,645,000	45,012,000
Outfall Bridge and Levee Improvements	6,696,633	533,000	569,000				1,102,000
Tertiary Wastewater Treatment	44,413,937	16,510,000	6,316,000	1,982,000	36,076,000	1,645,000	62,529,000
Additional Digester Upgrades			1,191,000	8,031,000	1,298,000	51,576,000	62,096,000
Digested Sludge Dewatering Facility	13,584,279	128,189,000	5,361,000	1,926,000	74,000		135,550,000
Digester and Thickener Facilities Upgrade	58,700,401	1,222,000					1,222,000
Biosolids	72,284,679	129,411,000	6,552,000	9,957,000	1,372,000	51,576,000	198,868,000
Energy Generation Improvements	52,115,228	587,000					587,000
Plant Electrical Reliability	7,729,455	194,000	693,000				887,000
Electrical Systems and Power Generation	59,844,684	781,000	693,000				1,474,000
Advanced Facility Control and Meter Replacement	20,281,870	990,000	408,000	322,000			1,720,000
Treatment Plant Distributed Control System	7,057,105						

Water Pollution Control

2021-2025 Proposed Capital Improvement Program Use of Funds (Combined)

	Estimated						
	2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	5-Year Total
Advanced Process Control & Automation	27,338,975	990,000	408,000	322,000			1,720,000
Facility Wide Water Systems Improvements	4,472,715	753,000	1,196,000	7,748,000	463,000	422,000	10,582,000
Flood Protection	1,546,141						
Plant Infrastructure Improvements	1,957,786	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000
Storm Drain System Improvements	1,668,931		11,116,000	807,000	652,000		12,575,000
Support Building Improvements	15,205,124	113,000		13,090,000	969,000	967,000	15,139,000
Urgent and Unscheduled Treatment Plant Rehabilitation	500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	7,500,000
Various Infrastructure Decommissioning	469,000		2,590,000	18,470,000	691,000		21,751,000
Yard Piping and Road Improvements	22,447,860		16,972,000	37,559,000	35,707,000	1,870,000	92,108,000
Site Facility Maintenance and Improvements	48,267,557	3,366,000	34,374,000	80,174,000	40,982,000	5,759,000	164,655,000
Hydraulic Capacity Engineering	25,000	25,000	25,000	25,000	25,000	25,000	125,000
South Bay Water Recycling	25,000	25,000	25,000	25,000	25,000	25,000	125,000
Water Pollution Control - Construction	504,869,609	161,403,000	71,154,000	219,669,000	82,591,000	122,815,000	657,632,000
Debt Service Repayment for Plant Capital Improvement Projects	5,688,000	2,926,000	4,169,000	303,834,000	25,225,000	26,675,000	362,829,000
Equipment Replacement	1,663,000	1,663,000	1,663,000	1,663,000	1,663,000	1,663,000	8,315,000
Owner Controlled Insurance Program	6,424,000	3,705,000	3,705,000	1,399,000	1,264,000		10,073,000
Master Plan Updates	1,500,000						
Preliminary Engineering - Water Pollution Control	1,674,737	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000
Program Management - Water Pollution Control	11,775,393	11,738,000	11,712,000	9,794,000	7,426,000	1,576,000	42,246,000
General Non-Construction - Water Pollution Control	28,725,131	21,032,000	22,249,000	317,690,000	36,578,000	30,914,000	428,463,000
Water Pollution Control - Non Construction	28,725,131	21,032,000	22,249,000	317,690,000	36,578,000	30,914,000	428,463,000
Public Art Allocation	253,342						
Public Art Projects	253,342						
Capital Program and Public Works Department Support Service Costs	724,000	677,000	298,000	921,000	350,000	522,000	2,768,000

Water Pollution Control

2021-2025 Proposed Capital Improvement Program Use of Funds (Combined)

	Estimated 2019-2020	2020-2021	2021-2022	2022-2023	2023-2024	2024-2025	5-Year Total
Payment for Clean Water Financing Authority Trustee	5,000	5,000	5,000				10,000
Allocations	729,000	682,000	303,000	921,000	350,000	522,000	2,778,000
City Hall Debt Service Fund	89,000	94,000	97,000	97,000	97,000	97,000	482,000
Clean Water Financing Authority Debt Service Payment Fund	5,527,000	5,526,000					5,526,000
Transfers to Special Funds	5,616,000	5,620,000	97,000	97,000	97,000	97,000	6,008,000
Transfers Expense	5,616,000	5,620,000	97,000	97,000	97,000	97,000	6,008,000
Equipment Replacement Reserve		5,000,000					5,000,000
Hydraulic Capacity Enhancements Reserve		3,666,000					3,666,000
Expense Reserves - Non Construction		8,666,000					8,666,000
Total Expenditures	540,193,082	197,403,000	93,803,000	538,377,000	119,616,000	154,348,000	1,103,547,000
Ending Fund Balance	9,011,267	2,038,267	3,096,267	4,257,267	3,930,267	3,535,267	3,535,267 *
TOTAL	549,204,349	199,441,267	96,899,267	542,634,267	123,546,267	157,883,267	1,107,082,267 *

* The 2020-2021 through 2023-2024 Ending Balances are excluded from the FIVE-YEAR TOTAL USE OF FUNDS to avoid multiple counting of the same funds.

Water Pollution Capital Program

2021-2025 Proposed Capital Improvement Program

Detail of One-Time Construction Projects

Digested Sludge Dewatering Facility

CSA Environmental and Utility Services
 CSA Outcome Reliable Utility Infrastructure
 Department Environmental Services
 Location Water Pollution Control Plant
 Council Districts 4
 Appropriation A7452

Initial Start Date 3rd Qtr. 2012
 Initial End Date 2nd Qtr. 2013
 Revised Start Date 3rd Qtr. 2014
 Revised End Date 3rd Qtr. 2023
 Initial Project Budget \$1,000,000
 FY Initiated 2012-2013

Description This project will construct a new mechanical dewatering facility and support systems to replace the existing sludge storage lagoons and open air solar drying beds. All new mechanical dewatering units, feed tank, storage, conveyance, and chemical dosing facilities will be housed in an odor-controlled building.

Justification This project responds to a recommendation in the adopted Plant Master Plan to consolidate the Plant's operational area by reducing the biosolids process footprint. It also provides greater flexibility in biosolids disposal options in anticipation of the potential Newby Island landfill closure in 2025, responds to stricter regulations for landfilling and alternative daily cover, and addresses odor, noise, and aesthetics concerns from the operations of the lagoons and sludge drying beds.

Notes This project corresponds to Plant Master Plan Project Nos. 44, 54, 57-60 and Validation Project PS-03.

Major Cost Changes 2014-2018 CIP - increase of \$325.0 million due to accelerated project start and compressed implementation schedule. 2015-2019 CIP - decrease of \$256.8 million due to creation of separate biosolids projects through project validation. 2016-2020 CIP - increase of \$1.6 million due to escalation of construction costs. 2017-2021 CIP - increase of \$28.1 million due to increased scope and revised cost estimate. 2019-2023 CIP - increase of \$18.3 million due to an updated construction cost estimate. 2020-2024 CIP - increase of \$11.8 million due to an increase in scope and updated construction cost estimate. 2021-2025 CIP - increase of \$26.4 million due to an updated scope and construction cost estimate.

	PRIOR YEARS	FY20 EST	FY21	FY22	FY23	FY24	FY25	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
Expenditure Schedule (000s)										
Project Feasibility Development	5,193	573								5,765
Design	116	12,519	2,091	762				2,853		15,488
Bid & Award	1,067	492								1,559
Construction			126,098	4,599	1,434			132,131		132,131
Post Construction					492	74		566		566
Total	6,375	13,584	128,189	5,361	1,926	74		135,550		155,509

Funding Source Schedule (000s)										
San José-Santa Clara Treatment Plant Capital Fund (512)	6,375	13,584	128,189	5,361	1,926	74		135,550		155,509
Total	6,375	13,584	128,189	5,361	1,926	74		135,550		155,509

Annual Operating Budget Impact (000s)										
Operating					3,004	12,019	12,360			
Maintenance					58	232	239			
Total					3,062	12,251	12,599			

Water Pollution Capital Program
2021-2025 Proposed Capital Improvement Program
Detail of One-Time Construction Projects

Filter Rehabilitation

CSA Environmental and Utility Services
CSA Outcome Reliable Utility Infrastructure
Department Environmental Services
Location Water Pollution Control Plant
Council Districts 4
Appropriation A7227

Initial Start Date 3rd Qtr. 2011
Initial End Date 2nd Qtr. 2013
Revised Start Date 3rd Qtr. 2014
Revised End Date 3rd Qtr. 2023
Initial Project Budget \$3,506,000
FY Initiated 2010-2011

Description This project will replace filter media, valves, actuators, and electrical controls for all filters. It will also replace the existing surface wash system with a new air scour system, rehabilitate electrical switchgears and related motor control consoles, upgrade pipes, and make concrete repairs.

Justification The existing filter complex was constructed in the 1970s and requires significant refurbishment. The filter media, consisting of anthracite and sand, needs to be replaced and some of the mechanical and electrical components need to be upgraded. These critical improvements are needed to ensure continued regulatory compliance and operational reliability until a new filter complex is constructed.

Notes This project corresponds to Plant Master Plan Project Nos. 31, 32, and 33 as well as Validation Project PLF-01 and PLF-02.

Major Cost Changes 2014-2018 CIP - decrease of \$2.7 million due to the removal of scope that is dependent on the evaluation of the demonstration project.
2015-2019 CIP - increase of \$26.9 million due to revised scope and project validation cost estimate.
2016-2020 CIP - increase of \$6.5 million due to revised cost estimate and escalation of construction costs.
2017-2021 CIP - increase of \$2.5 million due to increased project scope.
2019-2023 CIP - increase of \$6.9 million due to a revised construction cost estimate.
2020-2024 CIP - increase of \$2.5 million due to a revised construction cost estimate.
2021-2025 CIP - increase of \$12.6 million due to a revised construction estimate.

	PRIOR YEARS	FY20 EST	FY21	FY22	FY23	FY24	FY25	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
Expenditure Schedule (000s)										
Project Feasibility Development	2,047	0								2,047
Design	3,176	2,636								5,813
Bid & Award	18	337								356
Construction	227	33,742	13,968	1,244	1,102			16,314		50,283
Post Construction		100				101		101		201
Total	5,468	36,815	13,968	1,244	1,102	101		16,415		58,699

Funding Source Schedule (000s)										
San José-Santa Clara Treatment Plant Capital Fund (512)	5,468	36,815	13,968	1,244	1,102	101		16,415		58,699
Total	5,468	36,815	13,968	1,244	1,102	101		16,415		58,699

Annual Operating Budget Impact (000s)										
Total										

Water Pollution Capital Program

2021-2025 Proposed Capital Improvement Program

Detail of One-Time Construction Projects

Final Effluent Pump Station & Stormwater Channel Improvements

CSA Environmental and Utility Services
 CSA Outcome Reliable Utility Infrastructure
 Department Environmental Services
 Council Districts 4
 Appropriation A412H

Initial Start Date 3rd Qtr. 2019
 Initial End Date 3rd Qtr. 2025
 Revised Start Date
 Revised End Date 2nd Qtr. 2025
 Initial Project Budget \$47,358,000
 FY Initiated 2019-2020

Description This project designs and constructs a new pump station to hydraulically push the Plant's final treated effluent to Coyote Creek. Additionally, it will improve the existing stormwater channel by rehabilitating the flapper gates and embankments.

Justification The U.S. Army Corps of Engineers (USACE) will be constructing a new shoreline levee and closure structure near the Plant's outfall channel to protect the region against future sea level rise from the San Francisco Bay. The USACE project will install a tide gate closure structure with two new flapper gates just north of the Plant's outfall bridge, which will inhibit the Plant's treated wastewater discharge into Coyote Creek. A new final effluent pump station is required to lift the treated wastewater to the projected higher water surface elevations that will be held back by the new levee and tide gate in Coyote Creek.

Notes This project corresponds to Validation Project PLD-03.

Major Cost Changes

	PRIOR YEARS	FY20 EST	FY21	FY22	FY23	FY24	FY25	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
Expenditure Schedule (000s)										
Project Feasibility Development		902	2,009	503				2,512		3,414
Design				4,000	880	233		5,113		5,113
Bid & Award						189		189		189
Construction						35,553	1,645	37,198	1,250	38,448
Post Construction									194	194
Total		902	2,009	4,503	880	35,975	1,645	45,012	1,444	47,358

Funding Source Schedule (000s)										
San José-Santa Clara Treatment Plant Capital Fund (512)		902	2,009	4,503	880	35,975	1,645	45,012	1,444	47,358
Total		902	2,009	4,503	880	35,975	1,645	45,012	1,444	47,358

Annual Operating Budget Impact (000s)										
Total										

Water Pollution Capital Program
2021-2025 Proposed Capital Improvement Program
Detail of One-Time Construction Projects

Nitrification Clarifier Rehabilitation

CSA	Environmental and Utility Services	Initial Start Date	3rd Qtr. 2009
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	2nd Qtr. 2024
Department	Environmental Services	Revised Start Date	
Location	Water Pollution Control Plant	Revised End Date	4th Qtr. 2025
Council Districts	4	Initial Project Budget	\$26,701,000
Appropriation	A7074	FY Initiated	2009-2010

Description	This project includes phased rehabilitation of the 16 nitrification clarifiers. Structural improvements may include concrete repairs and coating, new clarifier mechanisms and baffle installations, pipe support and meter vault replacements, and walkway improvements. Mechanical improvements may include piping, valve and actuator replacements, spray water system replacements, scum skimmer system upgrades, and return activated sludge piping lining. Electrical and instrumentation improvements may include motor control center replacements, new wiring, and other electrical equipment upgrades. Other incidental work may include grouting, painting, coating, and other surface treatments.
Justification	The Plant's 16 nitrification clarifiers have been in service for 30 to 40 years depending on the year of construction. A condition assessment study, completed in 2011, recommended phased rehabilitation of the nitrification clarifiers. The improvements are needed to address structural, mechanical, electrical, and instrumentation deficiencies and will extend the useful life of the clarifier assets for an additional 30 years.
Notes	This project corresponds to Plant Master Plan Project No. 21 and Validation Project PLS-02. This project is planned to be completed in multiple phases.
Major Cost Changes	2014-2018 CIP - increase of \$13.0 million due to revised estimate. 2015-2019 CIP - increase of \$22.0 million due to revised project validation cost estimate. 2016-2020 CIP - decrease of \$8.5 million due to revised scope and cost estimate. 2017-2021 CIP - decrease of \$1.6 million due to revised cost estimate. 2020-2024 CIP - increase of \$46.4 million due to an increase in the amount of rehabilitation required and updated construction cost estimate.

	PRIOR YEARS	FY20 EST	FY21	FY22	FY23	FY24	FY25	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
Expenditure Schedule (000s)										
Project Feasibility Development	3,829	53								3,882
Design	2,267	188	323	833				1,156		3,611
Bid & Award	82	245		213				213		540
Construction	6	53,966	1,279	1,472	30,698	2,152	1,110	36,711		90,684
Post Construction		251			231		764	995		1,246
Total	6,184	54,703	1,602	2,518	30,929	2,152	1,874	39,075		99,962

Funding Source Schedule (000s)										
San José-Santa Clara Treatment Plant Capital Fund (512)	6,184	54,703	1,602	2,518	30,929	2,152	1,874	39,075		99,962
Total	6,184	54,703	1,602	2,518	30,929	2,152	1,874	39,075		99,962

Annual Operating Budget Impact (000s)										
Total										

Water Pollution Capital Program
2021-2025 Proposed Capital Improvement Program
Detail of One-Time Construction Projects

Support Building Improvements

CSA	Environmental and Utility Services	Initial Start Date	1st Qtr. 2015
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	3rd Qtr. 2023
Department	Environmental Services	Revised Start Date	2nd Qtr. 2015
Location	Water Pollution Control Plant	Revised End Date	4th Qtr. 2033
Council Districts	4	Initial Project Budget	\$55,590,000
Appropriation	A7681	FY Initiated	2014-2015

Description This project constructs various tenant improvements to the administration, operations, engineering, and other support buildings located throughout the Plant. It may include floor, ceiling, wall, partition, plumbing, heating, ventilation and air conditioning upgrades, fire protection, and security improvements, as well as ancillary landscaping improvements. It also constructs new warehousing facilities and an electronic warehouse management system which may include new computers, a central database, barcode scanners, mobile tablets, and other technology improvements. This project will be constructed in phases based on a detailed tenant improvement study, warehouse design study, and priority of needs.

Justification Most of the buildings at the Plant are between 30 and 50 years old and are in need of refurbishment to improve worker health, safety, and environment. The tenant improvements are also needed to bring the buildings into compliance with current building and safety codes. The new warehousing facility and warehouse management system will improve operational efficiency through better control of the movement and storage of materials, including shipping, receiving, material stocking, use, and distribution.

Notes This project corresponds to Plant Master Plan Project Nos. 94, 95, 96, 98, 106, and 107 and Validation Project PF-02.

Major Cost Changes 2016-2020 CIP - decrease of \$856,000 due to revised cost estimate.
2018-2022 CIP - increase of \$2.2 million due to revised project delivery cost estimate.

	PRIOR YEARS	FY20 EST	FY21	FY22	FY23	FY24	FY25	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
Expenditure Schedule (000s)										
General Administration	0									0
Project Feasibility Development	2,046	230							1,848	4,124
Design	365	1,100							4,193	5,659
Bid & Award	17	286							493	795
Construction		13,589			13,090	969	967	15,026	23,032	51,647
Post Construction Equipment, Materials and Supplies	346		113					113	1,141	1,254
Total	2,774	15,205	113		13,090	969	967	15,139	30,707	63,826

Funding Source Schedule (000s)										
San José-Santa Clara Treatment Plant Capital Fund (512)	2,774	15,205	113		13,090	969	967	15,139	30,707	63,826
Total	2,774	15,205	113		13,090	969	967	15,139	30,707	63,826

Annual Operating Budget Impact (000s)										
Total										

Water Pollution Capital Program

2021-2025 Proposed Capital Improvement Program

Detail of One-Time Non-Construction Projects

Debt Service Repayment for Plant Capital Improvement Projects

CSA Environmental and Utility Services
CSA Outcome Reliable Utility Infrastructure
Department Environmental Services
Council Districts N/A
Appropriation A402C

Description This allocation provides for the repayment of financing proceeds, including short-term wastewater revenue notes and long-term bonds, drawn for the Plant Capital Improvement Projects.

Notes The use of Wastewater Revenue Notes for funding began in October 2017.

	PRIOR YEARS	FY20 EST	FY21	FY22	FY23	FY24	FY25	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
Expenditure Schedule (000s)										
General Administration	2,115	5,688	2,926	4,169	303,834	25,225	26,675	362,829	133,375	504,007
Total	2,115	5,688	2,926	4,169	303,834	25,225	26,675	362,829	133,375	504,007

Funding Source Schedule (000s)										
San José-Santa Clara Treatment Plant Capital Fund (512)	2,115	5,688	2,926	4,169	303,834	25,225	26,675	362,829	133,375	504,007
Total	2,115	5,688	2,926	4,169	303,834	25,225	26,675	362,829	133,375	504,007

Water Pollution Capital Program
2021-2025 Proposed Capital Improvement Program

Summary of Projects with Close-Out Costs Only in 2020-2021

Project Name	Energy Generation Improvements	Initial Start Date	3rd Qtr. 2012
5-Yr CIP Budget	\$ 587,000	Initial End Date	2nd Qtr. 2013
Total Budget	\$ 132,047,168	Revised Start Date	1st Qtr. 2012
Council Districts	4	Revised End Date	1st Qtr. 2021
Description	This project will install new, lower-emission engine-generators to replace the aged existing engine-generators and allow the aged engine-driven blowers to be retired. It includes a new generator building, gas cleaning and blending systems, piping, control system, and motor control centers. This project will also install emergency diesel generators and storage tanks to provide backup power in the event of an extended PG&E power outage.		

Water Pollution Capital Program
2021-2025 Proposed Capital Improvement Program
Summary of Projects that Start After 2020-2021

Project Name	Additional Digester Upgrades	Initial Start Date	3rd Qtr. 2021
5-Yr CIP Budget	\$ 62,096,000	Initial End Date	2nd Qtr. 2028
Total Budget	\$ 64,475,000	Revised Start Date	
Council Districts	4	Revised End Date	4th Qtr. 2027
Description	This project will rehabilitate up to six existing anaerobic digesters, including installation of new covers and mixers, upgrades the existing sludge distribution piping, and upgrades the digester heat supply system. The project may also include the installation of batch tanks to produce Class A biosolids (if required by future regulations).		

Project Name	Aeration Tanks and Blower Rehabilitation	Initial Start Date	1st Qtr. 2015
5-Yr CIP Budget	\$ 68,057,000	Initial End Date	3rd Qtr. 2025
Total Budget	\$ 131,579,768	Revised Start Date	2nd Qtr. 2015
Council Districts	4	Revised End Date	1st Qtr. 2029
Description	This project rehabilitates the secondary and nitrification aeration tanks including structural, mechanical, electrical, and instrumentation upgrades. It also replaces the remaining existing coarse bubble diffusers with fine bubble diffusers; installs partition walls and reconfigures air piping to optimize process treatment capabilities; repairs concrete and applies coatings; installs Variable Frequency Drives (VFDs), new motors, new Motor Control Centers (MCC), and new controls to the electric driven blowers in Building 40 and Tertiary Blower Building; decommissions the engine driven blowers in the Secondary Blower Building; and replaces the S11 switchgear.		

Project Name	East Primary Rehabilitation, Seismic Retrofit, and Odor Control	Initial Start Date	3rd Qtr. 2009
5-Yr CIP Budget	\$ 106,785,000	Initial End Date	4th Qtr. 2012
Total Budget	\$ 112,974,114	Revised Start Date	3rd Qtr. 2010
Council Districts	4	Revised End Date	1st Qtr. 2030
Description	This project rehabilitates the existing primary clarifiers, including the coating of concrete and replacement of clarifier mechanisms with corrosion resistant materials. It also includes structural retrofits to allow new covers to be installed over a portion or all of the primary treatment area to contain odors. A new odor extraction and treatment system will also be constructed.		

Project Name	Secondary Clarifier Rehabilitation	Initial Start Date	1st Qtr. 2017
5-Yr CIP Budget	\$ 3,398,000	Initial End Date	2nd Qtr. 2024
Total Budget	\$ 26,455,000	Revised Start Date	3rd Qtr. 2023
Council Districts	4	Revised End Date	4th Qtr. 2031
Description	The Plant has 26 secondary clarifiers configured with peripheral mix liquor feed channel, and either central or peripheral launders. The first phase of this project rehabilitates one secondary (BNR1) clarifier and retrofits it to receive a new baffle configuration based on computational fluid dynamic (CFD) modeling results. The new configuration is expected to improve clarifier performance and efficiency. The subsequent phases of the project will rehabilitate and convert the remaining 25 clarifiers based on the results of the first phase. Rehabilitation will include structural, mechanical, electrical, and instrumentation improvements.		

Project Name	Storm Drain System Improvements	Initial Start Date	3rd Qtr. 2017
5-Yr CIP Budget	\$ 12,575,000	Initial End Date	2nd Qtr. 2021
Total Budget	\$ 15,101,576	Revised Start Date	4th Qtr. 2017
Council Districts	4	Revised End Date	2nd Qtr. 2024
Description	This project upgrades the existing Plant stormwater drainage system to meet current City standards. The project includes modifying existing drainage facilities and constructing new storm system facilities to meet the City's 10-year design standard. This project may also include improvements to the existing combined sanitary sewer system.		

Water Pollution Capital Program
2021-2025 Proposed Capital Improvement Program
Summary of Projects that Start After 2020-2021

Project Name	Various Infrastructure Decommissioning	Initial Start Date	3rd Qtr. 2018
5-Yr CIP Budget	\$ 21,751,000	Initial End Date	2nd Qtr. 2022
Total Budget	\$ 22,220,000	Revised Start Date	3rd Qtr. 2019
Council Districts	4	Revised End Date	2nd Qtr. 2026
Description	This project will decommission and remove equipment, structures, and piping located in Building 40, Pump and Engine Building, Sludge Control Building, digester campus, and tunnels.		

Project Name	Yard Piping and Road Improvements	Initial Start Date	3rd Qtr. 2011
5-Yr CIP Budget	\$ 92,108,000	Initial End Date	4th Qtr. 2026
Total Budget	\$ 121,319,395	Revised Start Date	
Council Districts	4	Revised End Date	1st Qtr. 2028
Description	This project will rehabilitate and/or replace process piping systems, valves, and related appurtenances throughout the Plant. The work will be completed in phases based on the outcome of a detailed condition assessment, physical testing, and prioritization of needs. This project will also make roadway and drainage-related improvements throughout the Plant's main operations and residual management areas.		

Water Pollution Capital Program
2021-2025 Proposed Capital Improvement Program
Summary of Reserves

Project Name	Equipment Replacement Reserve	Initial Start Date	N/A
5-Yr CIP Budget	\$ 5,000,000	Initial End Date	N/A
Total Budget	\$ 5,000,000	Revised Start Date	
Council Districts	4	Revised End Date	
Description	This reserve sets aside funding for unforeseen replacement and rehabilitation of equipment that, due to age, wear, or obsolescence, must be replaced for the efficient operation of the Plant.		

Project Name	Hydraulic Capacity Enhancements Reserve	Initial Start Date	N/A
5-Yr CIP Budget	\$ 3,666,000	Initial End Date	N/A
Total Budget	\$ 3,666,000	Revised Start Date	
Council Districts	4	Revised End Date	
Description	This reserve sets aside funding for future design, engineering, and inspection for the connection of new developments to the recycled water utility system.		

Water Pollution Capital Program
2021-2025 Proposed Capital Improvement Program
Attachment A - Operating Budget Impact

	<u>2021-2022</u>	<u>2022-2023</u>	<u>2023-2024</u>	<u>2024-2025</u>
<u>Water Pollution Capital Program</u>				
New Headworks		\$9,000	\$26,000	\$27,000
Digested Sludge Dewatering Facility		\$3,062,000	\$12,251,000	\$12,599,000
Digester and Thickener Facilities Upgrade	\$2,123,000	\$2,203,000	\$2,285,000	\$2,370,000
Energy Generation Improvements	<u>\$92,000</u>	<u>\$95,000</u>	<u>\$97,000</u>	<u>\$100,000</u>
Total Water Pollution Capital Program	\$2,215,000	\$5,369,000	\$14,659,000	\$15,096,000

Water Pollution Control

2021-2025 Proposed Capital Improvement Program

Explanation of Funds

Revenues and expenditures for the operation and maintenance of the San José-Santa Clara Water Pollution Control Plant (Plant) are accounted for by the City of San José, as the administering agency, through the San José-Santa Clara Treatment Plant Operating Fund (Operating Fund) and the San José-Santa Clara Treatment Plant Capital Fund (Capital Fund).

Revenues from tributary agencies of the San José-Santa Clara Water Pollution Control Plant are recorded directly into the Operating and Capital Funds. The tributary agencies include the City of Milpitas, City of Cupertino, Burbank Sanitary District, County Sanitation District No. 2-3, and West Valley Sanitation District.

Tributary agencies are assessed for their share of annual operation, maintenance, equipment, and facilities replacement and capital costs, based on their respective flow and strength of sewage conveyed to the Plant.

The San José Sewer Service and Use Charge Fund was established in the San José Municipal Code Section 15.12.640 in August 1959. This

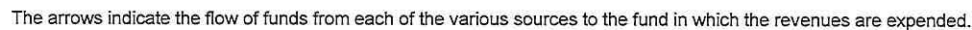
fund is the depository of revenues from Sewer Service and Use Charges received from residential, commercial, and industrial users of the sanitary sewer system. A portion of these monies is transferred to the Operating and Capital Funds to pay for the City of San José's share of operating and capital costs of the Plant.

The Santa Clara Sewer Revenue Fund was established by Resolution Number 916 of the City Council of Santa Clara in October 1960. Like the City of San José, revenues from this fund are transferred directly to the Operating and Capital Funds.

The Capital Fund provides all monies used for capital projects. Included in this fund is the Treatment Plant Renewal and Replacement Fund. This fund was established to satisfy the Plant's federal and State grant agreements as well as to comply with bond covenants.

The South Bay Water Recycling (SBWR) Capital Fund provides monies for capital improvement projects in support of SBWR system infrastructure.

V - 92



**ATTACHMENT A
2021-25 CIP AGENCY ALLOCATIONS**

	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28	28-29	29-30	5-Year Total	10-Year Total
Santa Clara												
WPCP Projects	28,592,611	13,625,380	36,185,028	14,157,111	20,243,368	8,584,446	3,127,528	2,174,405	4,925,179	15,043,832	112,803,497	146,658,887
Equipment Replacement	0	229,976	229,976	229,976	229,976	229,976	229,976	229,976	229,976	229,976	919,904	2,069,784
CWFA Debt Service Payment	0	0	0	0	0	0	0	0	0	0	0	0
Total	28,592,611	13,855,356	36,415,004	14,387,087	20,473,344	8,814,422	3,357,504	2,404,381	5,155,155	15,273,808	113,723,401	148,728,671
West Valley												
WPCP Projects	10,410,295	5,651,326	14,902,440	6,216,563	7,183,836	3,457,709	1,303,946	908,452	2,094,535	6,215,859	44,364,461	58,344,962
Equipment Replacement	0	144,565	144,565	144,565	144,565	144,565	144,565	144,565	144,565	144,565	578,260	1,301,085
CWFA Debt Service Payment	0	0	0	0	0	0	0	0	0	0	0	0
Total	10,410,295	5,795,891	15,047,005	6,361,128	7,328,401	3,602,274	1,448,511	1,053,017	2,239,100	6,360,424	44,942,721	59,646,047
Cupertino												
WPCP Projects	6,392,192	3,692,293	9,647,618	4,121,754	4,482,151	2,222,314	857,581	597,046	1,382,719	4,102,091	28,336,009	37,497,759
Equipment Replacement	0	85,262	85,262	85,262	85,262	85,262	85,262	85,262	85,262	85,262	341,048	767,358
CWFA Debt Service Payment	0	0	0	0	0	0	0	0	0	0	0	0
Total	6,392,192	3,777,555	9,732,880	4,207,016	4,567,413	2,307,576	942,843	682,308	1,467,981	4,187,353	28,677,057	38,265,117
Milpitas												
WPCP Projects	10,724,460	6,430,547	16,845,258	7,333,467	7,299,841	3,879,118	1,491,416	1,039,353	2,423,754	7,085,264	48,633,573	64,552,478
Equipment Replacement	0	98,882	98,882	98,882	98,882	98,882	98,882	98,882	98,882	98,882	395,528	889,938
CWFA Debt Service Payment	42,994	0	0	0	0	0	0	0	0	0	42,994	42,994
Total	10,767,454	6,529,429	16,944,140	7,432,349	7,398,723	3,978,000	1,590,298	1,138,235	2,522,636	7,184,146	49,072,095	65,485,410
CSD 2/3												
WPCP Projects	794,338	460,329	1,203,800	515,536	552,710	277,164	106,819	74,392	172,600	510,096	3,526,713	4,667,784
Equipment Replacement	0	15,965	15,965	15,965	15,965	15,965	15,965	15,965	15,965	15,965	63,860	143,685
CWFA Debt Service Payment	95,990	0	0	0	0	0	0	0	0	0	95,990	95,990
Total	890,328	476,294	1,219,765	531,501	568,675	293,129	122,784	90,357	188,565	526,061	3,686,563	4,907,459
Burbank												
WPCP Projects	332,016	202,931	509,703	219,181	271,928	118,414	48,394	33,407	76,392	240,277	1,535,759	2,052,642
Equipment Replacement	0	4,623	4,623	4,623	4,623	4,623	4,623	4,623	4,623	4,623	18,492	41,607
CWFA Debt Service Payment	15,860	0	0	0	0	0	0	0	0	0	15,860	15,860
Total	347,876	207,554	514,326	223,804	276,551	123,037	53,017	38,030	81,015	244,900	1,570,112	2,110,109
San Jose												
WPCP Projects	121,257,088	57,786,194	153,464,153	60,042,387	85,854,167	36,407,836	13,264,317	9,221,946	20,887,821	63,803,581	478,403,989	621,989,489
Equipment Replacement	0	1,083,727	1,083,727	1,083,727	1,083,727	1,083,727	1,083,727	1,083,727	1,083,727	1,083,727	4,334,908	9,753,543
City Hall Debt Service	94,000	97,000	97,000	97,000	97,000	97,000	97,000	97,000	97,000	97,000	482,000	967,000
New Debt Service 2017-18	2,926,000	4,169,000	303,834,000	25,225,000	26,675,000	26,675,000	26,675,000	26,675,000	26,675,000	26,675,000	362,829,000	496,204,000
CWFA Debt Service Payment	5,371,356	0	0	0	0	0	0	0	0	0	5,371,356	5,371,356
Total	129,648,444	63,135,921	458,478,880	86,448,114	113,709,894	64,263,563	41,120,044	37,077,673	48,743,548	91,659,308	851,421,252	1,134,285,388

2021-25 CIP AGENCY ALLOCATIONS

	20-21	21-22	22-23	23-24	24-25	25-26	26-27	27-28	28-29	29-30	5-Year Total	10-Year Total
TOTAL												
WPCP Projects	178,503,000	87,849,000	232,758,000	92,606,000	125,888,000	54,947,000	20,200,000	14,049,000	31,963,000	97,001,000	717,604,000	935,764,000
Equipment Replacement	0	1,663,000	1,663,000	1,663,000	1,663,000	1,663,000	1,663,000	1,663,000	1,663,000	1,663,000	6,652,000	14,967,000
City Hall Debt Service	94,000	97,000	97,000	97,000	97,000	97,000	97,000	97,000	97,000	97,000	482,000	967,000
New Debt Service 2017-18	2,926,000	4,169,000	303,834,000	25,225,000	26,675,000	26,675,000	26,675,000	26,675,000	26,675,000	26,675,000	362,829,000	496,204,000
CWFA Debt Service Repayment	5,526,000	0	0	0	0	0	0	0	0	0	5,526,000	5,526,000
	187,049,000	93,778,000	538,352,000	119,591,000	154,323,000	83,382,000	48,635,000	42,484,000	60,398,000	125,436,000	1,093,093,000	1,453,428,000