

Memorandum

TO: TREATMENT PLANT ADVISORY COMMITTEE

FROM: K

FROM: Kerrie Romanow

SUBJECT: FIVE-YEAR 2025-2029 PROPOSED

CAPITAL IMPROVEMENT

DATE: PROGRAM

May 16, 2024

Approved Date

This memorandum serves to transmit the San José/Santa Clara Regional Wastewater Facility Proposed Five-Year 2025-2029 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 (2024-2025 through 2033-2034) forecast of CIP allocations based on the assumption that all agencies will fund their respective share of capital costs through cash contributions.

If you should have any questions, please contact Jeff Provenzano at 408-506-4319.

Kerrie Romanow

KERRIE ROMANOW
Director, Environmental Services

PROPOSED

SAN JOSE / SANTA CLARA WATER POLLUTION CONTROL PLANT

700 Los Esteros Road San Jose, California 95134

Five-Year 2025-2029 Capital Improvement Program

Submitted by

Kerrie Romanow, Director

Environmental Services Department

City of San Jose

TO: Treatment Plant Advisory Committee

David Cohen (Chair) Councilmember, City of San Jose

Karen Hardy (Vice-Chair), Councilmember, City of Santa Clara

Carmen Montano Mayor, City of Milpitas

Rowena Turner Boardmember, West Valley Sanitation District Patrick Kwok Boardmember, Cupertino Sanitary District

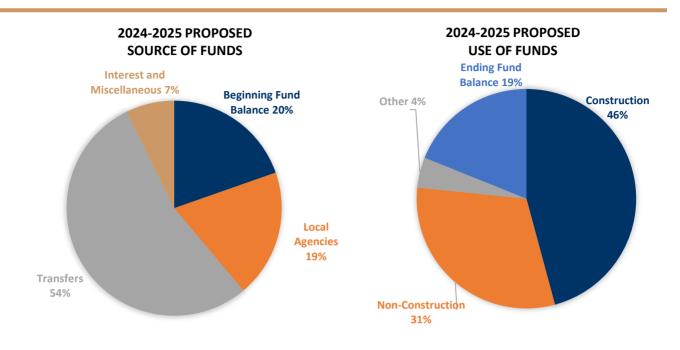
Kip Harkness Deputy City Manager, City of San Jose

Domingo Candelas Councilmember, City of San Jose Dev Davis Councilmember, City of San Jose

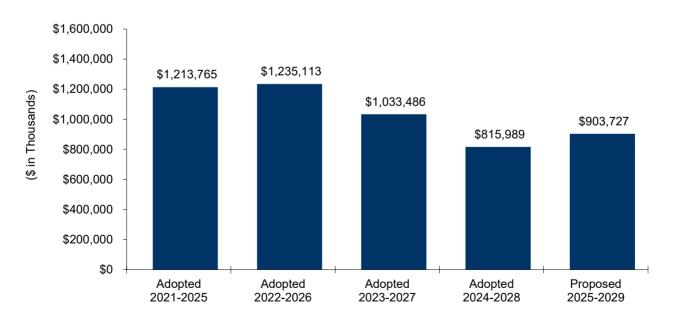
Kathy Watanabe Councilmember, City of Santa Clara

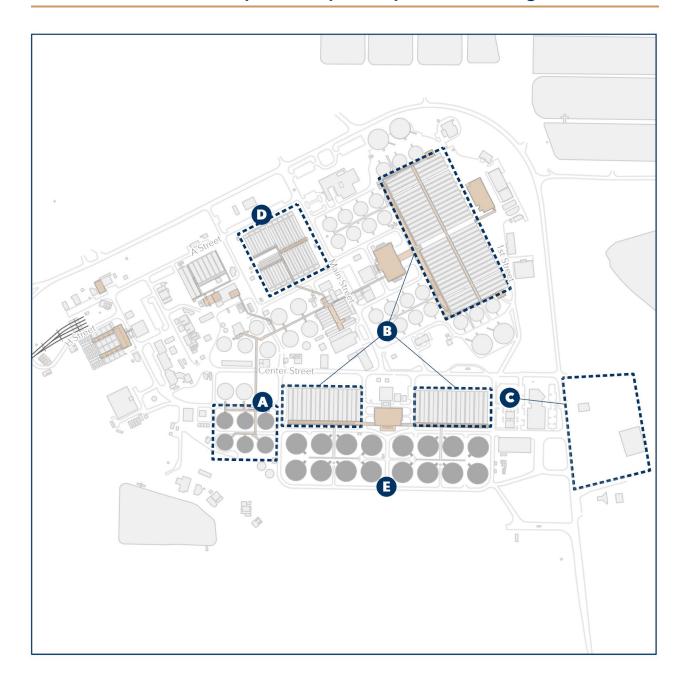
WATER POLLUTION CONTROL

2025-2029 Capital Improvement Program



CIP History





- A Additional Digester Upgrades
- B Aeration Tanks and Blower Rehabilitation
- © Digested Sludge Dewatering Facility

- Primary Rehabilitation
- Nitrification Clarifier Rehabilitation

OVERVIEW

INTRODUCTION

The San José-Santa Clara Regional Wastewater Facility (RWF) 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 RWF 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 improvements at the RWF, including water reuse facilities. On March 26, 2013, the City Council

RWF 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)	106.5							
DRY METRIC TONS OF BIOSOLIDS HAULED EACH YEAR	97,497							
AVERAGE MEGAWATTS PRODUCED	14.0							

approved to change the name of the San José-Santa Clara Water Pollution Control Plant to the RWF for use in public communications and outreach.

The 2025-2029 Proposed Capital Improvement Program (CIP) provides funding of \$903.7 million, of which \$103.8 million is allocated in 2024-2025. 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 RWF. Each agency is responsible for its allocated share of RWF 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 2025-2029 Proposed CIP is consistent with the goals and policies outlined in the City's Envision San José 2040 General Plan. The following are the identified goals and priorities for 2024-2025:

- Maintain adequate operational capacity for wastewater treatment to accommodate the City's economic and population growth;
- Adopt and implement new technologies for wastewater to achieve greater safety, energy efficiency, and environmental benefit; and
- Maintain and operate the RWF in compliance with all applicable local, state, and federal regulatory requirements.

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 RWF. The City Council approved a preferred alternative for the Draft PMP in 2011 and in 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.

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.

In early 2014, City staff, with assistance from a program management consultant, developed an implementation plan for delivering the first ten years of critical rehabilitation projects identified in the PMP. To ensure the program continues to address Plant critical rehabilitation needs and pending regulations, a priority for this upcoming fiscal year will be to update the PMP. Other ongoing priorities 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.



OVERVIEW

SOURCES OF FUNDING

Revenues for the 2025-2029 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.

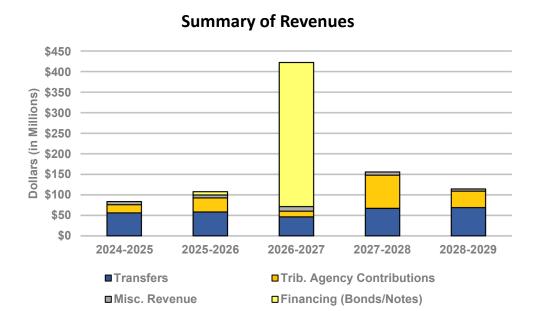
The SSUC Fund derives its revenues from fees imposed on San José users of the residential, commercial, and industrial sanitary sewer system. Transfers from this fund to the RWF CIP over the five years total \$296.0 million, which represents a \$19.1 million (6.9%) increase as compared to the 2024-2028 Adopted CIP. This increase is due primarily to the incorporation of expected debt service payments on bond financing proceeds programmed to be issued in 2026-2027.

Contributions from the City of Santa Clara and other agencies are determined according to agreements with the participating agencies, the amount and characteristics of flows from each agency's connections to the RWF, and the adopted budget for that fiscal year. In this Proposed CIP, contributions from the City of Santa Clara and other agencies total \$189.2 million, which represents a \$19.3 million (9.3%) decrease compared to the 2024-2028 Adopted CIP.

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 October 2017 and renewed in September 2020 to provide up to \$300 million in interim financing capacity. The Notes provide periodic, shortterm, flexible funding to meet the cash flow needs of the RWF improvement project. Generally, the notes are repaid within a three-year period and offer lower interest costs than fixed rate bonds. In December 2022, long-term bonds in the amount of \$301.1 million were issued to both repay the Wastewater Revenue Notes issued since 2017-2018 and to cover other CIP project and financing costs within that fiscal year. Another \$200 million of interim financing was committed in June 2023 to cover costs through October 2026, which is expected to be repaid with another issuance of long-term bonds in 2026-2027. Associated debt service for the Wastewater Revenue Notes and debt service for the bonds total \$329.7 million in this CIP, which includes \$20.9 million in 2024-2025, \$23.2 million in 2025-2026, \$219.9 million in 2026-2027, \$32.0 million in 2027-28 and \$33.8 million in 2028-29. The estimated size of the debt financings and the related debt service are scheduled to cover external third-party capital costs programmed in the 2025-2029 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.

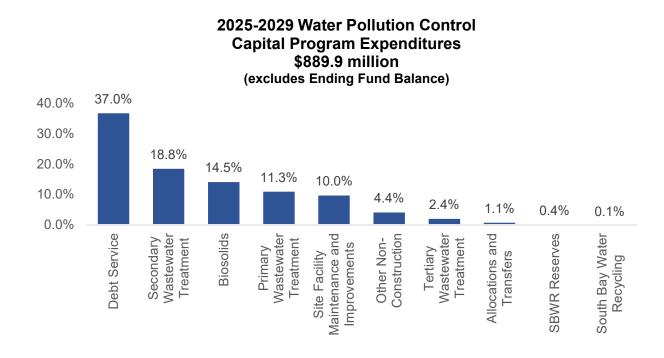
OVERVIEW

SOURCES OF FUNDING



PROGRAM HIGHLIGHTS

The Water Pollution Control Capital Program's expenditures are organized to show the use of funds in several categories, as summarized in the table below.



OVERVIEW

PROGRAM HIGHLIGHTS

Program/Project Delivery and Implementation: Successful delivery of this large, multi-disciplinary CIP requires an integrated team of City staff, outside consultants, and contractors. To address the significant large-scale construction activity, City staff has implemented a construction management strategy that has been incorporated into the 2025-2029 Proposed CIP. This includes maintaining a construction management budget to provide the necessary support from Public Works Department and third-party construction management and controls consultants required for projects of this magnitude and complexity.

Program/Project Delivery Variables: 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 program team continues to work on developing standardized project delivery tools, design standards and specifications, control system and integration strategies, startup, commissioning, and training.

Digested Sludge Dewatering Facility

The addition of a mechanical dewatering facility to replace the existing lagoons and drying beds at the Plant was identified as a priority since the adoption of the PMP that TPAC recommended and City Council approved in 2013.

The project will construct a new dewatering building to house mechanical dewatering equipment; dewatered cake storage, conveyance, and truck load-out facility; chemical feed station; pump station to return centrate to headworks; operations



New sludge storage tanks

and maintenance space and storage; and associated mechanical, electrical, and instrumentation equipment. The facilities will transfer sludge from the digesters to the new dewatering building on the east side of Zanker Road. The dewatered sludge will be loaded into trucks and hauled away for a variety of beneficial uses.

Ultimately, the project will allow the Plant to retire its current open-air operation, which uses more than 500 acres of land and requires four years to produce sundried biosolids. By comparison, the new dewatering facility will use 10 acres of land and dewater biosolids in less than one day.

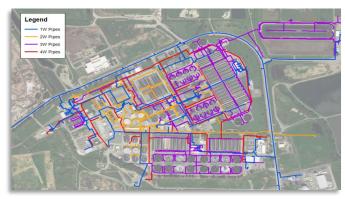
The 2025-2029 Proposed CIP allocates \$3.9 million for this project. The estimated total project cost is \$178.1 million and construction is anticipated to be finished in 2025-2026.

OVERVIEW

PROGRAM HIGHLIGHTS

Facility Wide Water Systems Improvements

The Plant has five water systems including potable water (1W), groundwater (2W), process water (3W), fire protection water (4W), and recycled water (RW). These water systems were constructed over time and have not been upgraded on account of age, water demands, or pressure requirements over several decades. Prior condition assessments indicated that much of the existing water system piping is at or nearing the end of its useful service life.



Project site map

The project will upgrade and/or replace aging components of the various Plant water

systems to extend the useful service life and reliably meet current and future water demands.

The 2025-2029 Proposed CIP allocates \$10.1 million for this project. The estimated total project cost is \$90.4 million and construction completion is anticipated in 2026-2027.

For further information on the program's individual projects, please refer to the Detail Pages.

MAJOR CHANGES FROM THE 2024-2028 ADOPTED CIP

The overall size of the Water Pollution Control CIP has increased by \$87.7 million from \$816.0 million in the 2024-2028 Adopted CIP to \$903.7 million in the 2025-2029 Proposed CIP. The changes to the size of the CIP are primarily attributable to projects increasing in scope and/or cost estimates, or to projects that have been shifted into the five-year planning horizon, where previously their costs were estimated in years further out than the five-year CIP.

Major Changes to Project Budgets

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	\$18.6 million
Facility Wide Water Systems Improvements	\$15.1 million
Support Building Improvements	\$7.5 million
Aeration Tanks and Blower Rehabilitation	\$5.8 million
Yard Piping Improvements	\$4.6 million
Various Infrastructure Decommissioning	(\$21.8 million)

OVERVIEW

OPERATING BUDGET IMPACT

The 2024-2025 Proposed Operating Budget includes \$4.3 million for the expected operating costs for the Digested Sludge Dewatering Facility Project in the San José-Santa Clara Treatment Plant Operating Fund that is expected to come online in February 2025. The new estimated operating and maintenance impacts are due primarily to hauling & tipping costs for the transportation of dewatered biosolids produced by the Dewatering Facility. Until the lagoons and drying beds can be fully retired, it is anticipated there will be several years with the new dewatering facility and existing lagoons and drying beds in concurrent operation. More information can be found in the Environmental Services Department Section of the 2024-2025 Proposed Operating Budget.

No other projects in the 2025-2029 Proposed CIP include expected Operating Budget impacts. Net operating cost impacts will continue to be evaluated and incorporated based on final design and operation configurations and may result in different costs when the actual budget for the year in question is developed.

2025-2029 Proposed Capital Improvement Program Source of Funds (Combined)

Estimated

Beginning Balance	15,086,779	16,210,299	19,422,299	6,750,299	168,856,299	44,177,299	16,210,299
Reserve for Encumbrance	170,017,191						
Transfers and Reimbursements Transfer for Plant CIP Debt Service from Sewer Service and Use Charge Fund (541)	19,577,000	20,879,000	23,176,000	19,864,000	31,991,000	33,785,000	129,695,000
Transfer for Capital Projects from Sewer Service and Use Charge Fund (541)	30,000,000	35,000,000	35,000,000	26,347,000	35,000,000	35,000,000	166,347,000
TOTAL Transfers and Reimbursements	49,577,000	55,879,000	58,176,000	46,211,000	66,991,000	68,785,000	296,042,000
Revenue from Use of Money and Property	-	7.400.000	0.740.000	40.747.000	7.045.000	4.005.000	00.704.000
Interest Income	5,217,000	7,128,000	6,749,000	10,717,000	7,315,000	4,885,000	36,794,000
TOTAL Revenue from Use of Money and Property	5,217,000	7,128,000	6,749,000	10,717,000	7,315,000	4,885,000	36,794,000
Revenue from Local Agencies							
WPCP Projects and Equipment Replacement	28,116,000	19,994,000	34,214,000	13,884,000	80,916,000	40,186,000	189,194,000
TOTAL Revenue from Local Agencies	28,116,000	19,994,000	34,214,000	13,884,000	80,916,000	40,186,000	189,194,000
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	110,000,000		8,000,000	151,000,000			159,000,000

^{*} The 2025-2026 through 2028-2029 Beginning Balances are excluded from the FIVE-YEAR TOTAL SOURCE OF FUNDS to avoid multiple counting of the same funds.

Water Pollution Control 2025-2029 Proposed Capital Improvement Program Source of Funds (Combined)

	Estimated						
Bond Proceeds TOTAL Financing Proceeds	110,000,000		8,000,000	200,000,000 351,000,000			200,000,000 359,000,000
Total San José-Santa Clara Treatment Plant Capital Fund (512)	378,402,970	99,600,299	126,950,299	428,951,299	324,467,299	158,422,299	899,185,299
South Bay Water Recycling Capit	al Fund (571)						
Beginning Balance	4,093,505	4,176,505	208,505	256,505	304,505	352,505	4,176,505
Revenue from Use of Money and Proper Interest Income	ty 108,000	73,000	73,000	73,000	73,000	73,000	365,000
TOTAL Revenue from Use of Money and Property	108,000	73,000	73,000	73,000	73,000	73,000	365,000
Total South Bay Water Recycling Capital Fund (571)	4,201,505	4,249,505	281,505	329,505	377,505	425,505	4,541,505
TOTAL SOURCES	382,604,475	103,849,804	127,231,804	429,280,804	324,844,804	158,847,804	903,726,804

^{*} The 2025-2026 through 2028-2029 Beginning Balances are excluded from the FIVE-YEAR TOTAL SOURCE OF FUNDS to avoid multiple counting of the same funds.

2025-2029 Proposed Capital Improvement Program Use of Funds (Combined)

			•				
	Estimated 2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	5-Year Total
Water Pollution Control							
Headworks Improvements	1,447,218						
New Headworks	9,150,083						
Preliminary Wastewater Treatment	10,597,301						
Primary Rehabilitation	6,206,000	618,000	792,000	4,634,000	843,000	93,544,000	100,431,000
Primary Wastewater Treatment	6,206,000	618,000	792,000	4,634,000	843,000	93,544,000	100,431,000
Aeration Tanks and Blower Rehabilitation	10,852,507	3,841,000	1,406,000	7,987,000	98,237,000	4,168,000	115,639,000
Nitrification Clarifier Rehabilitation	6,887,751		22,530,000	1,183,000	1,217,000	790,000	25,720,000
Secondary Clarifier Rehabilitation			565,000	2,833,000	22,379,000	159,000	25,936,000
Secondary Wastewater Treatment	17,740,257	3,841,000	24,501,000	12,003,000	121,833,000	5,117,000	167,295,000
Filter Rehabilitation	21,526,840						
Final Effluent Pump Station & Stormwater Channel Improvements New Disinfection Facilities	4,340,000		12,460,000 952,000	449,000 6,179,000	722,000	388,000	12,909,000 8,241,000
Outfall Channel and Instrumentation Improvements	3,010,481		002,000	0,170,000	722,000	000,000	0,211,000
Tertiary Wastewater Treatment	28,877,321		13,412,000	6,628,000	722,000	388,000	21,150,000
Additional Digester Upgrades	2,179,000	2,811,000	10,809,000	1,297,000	107,317,000	2,493,000	124,727,000
Digested Sludge Dewatering Facility	103,581,923	2,927,000	993,000				3,920,000
Digester and Thickener Facilities Upgrade	27,072						
Biosolids	105,787,994	5,738,000	11,802,000	1,297,000	107,317,000	2,493,000	128,647,000
Energy Generation Improvements	796,546						
Electrical Systems and Power Generation	796,546						

^{*} The 2024-2025 through 2027-2028 Ending Balances are excluded from the FIVE-YEAR TOTAL USE OF FUNDS to avoid multiple counting of the same funds.

2025-2029 Proposed Capital Improvement Program Use of Funds (Combined)

			•				
	Estimated	0004 0005	2025 2022	2222 2227	222 222	2002 2002	5 V T. (a)
Advanced Facility Control and Meter Replacement	2023-2024 1,605,732	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	5-Year Total
Advanced Process Control & Automation	1,605,732						
Facility Wide Water Systems Improvements	72,366,927	6,104,000	2,436,000	1,577,000			10,117,000
Flood Protection	6,203,737		7,731,000	269,000			8,000,000
Plant Infrastructure Improvements	6,836,541	1,400,000	1,000,000	1,000,000	1,000,000	1,000,000	5,400,000
Plantwide Security Systems Upgrade	15,658,798	1,773,000	4,144,000	191,000			6,108,000
Storm Drain System Improvements	6,115,337						
Support Building Improvements	14,560,290	767,000	16,814,000	1,750,000	3,246,000	985,000	23,562,000
Urgent and Unscheduled Treatment Plant Rehabilitation	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	7,500,000
Various Infrastructure Decommissioning	440,000						
Yard Piping Improvements	25,412,922	25,800,000	2,004,000	910,000			28,714,000
Site Facility Maintenance and Improvements	149,094,551	37,344,000	35,629,000	7,197,000	5,746,000	3,485,000	89,401,000
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	320,730,702	47,566,000	86,161,000	31,784,000	236,486,000	105,052,000	507,049,000
Debt Service Repayment for Plant Capital Improvement Projects	2,000,000	3,605,000	5,905,000	202,592,000	1,710,000	3,502,000	217,314,000
Owner Controlled Insurance Program	3,570,000	764,000					764,000
Preliminary Engineering - Water Pollution Control	5,218,762	1,000,000	1,000,000	1,000,000	1,000,000	1,000,000	5,000,000
Program Management - Water Pollution Control	11,836,203	9,016,000	8,236,000	6,767,000	6,569,000	3,249,000	33,837,000
RWF Bond Debt Service 2022B	17,577,000	17,274,000	17,271,000	17,272,000	17,271,000	17,273,000	86,361,000

^{*} The 2024-2025 through 2027-2028 Ending Balances are excluded from the FIVE-YEAR TOTAL USE OF FUNDS to avoid multiple counting of the same funds.

2025-2029 Proposed Capital Improvement Program Use of Funds (Combined)

	Estimated						
	2023-2024	2024-2025	2025-2026	2026-2027	2027-2028	2028-2029	5-Year Total
RWF Bond Debt Service 2026					13,010,000	13,010,000	26,020,000
SBWR Master Plan Updates		350,000					350,000
General Non-Construction - Water Pollution Control	40,201,965	32,009,000	32,412,000	227,631,000	39,560,000	38,034,000	369,646,000
Water Pollution Control - Non- Construction	40,201,965	32,009,000	32,412,000	227,631,000	39,560,000	38,034,000	369,646,000
Capital Program and Public Works Department Support Service Costs	1,246,000	828,000	1,500,000	553,000	4,117,000	1,829,000	8,827,000
Allocations	1,246,000	828,000	1,500,000	553,000	4,117,000	1,829,000	8,827,000
City Hall Debt Service Fund	39,000	150,000	152,000	152,000	152,000	152,000	758,000
Transfers to Special Funds	39,000	150,000	152,000	152,000	152,000	152,000	758,000
Transfers Expense	39,000	150,000	152,000	152,000	152,000	152,000	758,000
Hydraulic Capacity Enhancements Reserve		3,666,000					3,666,000
Expense Reserves - Non- Construction		3,666,000					3,666,000
Total Expenditures	362,217,667	84,219,000	120,225,000	260,120,000	280,315,000	145,067,000	889,946,000
Ending Fund Balance	20,386,808	19,630,808	7,006,808	169,160,808	44,529,808	13,780,808	13,780,808
TOTAL	382,604,475	103,849,808	127,231,808	429,280,808	324,844,808	158,847,808	903,726,808

^{*} The 2024-2025 through 2027-2028 Ending Balances are excluded from the FIVE-YEAR TOTAL USE OF FUNDS to avoid multiple counting of the same funds.

Additional Digester Upgrades

CSA	Environmental and Utility Services	Initial Start Date	3rd Qtr. 2021
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	2nd Qtr. 2028
Location	Water Pollution Control Plant	Revised Start Date	2nd Qtr. 2022
Dept Owner	Environmental Services	Revised End Date	3rd Qtr. 2030
Council Districts	4	Initial Project Budget	\$64,475,000
Appropriation	A426D	FY Initiated	2021-2022

This project will rehabilitate up to six existing anaerobic digesters, including installation of new covers and mixers, upgrades to the existing sludge distribution piping, and upgrades to the digester heat supply system. This project will also construct a new FOG (Fats, Oils, Grease) Receiving station, including storage tanks, access control, feed piping from the receiving station to the first phase anaerobic digesters, odor control, and 1/4-mile of access road improvements. The project may also include the installation of batch tanks to produce Class A biosolids (if required by

future regulations).

Justification This project will complete the second phase of the upgrades to ensure safe and reliable operation of the digestion

facilities.

Notes This project corresponds to Plant Master Plan Project Nos. 50, 51, and 53, and Validation Project PS-02. Prior to 2018-

2022, this project was part of "Digester and Thickener Facilities Upgrade". In the 2025-2029 CIP, this project

incorporates the previously-separate FOG Receiving project scope.

Major Cost Changes 2024-2028 CIP - Increase of \$49.0 million due to revised scope and cost estimate.

2025-2029 CIP - Increase of \$18.6 million due to the incorporation of the previously-separate FOG Receiving project

scope.

	PRIOR	FY24	FY25	FY26	FY27	FY28	FY29	5 YEAR	BEYOND	PROJECT
	YEARS	EST						TOTAL	5 YEARS	TOTAL
			Expendit	ure Sched	dule (000	Os)				
Project Feasibility Development	323	1,304	1,676					1,676		3,303
Design				10,479	1,297	818		12,594		12,594
Bid & Award		875	1,135	330				1,465		2,340
Construction						106,499	2,493	108,992	2,613	111,605
Post Construction									2,154	2,154
Total	323	2,179	2,811	10,809	1,297	107,317	2,493	124,727	4,767	131,996

Funding Source Schedule (000s)										
San José-Santa Clara Treatment Plant Capital Fund						•				
(512)	323	2,179	2,811	10,809	1,297	107,317	2,493	124,727	4,767	131,996
Total	323	2.179	2.811	10.809	1.297	107.317	2.493	124.727	4.767	131.996

	Annual Operating Budget Impact (000s)	
	Aimail Operating Badget impact (0003)	
Total		

Aeration Tanks and Blower Rehabilitation

CSA	Environmental and Utility Services	Initial Start Date	1st Qtr. 2015
CSA Outcome	Reliable Utility Infrastructure	Initial End Date	3rd Qtr. 2025
Location	Water Pollution Control Plant	Revised Start Date	2nd Qtr. 2015
Dept Owner	Environmental Services	Revised End Date	3rd Qtr. 2031
Council Districts	4	Initial Project Budget	\$114,880,000
Appropriation	A7677	FY Initiated	2014-2015

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; and repairs concrete and applies coatings. This is the first phase of a multi-phased project. Based on performance of the tanks and updated flows and loads data, there is potential for a second and third phase. This Phase I work will help inform the scope and budget of the potential future budget phase(s). This project also installs Variable Frequency Drives (VFDs), new motors, new Motor Control Centers (MCC), and new controls for 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.

Justification

Due to the age and the aggressive and corrosive environment the aeration tanks operate in, extensive rehabilitation is required. Conversion to fine bubble diffusers will increase the oxygen transfer efficiency and decrease energy requirements. Installing VFDs will minimize the impact of starting current on the blowers when the Plant is run on emergency power. Lastly, the S11 switchgear and MCCs need to be upgraded to be compatible with the new VFDs.

Notes

This project corresponds to Plant Master Plan Project Nos. 20, 24, and 85 and Validation Project PLS-01.

Major Cost Changes

2016-2020 CIP - Increase of \$4.4 million due to escalation of construction costs. 2018-2022 CIP - Increase of \$4.5 million due to a revised scope and cost estimate. 2019-2023 CIP - Increase of \$26.5 million due to an updated construction cost estimate. 2020-2024 CIP - Decrease of \$16.9 million due to updated construction estimate and lower than expected construction bids. 2023-2027 CIP - Decrease of \$52.8 million due to revised scope and cost estimate to include only Phase I of this project. 2024-2028 CIP – Increase of \$105.4 million due to revised scope and cost estimate for Aeration Basin Mods – Phase 1.

	PRIOR	FY24	FY25	FY26	FY27	FY28	FY29	5 YEAR	BEYOND	PROJECT
	YEARS	EST						TOTAL	5 YEARS	TOTAL
			Expenditu	ure Sched	dule (000	s)				
Project Feasibility										
Development	6,979	6,269	2,821					2,821		16,069
Design	4,329	945	629	163	7,880	43		8,715		13,989
Bid & Award	273	600	391	893	107			1,391		2,264
Construction	41,621	2,853		350		98,194	4,168	102,712	7,823	155,009
Post Construction		185							1,397	1,582
Total	53,202	10,853	3,841	1,406	7,987	98,237	4,168	115,639	9,220	188,913

Funding Source Schedule (000s)										
San José-Santa Clara Treatment Plant Capital Fund										
(512)	53,202	10,853	3,841	1,406	7,987	98,237	4,168	115,639	9,220	188,913
Total	53,202	10.853	3.841	1.406	7.987	98.237	4.168	115.639	9.220	188.913

|--|

Total

Digested Sludge Dewatering Facility

CSA **Environmental and Utility Services Initial Start Date** 3rd Qtr. 2012 **CSA Outcome** Reliable Utility Infrastructure **Initial End Date** 2nd Qtr. 2013 Water Pollution Control Plant Location **Revised Start Date** 3rd Qtr. 2014 **Dept Owner Environmental Services Revised End Date** 4th Qtr. 2025 **Council Districts 4 Initial Project Budget** \$1,000,000 Appropriation A7452 **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. The estimated operating and maintenance impacts are due to chemical, labor, maintenance consumables (e.g. parts, oil), electrical, and hauling & tipping costs. Until the lagoons and drying beds can be fully retired, it is anticipated there will be several years with the new dewatering facility and existing lagoons and drying beds in concurrent operation.

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. 2022-2026 CIP - Increase of \$13.0 million due to an updated scope and construction cost estimate.

	PRIOR	FY24	FY25	FY26	FY27	FY28	FY29	5 YEAR	BEYOND	PROJECT
	YEARS	EST						TOTAL	5 YEARS	TOTAL
			Expenditu	ure Sche	dule (000s	s)				
Project Feasibility										
Development	5,446									5,446
Design	12,412									12,412
Bid & Award	1,411	171								1,582
Construction	51,337	103,411	2,927	775				3,702		158,450
Post Construction				218				218		218
Total	70,606	103,582	2,927	993				3,920		178,108

		Fu	ınding Sou	urce Schedule (000s)		
San José-Santa Clara Treatment Plant Capital Fund						
<u>(</u> 512)	70,606	103,582	2,927	993	3,920	178,108
Total	70,606	103,582	2,927	993	3,920	178,108

Annual Operating Budget Impact (000s)	
Total	

Facility Wide Water Systems Improvements

CSAEnvironmental and Utility ServicesInitial Start Date3rd Qtr. 2014CSA OutcomeReliable Utility InfrastructureInitial End Date1st Qtr. 2022

Location Water Pollution Control Plant Revised Start Date

Dept OwnerEnvironmental ServicesRevised End Date2nd Qtr. 2027Council Districts4Initial Project Budget\$14,130,000AppropriationA7679FY Initiated2014-2015

Description

This project rehabilitates, replaces, and/or extends the Plant's four water systems including piping, valves, pumps, controls, and other ancillary equipment. The scope of work will be based on hydraulic modeling and study of existing and future water demands at the Plant. The project may be constructed in phases based on the outcome of the study

and priority of needs.

Justification The Plant's four water systems include potable water, groundwater, process/fire protection water, and recycled water.

These were constructed over time with various Plant expansions and are in need of rehabilitation and upgrade due to age, condition, worker safety, plant reliability, and code compliance requirements. In addition, changes to water uses and demands have not all been addressed over time. An updated hydraulic model and assessment of current and future water demands will allow for the proper sizing of these systems to improve current and future performance and

reduce risk of damage to pumping equipment.

Notes This project corresponds to Plant Master Plan Project No. 105 and Validation Project PF-06.

	PRIOR	FY24	FY25	FY26	FY27	FY28	FY29	5 YEAR	BEYOND	PROJECT
	YEARS	EST						TOTAL	5 YEARS	TOTAL
			Expendit	ure Sche	dule (000s	5)				
Project Feasibility										
Development	3,141									3,141
Design	4,364									4,364
Bid & Award	109	962								1,071
Construction	318	71,405	6,104	2,436	811			9,351		81,073
Post Construction					766			766		766
Total	7,932	72,367	6,104	2,436	1,577			10,117		90,416

		Fι	ınding So	ource Sch	edule (000s)		
San José-Santa Clara Treatment Plant Capital Fund							
(512)	7,932	72,367	6,104	2,436	1,577	10,117	90,416
Total	7.932	72.367	6.104	2.436	1.577	10.117	90.416

	Annual Operating Budget Impact (000s)	
Total		

Owner Controlled Insurance Program

CSA Environmental and Utility Services Initial Start Date 2nd Qtr. 2017
CSA Outcome Reliable Utility Infrastructure Initial End Date 2nd Qtr. 2023

Location Water Pollution Control Plant Revised Start Date

Dept OwnerEnvironmental ServicesRevised End Date2nd Qtr. 2025Council DistrictsN/AInitial Project Budget\$16,085,000AppropriationA401BFY Initiated2017-2018

Description This allocation provides funding for a centrally managed insurance and risk control program for construction projects in

the Water Pollution Control CIP.

Justification This allocation is required to centrally manage insurance and risk control programs for construction projects in this

capital program.

Notes

Major Cost 2019-2023 CIP - Increase of \$4.9 million due to revised insurance cost estimates.

Changes 2022-2026 CIP - Decrease of \$2.3 million due to revised insurance cost estimates.

2025-2029 CIP - Increase of \$6.0 million due to revised insurance cost estimates.

	PRIOR	FY24	FY25	FY26	FY27	FY28	FY29	5 YEAR	BEYOND	PROJECT
	YEARS	EST						TOTAL	5 YEARS	TOTAL
Expenditure Schedule (000s)										
General Administration	13,459	3,570	764					764		17,793
Construction	5,993									5,993
Total	19,452	3,570	764					764		23,786

Funding Source Schedule (000s)									
San José-Santa Clara									
Treatment Plant Capital Fund									
(512)	19,452	3,570	764	764	23,786				
Total	19,452	3,570	764	764	23,786				

	Annual Operating Budget Impact (000s)
Total	

Plantwide Security Systems Upgrade

CSA Environmental and Utility Services Initial Start Date 3rd Qtr. 2021
CSA Outcome Reliable Utility Infrastructure Initial End Date 2nd Qtr. 2022

Location Water Pollution Control Plant Revised Start Date

Dept OwnerEnvironmental ServicesRevised End Date3rd Qtr. 2026Council Districts4Initial Project Budget\$6,740,000AppropriationA426EFY Initiated2021-2022

DescriptionThis project will upgrade three critical security components at the Plant: 1. Construct a new main guard shack with monitoring, lighting, traffic circulation, and pavement improvements; 2. Install closed-circuit television cameras throughout the Plant and upgrade software, hardware, and equipment in the main server room; and 3. Install access

card readers throughout the Plant and install new proximity card badging stations.

Justification The existing guard shack is antiquated and undersized. Existing entrance and exit lanes are inadequate for larger

delivery trucks, which impedes traffic flow and causes delays. Installing wired and wireless cameras, along with an upgraded server room and new monitoring station will enhance security throughout the Plant, which is needed due to increased operational and construction activity. Installing access card readers will provide and improve security by

replacing a mix of entry systems (e.g., cyberkey, traditional locks, card readers) with a single system.

Notes

Major Cost 2023-2027 CIP - Increase of \$7.2 million due to revised scope and cost estimate.

Changes 2024-2028 CIP – Increase of \$9.9 million due to revised scope and cost estimate.

	PRIOR	FY24	FY25	FY26	FY27	FY28	FY29	5 YEAR	BEYOND	PROJECT			
	YEARS	EST						TOTAL	5 YEARS	TOTAL			
Expenditure Schedule (000s)													
Project Feasibility													
Development	1,015	153								1,168			
Design	428	2,676	344					344		3,449			
Bid & Award		253		72				72		325			
Construction	0	12,576	1,429	3,912	118			5,459		18,035			
Post Construction				160	73			233		233			
Total	1,443	15,659	1,773	4,144	191			6,108		23,210			

Funding Source Schedule (000s)											
San José-Santa Clara											
Treatment Plant Capital Fund											
(512)	1,443	15,659	1,773	4,144	191	6,108	23,210				
Total	1,443	15,659	1,773	4,144	191	6,108	23,210				

	Annual Operating Budget Impact (000s)	
Total		

Primary Rehabilitation

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure
Location Water Pollution Control Plant
Dept Owner Environmental Services

Council Districts 4
Appropriation A7226

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.

Justification This project restores the mechanical and structural integrity of the aging clarifiers and provides odor control measures.

Notes This project corresponds to Plant Master Plan Project Nos. 9, 10, and 11 and Validation Project PLP-02.

Prior to 2025-2029 this appropriation was named East Primary Rehabilitation, Seismic Retrofit, and Odor Control. The

scope was expanded to all Primaries, which may or may not need seismic retrofitting or covers.

Major Cost Changes 2012-2016 CIP - Increase of \$80.1 million; \$16.6 million due to increase of scope to incorporate master planning recommendations for seismic upgrades and odor control measures; \$63.5 million reflects the addition of the Beyond 5-

Year expense not previously programmed.

2013-2017 CIP - Decrease of \$1.7 million due to revised cost estimate.

2015-2019 CIP - Increase of \$27.5 million due to revised project validation cost estimate.

2016-2020 CIP - Increase of \$3.6 million due to escalation of construction costs.

	PRIOR	FY24	FY25	FY26	FY27	FY28	FY29	5 YEAR	BEYOND	PROJECT
	YEARS	EST						TOTAL	5 YEARS	TOTAL
			Expenditu	ure Sche	dule (000s	s)				
Project Feasibility			-		-					
Development	56	5,606	618	494				1,112		6,774
Design	30				4,380	843	566	5,789		5,819
Bid & Award		600		298	254			552		1,152
Construction							92,978	92,978	3,680	96,658
Post Construction									562	562
Total	86	6,206	618	792	4,634	843	93,544	100,431	4,242	110,965

Funding Source Schedule (000s)										
San José-Santa Clara										_
Treatment Plant Capital Fund										
<u>(512)</u>	86	6,206	618	792	4,634	843	93,544	100,431	4,242	110,965
Total	86	6,206	618	792	4,634	843	93,544	100,431	4,242	110,965

	Applied Operating Budget Impact (000c)	
	Annual Operating Budget Impact (000s)	
T. 4.1		
Total		

SBWR Master Plan Updates

CSA Environmental and Utility Services Initial Start Date 3rd Qtr. 2024
CSA Outcome Reliable Utility Infrastructure Initial End Date 2nd Qtr. 2025

LocationWater Pollution Control PlantRevised Start DateDept OwnerEnvironmental ServicesRevised End Date

Council Districts 4

Council Districts 4Initial Project Budget\$350,000AppropriationTEMP_1075FY Initiated2024-2025

Description This project updates the existing hydraulic model and develops estimates and projections for future recycled water

demands and supply-based system expansions. It also develops strategic plans for future recycled water system expansions including infrastructure upgrades, and identifies and develops funding strategies for non-potable and potable

reuse.

Justification The most recent Master Plan update was performed in 2014 and new strategy planning is needed for the subsequent

decade

Notes

Major Cost Changes

	PRIOR YEARS	FY24 EST	FY25	FY26	FY27	FY28	FY29	5 YEAR TOTAL	_	PROJECT TOTAL
			Expendit	ure Sched	dule (000s	s)				
Construction			350					350		350
Total	350							350		350
		Fu	ınding So	urce Sch	edule (00	0s)				

	Funding Source Schedule (J008)	
South Bay Water Recycling Capital Fund (571)	350	350	350
Total	350	350	350

	Annual Operating Budget Impact (000s)	
Total		

Support Building Improvements

CSA Environmental and Utility Services

CSA Outcome Reliable Utility Infrastructure
Location Water Pollution Control Plant
Dept Owner Environmental Services

Council Districts 4

Appropriation A7681

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

2016-2020 CIP - Decrease of \$856,000 due to revised cost estimate.

Changes

2018-2022 CIP - Increase of \$2.2 million due to revised project delivery cost estimate. 2025-2029 CIP – Increase of \$7.5 million due to increased construction estimates.

	PRIOR YEARS	FY24 EST	FY25	FY26	FY27	FY28	FY29	5 YEAR TOTAL	BEYOND 5 YEARS	PROJECT TOTAL
			Expendit	ure Sche	dule (000:	s)				
General Administration Project Feasibility	0									0
Development	2,080	0	500	167	686	495		1,848		3,928
Design	4,351	626	182			2,669	985	3,836	539	9,352
Bid & Award	288	164							493	945
Construction	1,222	13,566	85	16,647	1,064			17,796	14,931	47,515
Post Construction Equipment, Materials and		204				82		82	1,141	1,427
Supplies	346									346
Total	8,286	14,560	767	16,814	1,750	3,246	985	23,562	17,104	63,513

Funding Source Schedule (000s)											
San José-Santa Clara Treatment Plant Capital Fund					-						
(512)	8,286	14,560	767	16,814	1,750	3,246	985	23,562	17,104	63,513	
Total	8,286	14,560	767	16,814	1,750	3,246	985	23,562	17,104	63,513	

	O 1 D 1 1 1 (000	
Anniial	Operating Budget Impact (000s	4 1
Alliluai	Operating Budget Impact (000s	"
	- p (

Total

Yard Piping Improvements

CSA **Environmental and Utility Services** 3rd Qtr. 2011 **Initial Start Date CSA Outcome** Reliable Utility Infrastructure **Initial End Date** 4th Qtr. 2026

Water Pollution Control Plant Location **Revised Start Date**

Dept Owner Environmental Services Revised End Date 1st Qtr. 2027

Council Districts 4 Initial Project Budget N/A

A7396 Appropriation **FY Initiated** 2011-2012

Description This project rehabilitates and/or replaces 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 address flood risks for identified junction structures, screening

structures, and pump stations.

Justification The Plant has approximately 300,000 linear feet of piping along with associated valves and related appurtenances. The

pipes range in diameter from 8 inches to 144 inches and carry gas, liquids, sludge, air, steam, and other process streams to and from the various treatment areas. The pipes vary in age, material, condition, reliability, and redundancy. Over 70 percent of the piping was installed more than 25 years ago and is in need of rehabilitation or replacement due to

age, failure, and/or excessive maintenance.

This project corresponds to Plant Master Plan Project Nos. 98 and 100 and Validation Project PF-04. Prior to 2018-Notes

2022, this project was ongoing in nature; it has since become a finite project. Prior to 2025-2029 this appropriation was

titled Yard Piping and Road Improvements. The road work scope of the project has been removed.

2019-2023 CIP - Decrease of \$14.3 million due to a decrease in project scope and a 78" SES pipe that will be replaced **Major Cost** in the Digester and Thickener Facilities Upgrade project. Changes

2022-2026 CIP - Decrease of \$11.8 million due to a decrease in project scope and construction cost estimates. 2023-2027 CIP - Decrease of \$39.8 million due to reduction in project scope based on updated condition assessment information that determined that certain pipe segments were in better than expected condition, so anticipated repairs

weren't needed.

Total

	PRIOR	FY24	FY25	FY26	FY27	FY28	FY29	5 YEAR	BEYOND	PROJECT	
	YEARS	EST						TOTAL	5 YEARS	TOTAL	
Expenditure Schedule (000s)											
Project Feasibility										_	
Development	6,607	1,846								8,453	
Design	2,370	1,272	1,919					1,919		5,561	
Bid & Award	714	30	327					327		1,071	
Construction	10,311	22,182	23,478	2,004	707			26,189		58,682	
Post Construction	152	83	76		203			279		514	
Total	20,155	25,413	25,800	2,004	910			28,714		74,281	

Funding Source Schedule (000s)									
San José-Santa Clara Treatment Plant Capital Fund									
(512)	20,155	25,413	25,800	2,004	910	28,714	74,281		
Total	20,155	25,413	25,800	2,004	910	28,714	74,281		

Annual Operating Budget Impact (000s)	

2025-2029 Proposed Capital Improvement Program Summary of Projects that Start After 2024-2025

3rd Qtr. 2019 Final Effluent Pump Station & Stormwater Channel Improvements **Project Name Initial Start Date** \$ 12,909,000 3rd Qtr. 2025 5-Yr CIP Budget **Initial End Date**

Total Budget \$ 18,116,706 **Revised Start Date**

2nd Qtr. 2027 Council Districts 4 **Revised End Date**

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

The scope of this project is a two-phase approach, with the first phase including work related to the stormwater channel.

Phase II will be developed at a future time.

This project is on hold pending an engineering evaluation by the US Army Corps of Engineers. The results of this evaluation may have significant impacts on the scope and design of this project. The precise timeframe of this evaluation is currently

unknown, but expected to complete within 2024-2025.

Flood Protection **Initial Start Date** 3rd Qtr. 2017 **Project Name** 5-Yr CIP Budget 2nd Qtr. 2021 \$8,000,000 **Initial End Date**

Total Budget \$ 15,300,130 **Revised Start Date**

Council Districts 4 **Revised End Date** 3rd Qtr. 2026

Description This project provides 100-year flood protection for the Plant by constructing engineered earthen berms on the northern and

eastern sides of the Plant.

This project is on hold pending coordination with the Department of Public Works regarding updated flood risk evaluations and mapping to determine future project scope and requirements. This coordination is expected to be complete by Q3 2024-

2025.

Description

New Disinfection Facilities 3rd Qtr. 2020 **Initial Start Date Project Name** \$8,241,000 2nd Qtr. 2029 5-Yr CIP Budget **Initial End Date**

\$56,977,000 **Total Budget Revised Start Date** 3rd Qtr. 2025 Council Districts 4 **Revised End Date** 2nd Qtr. 2035

This project constructs a new disinfection facility (currently assumed to be based on ultraviolet (UV) technology) to replace Description

the existing sodium hypochlorite disinfection facility. It may also expand the existing chlorine contact basins to

accommodate future peak hour wet weather flows and construct a new on-site hypochlorite generation facility. This project would only be triggered if new regulations concerning emerging contaminants are issued by the Regional Water Board

within the next two to three NPDES permit cycles, and additional studies confirm future flow projections.

Nitrification Clarifier Rehabilitation 3rd Qtr. 2009 **Project Name Initial Start Date** \$ 25,720,000 2nd Qtr. 2024 5-Yr CIP Budget **Initial End Date**

\$80,039,588 **Total Budget Revised Start Date**

Council Districts 4 1st Qtr. 2029 **Revised End Date**

> 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.

Phase 2 of the project, which will rehabilitate 9 of the 16 total nitrification clarifiers in operation at the RWF (the remaining 7 of which have been rehabilitated through Phase 1), is on hold while the Aeration Basin Modifications team determines if the Phase 2 scope will be rolled into the Aeration Tanks and Blower Rehabilitation project. This evaluation is expected to be complete in Q1 or Q2 of 2024-2025.

2025-2029 Proposed Capital Improvement Program Summary of Projects that Start After 2024-2025

Project NameRWF Bond Debt Service 2026Initial Start Date3rd Qtr. 20275-Yr CIP Budget\$ 26,020,000Initial End Date2nd Qtr. 2029

Total Budget \$ 26,020,000 Revised Start Date
Council Districts N/A Revised End Date

Description This allocation provides for the repayment of the revenue bonds planned to be issued in 2026 for the San José-Santa Clara

Treatment Plant Capital Fund.

Project NameSecondary Clarifier RehabilitationInitial Start Date1st Qtr. 20175-Yr CIP Budget\$ 25,936,000Initial End Date2nd Qtr. 2024Total Budget\$ 26,455,000Revised Start Date3rd Qtr. 2025Council Districts4Revised End Date1st 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.

Water Pollution Control 2025-2029 Proposed Capital Improvement Program Summary of Reserves

Project Name Hydraulic Capacity Enhancements Reserve

5-Yr CIP Budget \$ 3,666,000 **Total Budget** \$ 3,666,000

Council Districts 4

Description This reserve sets aside funding for future design, engineering, and inspection for the connection of new developments to the

recycled water utility system. This reserve is fully funded by the South Bay Water Recycling Capital Fund; no revenue from

Plant Tributary Agencies or City Sanitary Sewer rate payers has been used for the allocation of this reserve.

EXPLANATION OF FUNDS

Revenues and expenditures for the operation and maintenance of the San José-Santa Clara Regional Wastewater Facility (RWF) 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 the City of Santa Clara and tributary agencies of the RWF 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 RWF.

The 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 within San José. A portion of these monies are transferred to the Operating and Capital Funds to pay for the City of San José's share of operating and capital costs of the RWF.

The Capital Fund provides all monies used for capital projects. In addition, debt service payments for the City of San Jose's Sewer Revenue Bonds, issued under the San José Financing Authority are made from this fund.

Revenues and expenditures for the operation and maintenance of the South Bay Water Recycling system are accounted for by the South Bay Water Recycling Operating Fund. Wholesale revenues from recycled water retailers are recorded directly into the Operating fund. The South Bay Water Recycling (SBWR) Capital Fund provides monies for capital improvement projects in support of SBWR system infrastructure and capacity improvements. These funds may be supplemented by South Bay Water Recycling Operating funds to support the capital needs of the recycled water system. Annual payment and reimbursement obligations can require the transfer of funding from the South Bay Recycled Water Operating Fund to the Sewer Service and Use Charge Fund via the San José-Santa Clara Treatment Plant Operating Fund.

ATTACHMENT A CIP AGENCY ALLOCATIONS - TEN YEAR FORECAST

<u>-</u>	24-25	25-26	26-27	27-28	28-29	29-30	30-31	31-32	32-33	33-34	5-Year Total	10-Year Total
Santa Clara	9,697,165	15,439,891	6,469,542	41,307,022	17,229,259	10,183,650	4,232,035	1,101,748	917,596	4,419,350	90,142,879	110,997,259
West Valley	3,635,029	6,393,973	2,555,395	14,374,029	7,674,508	3,615,925	1,686,555	465,094	399,712	1,841,961	34,632,934	42,642,180
Cupertino	2,299,615	4,200,185	1,664,667	8,822,063	5,121,160	2,325,979	1,098,509	308,272	266,558	1,219,987	22,107,690	27,326,996
Milpitas	3,950,499	7,423,985	2,890,446	14,830,899	9,246,569	3,804,351	1,919,038	546,021	477,051	2,153,617	38,342,399	47,242,476
CSD 2/3	290,959	534,140	210,909	1,112,380	651,966	290,979	139,385	39,169	33,930	155,244	2,800,353	3,459,061
Burbank	120,970	222,064	93,025	469,285	262,567	151,976	59,699	16,680	14,064	66,106	1,167,910	1,476,435
San Jose	39,304,563	62,809,762	26,347,017	167,383,322	71,070,972	41,406,139	17,163,779	4,506,015	3,758,089	17,886,736	366,915,636	451,636,394
Total WPCP Projects	59,298,801	97,024,000	40,231,000	248,299,000	111,257,000	61,779,000	26,299,000	6,983,000	5,867,000	27,743,000	556,109,801	684,780,801