CITY SERVICE AREA ENVIRONMENTAL AND UTILITY SERVICES

Mission: Delivering world class utility services and programs to improve our health, environment, and economy.



Sanitary Sewer Repairs Project (CIPP Liner Installation)

The Sanitary Sewer System Capital Improvement Program (CIP) constructs sewer improvement projects that enhance sewer capacity to meet economic development goals and rehabilitates existing sewers to minimize sanitary sewer overflows.

The Storm Sewer System CIP continues to replace and rehabilitate storm drain infrastructures (piping, pump stations, outfalls), install and integrate green stormwater infrastructures, and install trash capture devices to reduce the risk of local flooding during storm events and improve storm water quality for regulatory compliance. The program addresses the drainage needs in residential neighborhoods, business districts, and walking routes to schools and public facilities.



Water Pollution Control Plan

The Water Pollution Control Plant (Plant) is a regional advanced wastewater treatment facility that serves the cities of San José, Santa Clara, and Milpitas, as well as the Cupertino Sanitary District, West Valley Sanitation District, County Sanitation Districts 2-3, and Burbank Sanitary District. The Plant is one of the largest tertiary wastewater treatment works in the western United States, serving more than 1.4 million residents and approximately 17,000 businesses. A major master planning effort was completed in late 2013, resulting in Environmental Impact Report certification and formal adoption of a 30-year master plan. The master plan provides the framework for over \$1.4 billion in new construction at the Plant over the next 10 to 15 years, and responds to aging infrastructure, future regulations, population growth, and treatment technology improvements.

The Water Utility System CIP ensures reliable utility infrastructure for the San José Municipal Water System and includes the construction of new facilities, maintenance of existing infrastructure, and improvements to existing facilities.

CSA CAPITAL PROGRAMS

- Sanitary Sewer System
- Storm Sewer System
- Water Pollution Control
- Water Utility System

CITY SERVICE AREA ENVIRONMENTAL AND UTILITY SERVICES

PROGRAM HIGHLIGHTS

Sanitary Sewer System Capital Program

2025-2029 Adopted CIP: \$282.2 million

Sanitary Sewer Rehabilitation Projects:

- Condition Assessment Sewer Repair
- Sanitary Sewer Interceptor Management Program
- Urgent Rehabilitation and Repair Projects

Sanitary Sewer Interceptor/Capacity Improvement Projects:

- Blossom Hill Road and Leigh Avenue Sanitary Sewer
- Chesbro Avenue Sanitary Sewer Improvements
- Fourth Major Interceptor Phase VII
- Immediate Replacement and Diversion Projects
- Southwest Expressway Sanitary Sewer Improvements

Storm Sewer System Capital Program

2025-2029 Adopted CIP: \$92.4 million

- Citywide Outfall Improvements
- Large Trash Capture Devices Phase VIII
- Measure T Clean Water Projects
- Measure T Storm Drain Improvements at Charcot Avenue
- Small Trash Capture Devices

Water Pollution Control Capital Program

2025-2029 Adopted CIP: \$948.1 million

Wastewater Treatment:

- Aeration Tanks and Blower Rehabilitation
- Nitrification Clarifier Rehabilitation
- Primary Rehabilitation
- Secondary Clarifier Rehabilitation

Biosolids:

Additional Digester Upgrades

Site Facility Maintenance & Improvements:

Yard Piping Improvements

Water Utility System Capital Program

2025-2029 Adopted CIP: \$131.9 million

- Advanced Metering Infrastructure Implementation
- Annual Water Main Replacement
- Infrastructure Improvements
- Water Resources Administration and Operations Facility

Recent Accomplishments

- Various sanitary sewer projects replaced aging pipeline throughout the system, including Mabury Yard Sanitary Sewer Replacement project; and completion of design for sanitary sewer improvements at McLaughlin Ave-Idlewood Drive, Coleman Road Phase III, and Blossom Hill Road and Leigh Ave.
- Various storm infrastructure projects completed, including the installation of three Large Trash Capture devices; began construction for the River Oaks Regional Stormwater Capture Project; and awarded the Charcot Area Storm Drain Improvements capacity project.
- Various water main replacements and system improvements were completed to ensure the continued reliability of the drinking water supply; construction began on a groundwater well in North San José and the Water Resources Administration and Operations Facility.
- At the Water Pollution Control Plant, completed construction of the \$172 million Headworks project and began construction on the \$91 million Facility Wide Water Systems Improvement project.

CSA OUTCOMES

(Supported by the Capital Program)

- ✓ Reliable Utility Infrastructure
- ✓ Healthy Streams, Rivers, Marsh and Bay
- ✓ Safe, Reliable and Sufficient Water Supply

CITY SERVICE AREA ENVIRONMENTAL & UTILITY SERVICES

PERFORMANCE MEASURES

A set of consistent and comprehensive performance measurements along with targets and goals has been established for the entire capital program and adopted for each individual CSA. Measures focus on schedule (cycle time) and project delivery cost. Please see the Budget Guide section narrative for additional information on capital performance measurements.

Outcome: Quality CIP Projects Delivered On-Time and On-Budget

Strategic Goals	CSA Performance Measures	2022-2023 Actual ¹	2023-2024 Target	2023-2024 Estimate	2024-2025 Target	5-Year Goal
CSA delivers quality Capital	1. % of CIP projects delivered within 2 months of approved baseline schedule ²	75% (15/20)	85%	86% (18/21)	85%	85%
	2. % of CIP projects that are completed within the approved baseline budget ³	88% (14/16)	90%	89% (24/27)	90%	90%

The 2022-2023 Actual number of projects may vary from the 2022-2023 Estimate, as documented in the 2023-2024 Adopted Budget, because of revision to the date of estimated beneficial use of the project being revised and the project expected to be delivered in the following fiscal year. Also, the number of projects may change with the inclusion of projects in the 2022-2023 Actual not originally included in the 2022-2023 Adopted Budget Estimate due to incomplete project information at that time.

In 2023-2024, the Environmental and Utility Services CSA estimates to deliver 18 of 21 (86%) projects within two months of the approved baseline schedule, which is above the performance target of 85%. Some of the notable capital projects delivered in 2023-2024 include Nitrification Clarifiers Rehabilitation - Phase 1 and many sanitary sewer repairs, improvements, and condition assessments at various locations.

In 2023-2024, 24 of 27 (89%) projects are estimated to be completed within their baseline budgets, which is below the one-year performance target of 90%. Some of the notable capital projects completed in 2023-2024 include the Advanced Facility Control and Meter Replacement - Phases 1 & 2 and multiple sanitary sewer replacements, repairs, and condition assessments at various locations. The CSA continues to work to strengthen the alignment of project scopes, schedules, and budgets, while also accounting for external market conditions that may affect the delivery of capital projects. Staff relies heavily on the cost estimating and tracking tools that are available through the City's Capital Project Management System (CPMS). These tools allow project management staff to effectively track project costs on an ongoing basis and assist in ensuring that expenditures remain within budgeted levels.

Projects are considered "delivered" when they are available for their intended use and are considered "on schedule" if delivered within two months of baseline schedule.

Projects are considered "completed" when final cost accounting has occurred, and the project has been accepted. Projects are considered "on budget" when the total expenditures do not exceed 101% of the baseline budget.

			Total		
	2024-2025	2025-2029	Budget		
	Budget	CIP Budget	(All Years)	Start Date	End Date
Sanitary Sewer System					
Almaden Supplement Sewer Rehabilitation (North)	3,792,000	3,792,000	3,840,349	3rd Qtr. 2020	2nd Qtr. 2025
Blossom Hill Road and Leigh Avenue Sanitary Sewer Improvement	4,987,000	5,447,000	5,883,299	2nd Qtr. 2021	4th Qtr. 2025
Capital Program and Public Works Department Support Service Costs	1,957,000	5,741,000	*	Ongoing	Ongoing
Cast Iron Pipe - Remove and Replace	5,000,000	9,000,000	*	Ongoing	Ongoing
Chesbro Avenue Sanitary Sewer Improvement	9,000,000	9,500,000	9,600,000	3rd Qtr. 2023	2nd Qtr. 2026
City Hall Debt Service Fund	291,000	1,471,000	*	Ongoing	Ongoing
Coleman Road Sanitary Sewer Improvement - Phase III	2,448,000	2,448,000	2,739,065	3rd Qtr. 2022	2nd Qtr. 2025
Condition Assessment Sewer Repairs	6,000,000	30,000,000	*	Ongoing	Ongoing
Crystal Springs Drive Sanitary Sewer Improvement		900,000	900,000	3rd Qtr. 2027	2nd Qtr. 2028
Fee Administration - Sanitary Sewer	85,000	425,000	*	Ongoing	Ongoing
Firefly Drive-Redmond Avenue-McAbee Road Sanitary Sewer Improve		3,350,000	3,350,000	3rd Qtr. 2028	2nd Qtr. 2029
Flow Monitoring Program (Master Planning)	681,553	3,569,565	*	Ongoing	Ongoing
Fontaine Rd Sanitary Sewer Improvement	1,706,900	1,877,900	1,972,967	3rd Qtr. 2022	4th Qtr. 2025
Fourth Major Interceptor, Phase VIIA	5,500,000	55,500,000	55,500,000	4th Qtr. 2024	2nd Qtr. 2028
Immediate Replacement and Diversion Projects	6,600,000	33,000,000	*	Ongoing	Ongoing
Inflow and Infiltration Reduction	200,000	1,000,000	*	Ongoing	Ongoing
Infrastructure - Sanitary Sewer Condition Assessment	3,200,000	12,000,000	*	Ongoing	Ongoing
Infrastructure Management System	43,000	225,000	*	Ongoing	Ongoing
Master Planning Updates	2,048,975	10,991,078	*	Ongoing	Ongoing
McLaughlin Ave-24th Street Sanitary Sewer Improvement	2,230,000	2,425,000	2,574,492	3rd Qtr. 2022	3rd Qtr. 2025
McLaughlin Ave-Idlewood Dr Sanitary Sewer Improvement	595,000	595,000	3,938,043	3rd Qtr. 2022	2nd Qtr. 2025
Monterey Road Sanitary Sewer Improvement		600,000	600,000	3rd Qtr. 2025	2nd Qtr. 2026
North 1st Street Sanitary Sewer Improvements	6,900,000	7,025,000	7,125,000	2nd Qtr. 2024	3rd Qtr. 2025
Payments to West Valley Sanitation District	10,000	50,000	*	Ongoing	Ongoing
Permit Review and Inspection for Outside Agencies - Sanitary Sewer	25,000	125,000	*	Ongoing	Ongoing
Preliminary Engineering - Sanitary Sewer	950,000	4,750,000	*	Ongoing	Ongoing
Program Management - Sanitary Sewer	300,000	1,500,000	*	Ongoing	Ongoing
Public Art Allocation	313,000	1,149,000	*	Ongoing	Ongoing
Public Works Engineering Services Equipment (Materials Lab)	40,000	200,000	*	Ongoing	Ongoing

	2024-2025 Budget	2025-2029 CIP Budget	Total Budget (All Years)	Start Date	End Date
Pump Station SCADA Upgrade - Sanitary Sewer	500,000	500,000	500,000	3rd Qtr. 2024	2nd Qtr. 2025
Rehabilitation of Sanitary Sewer Pump Stations	3,921,689	4,211,689	*	Ongoing	Ongoing
Reinforced Concrete Pipe Rehabilitation Program	500,000	2,500,000	*	Ongoing	Ongoing
Sanitary Sewer Interceptor Management Program	8,533,000	20,533,000	*	Ongoing	Ongoing
South White Road Sanitary Sewer Improvement	3,000,000	3,000,000	3,200,000	3rd Qtr. 2023	2nd Qtr. 2025
South White Road-Buckner Drive-Westboro Drive Sanitary Sewer Impr		1,200,000	1,200,000	3rd Qtr. 2028	2nd Qtr. 2029
Southwest Expressway Sanitary Sewer Improvement	8,800,000	8,940,000	9,140,000	3rd Qtr. 2023	2nd Qtr. 2026
Tisch Way Sanitary Sewer Improvement	1,690,000	1,690,000	1,990,000	3rd Qtr. 2023	2nd Qtr. 2025
Urgent Rehabilitation and Repair Projects	5,000,000	25,000,000	*	Ongoing	Ongoing
Total: Construction/Non-Construction	96,848,117	276,231,232			
Ending Fund Balance	34,851,909	5,976,794	**		
Total: Sanitary Sewer System	131,700,026	282,208,026	**		
Storm Sewer System					
Capital Program and Public Works Department Support Service Costs	568,000	696,000	*	Ongoing	Ongoing
Charcot Storm Pump Rental	300,000	1,500,000	*	Ongoing	Ongoing
City Hall Debt Service Fund	95,000	479,000	*	Ongoing	Ongoing
Citywide Outfall Improvements	8,798,000	8,798,000	*	Ongoing	Ongoing
Condition Assessment Storm Sewer Repairs	150,000	750,000	*	Ongoing	Ongoing
Fee Administration - Storm Sewer	25,000	125,000	*	Ongoing	Ongoing
Flow Monitoring Program	398,606	2,194,677	*	Ongoing	Ongoing
General Fund - Interest Income	15,000	55,000	*	Ongoing	Ongoing
Green Infrastructure Improvements	2,937,000	2,937,000	*	Ongoing	Ongoing
Infrastructure Management System	9,000	45,000	*	Ongoing	Ongoing
Large Trash Capture Devices Phase I-VII	2,200,000	2,200,000	37,324,780	3rd Qtr. 2014	2nd Qtr. 2025
Large Trash Capture Devices Phase VIII	10,000,000	10,000,000	10,000,000	2nd Qtr. 2024	2nd Qtr. 2025
Measure T - Admin Reserve Storm Sewer	250,000	250,000	250,000	N/A	N/A
Measure T - Admin Storm Sewer	132,000	132,000	*	Ongoing	Ongoing
Measure T - Clean Water Projects	2,600,000	13,221,000	24,421,625	3rd Qtr. 2019	2nd Qtr. 2027
Measure T - Public Art Storm Sewer	40,000	50,000	*	Ongoing	Ongoing

			Total		
	2024-2025	2025-2029	Budget		
_	Budget	CIP Budget	(All Years)	Start Date	End Date
Measure T - Storm Drain Improvements at Charcot Avenue	11,723,000	24,471,000	28,264,835	3rd Qtr. 2019	4th Qtr. 2025
Permit Review and Inspection for Outside Agencies - Storm Sewer	50,000	250,000	*	Ongoing	Ongoing
Preliminary Engineering - Storm Sewer	180,000	900,000	*	Ongoing	Ongoing
Program Management - Storm Sewer	150,000	750,000	*	Ongoing	Ongoing
Public Art Allocation	615,000	627,000	*	Ongoing	Ongoing
Pump Station SCADA Upgrade - Storm Sewer	300,000	750,000	750,000	3rd Qtr. 2023	2nd Qtr. 2027
Small Trash Capture Devices	4,700,000	4,700,000	5,000,000	1st Qtr. 2024	2nd Qtr. 2025
Storm Pump Station Rehabilitation and Replacement	200,000	1,000,000	*	Ongoing	Ongoing
Storm Sewer Improvements	250,000	1,250,000	*	Ongoing	Ongoing
Storm Sewer Master Plan - City-wide	1,313,423	7,073,708	*	Ongoing	Ongoing
Urgent Storm Drain Repair Projects	1,250,000	2,250,000	*	Ongoing	Ongoing
Total: Construction/Non-Construction	49,249,029	87,454,385			
Ending Fund Balance	19,193,375	4,896,019 **			
Total: Storm Sewer System	68,442,404	92,350,404 **			
Water Pollution Control					
Additional Digester Upgrades	2,862,000	124,778,000	131,995,609	2nd Qtr. 2022	3rd Qtr. 2030
Aeration Tanks and Blower Rehabilitation	12,106,000	123,904,000	188,913,039	2nd Qtr. 2015	3rd Qtr. 2031
Capital Program and Public Works Department Support Service Costs	828,000	8,827,000	*	Ongoing	Ongoing
City Hall Debt Service Fund	150,000	758,000	*	Ongoing	Ongoing
Debt Service Repayment for Plant Capital Improvement Projects	3,605,000	217,314,000	554,695,950	4th Qtr. 2017	2nd Qtr. 2033
Digested Sludge Dewatering Facility	5,388,000	6,381,000	178,108,110	3rd Qtr. 2014	4th Qtr. 2025
Facility Wide Water Systems Improvements	6,203,000	10,216,000	90,415,504	3rd Qtr. 2014	2nd Qtr. 2027
Filter Rehabilitation	883,000	883,000	60,358,464	3rd Qtr. 2014	2nd Qtr. 2025
Final Effluent Pump Station & Stormwater Channel Improvements		12,909,000	18,116,706	3rd Qtr. 2019	2nd Qtr. 2027
Flood Protection		8,000,000	15,300,130	3rd Qtr. 2017	3rd Qtr. 2026
Hydraulic Capacity Engineering	25,000	125,000	*	Ongoing	Ongoing
Hydraulic Capacity Enhancements Reserve	3,666,000	3,666,000	3,666,000	N/A	N/A
New Disinfection Facilities		8,241,000	56,977,000	3rd Qtr. 2025	2nd Qtr. 2035
Nitrification Clarifier Rehabilitation	1,332,000	27,052,000	80,039,588	3rd Qtr. 2009	1st Qtr. 2029

	2024-2025	2025-2029	Total Budget	- :	
-0.4.10	Budget	CIP Budget	(All Years)	Start Date	End Date
Outfall Channel and Instrumentation Improvements	608,000	608,000	10,675,942	3rd Qtr. 2014	
Owner Controlled Insurance Program	3,264,000	3,264,000	17,793,427	2nd Qtr. 2017	
Plant Infrastructure Improvements	3,345,000	7,345,000	00.000.040	Ongoing	Ongoing
Plantwide Security Systems Upgrade	4,747,000	9,082,000	23,209,949	3rd Qtr. 2021	3rd Qtr. 2026
Preliminary Engineering - Water Pollution Control	5,160,000	9,160,000		Ongoing	Ongoing
Primary Rehabilitation	6,794,000	106,607,000	110,965,114	3rd Qtr. 2010	4th Qtr. 2031
Program Management - Water Pollution Control	10,526,000	35,347,000		Ongoing	Ongoing
RWF Bond Debt Service 2022B	17,274,000	86,361,000	523,171,000	3rd Qtr. 2023	4th Qtr. 2052
RWF Bond Debt Service 2026		26,020,000	26,020,000	3rd Qtr. 2027	2nd Qtr. 2029
SBWR Master Plan Updates	350,000	350,000	350,000	3rd Qtr. 2024	
Secondary Clarifier Rehabilitation	4.057.000	25,936,000	26,455,000	3rd Qtr. 2025	1st Qtr. 2031
Storm Drain System Improvements	1,257,000	1,257,000	14,131,693	4th Qtr. 2017	
Support Building Improvements	9,653,000	32,448,000	63,529,950	2nd Qtr. 2015	
Urgent and Unscheduled Treatment Plant Rehabilitation	1,500,000	7,500,000		Ongoing	Ongoing
Yard Piping Improvements	27,563,000	30,477,000	74,281,429	3rd Qtr. 2011	1st Qtr. 2027
Total: Construction/Non-Construction	129,089,000	934,816,000			
Ending Fund Balance	19,130,808	13,280,808	**		
Total: Water Pollution Control	148,219,808	948,096,808	**		
Water Utility System					
Advance System Design	200,000	1,000,000	*	Ongoing	Ongoing
Advanced Metering Infrastructure Implementation	5,000,000	14,500,000	14,500,000	3rd Qtr. 2024	2nd Qtr. 2027
Annual Water Main Replacement	1,900,000	9,200,000	*	Ongoing	Ongoing
Backup Generator Replacement	199,000	199,000	*	3rd Qtr. 2019	2nd Qtr. 2025
Capital Program and Public Works Department Support Service Costs	287,000	533,000	*	Ongoing	Ongoing
City Hall Debt Service Fund	11,000	55,000	*	Ongoing	Ongoing
Commercial Paper Repayment 2027		33,000,000	33,000,000	3rd Qtr. 2026	2nd Qtr. 2027
Coyote Well Replacement Planning Efforts	370,000	370,000	465,000	3rd Qtr. 2023	2nd Qtr. 2025
Debt Service	303,000	13,987,000	72,994,000	2nd Qtr. 2024	TBD
Evergreen Reliability Well	200,000	1,800,000	1,800,000	3rd Qtr. 2024	2nd Qtr. 2027

			Total		
	2024-2025	2025-2029	Budget		
	Budget	CIP Budget	(All Years)	Start Date	End Date
GIS Support	120,000	120,000	*	Ongoing	Ongoing
Infrastructure Improvements	860,000	4,430,000	*	Ongoing	Ongoing
Major Facilities Fee Administration	15,000	75,000	*	Ongoing	Ongoing
Master Plan Engineering	200,000	1,100,000	*	Ongoing	Ongoing
Meter Installations	50,000	250,000	*	Ongoing	Ongoing
North San José Reliability Well Construction	1,850,000	1,850,000	3,163,238	3rd Qtr. 2019	2nd Qtr. 2025
North San José Well Development and Construction	3,552,000	3,552,000	4,554,951	3rd Qtr. 2019	2nd Qtr. 2025
Preliminary Engineering - Water	170,000	890,000	*	Ongoing	Ongoing
Public Art Funding	175,000	198,000	*	Ongoing	Ongoing
Safety and Security Improvements	100,000	300,000	*	Ongoing	Ongoing
Service Installations	200,000	1,000,000	*	Ongoing	Ongoing
System Growth Related Projects Reserve	1,600,000	1,600,000	1,600,000	N/A	N/A
System Maintenance/Repairs	900,000	4,620,000	*	Ongoing	Ongoing
System Rehabilitation/Replacement Reserve	4,675,000	5,185,000	5,185,000	N/A	N/A
Water Resources Administration & Operations Facility	28,472,000	29,972,000	37,900,334	3rd Qtr. 2020	2nd Qtr. 2026
Total: Construction/Non-Construction	51,409,000	129,786,000			
Ending Fund Balance	2,965,939	2,073,939	**		
Total: Water Utility System	54,374,939	131,859,939	**		
CSA Total: Construction/Non-Construction	326,595,146	1,428,287,617	**		
Ending Fund Balance	76,142,031	26,227,560	**		
CSA Total:	402,737,177	1,454,515,177	**		

^{*} Total Budget information is not provided due to the ongoing nature of this project.

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