

City Service Area

Environmental and Utility Services



***Mission:** Provide environmental leadership through policy development, program design, and reliable utility services*

Primary Partners

Community Energy
Environmental
Services
Transportation

CSA OUTCOMES

- Reliable Utility Infrastructure
- Healthy Streams, Rivers, Marsh, and Bay
- “Clean and Sustainable” Air, Land, and Energy
- Safe, Reliable, and Sufficient Water Supply

City Service Area

Environmental and Utility Services

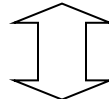
SERVICE DELIVERY FRAMEWORK

CITY SERVICE AREA
A cross-departmental collection of core services that form one of the City's six key "lines of business"

MISSION STATEMENT
Why the CSA exists

Environmental & Utility Services CSA

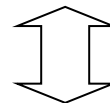
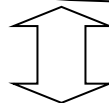
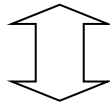
Mission:
Provide environmental leadership through policy development, program design, and reliable utility services.



CSA OUTCOMES
The high level results of service delivery sought by the CSA partners

Outcomes:

- Reliable Utility Infrastructure
- Healthy Streams, Rivers, Marsh, and Bay
- "Clean and Sustainable" Air, Land, and Energy
- Safe, Reliable, and Sufficient Water Supply



PRIMARY PARTNERS
Departments with Core Services that contribute to achievement of CSA Outcomes

Community Energy Department

Core Services:

Providing Clean Energy to the Community

Community Energy Customer Support

Community Energy Community Programming

Environmental Services Department

Core Services:

Potable Water Delivery

Recycled Water Management

Recycling and Garbage Services

Stormwater Management

Sustainability and Environmental Health

Wastewater Management

Transportation Department

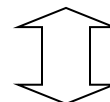
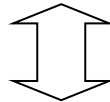
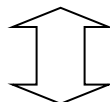
Core Services:

Sanitary Sewer Maintenance

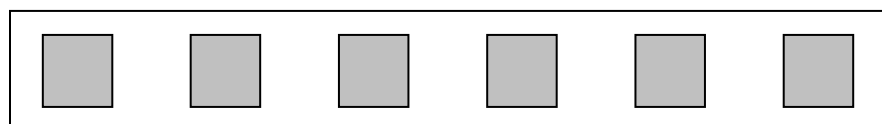
Storm Sewer Maintenance

CORE SERVICES
Primary deliverables of the organization

PROGRAMS
Elements of Core Services; the "front-line" of service delivery

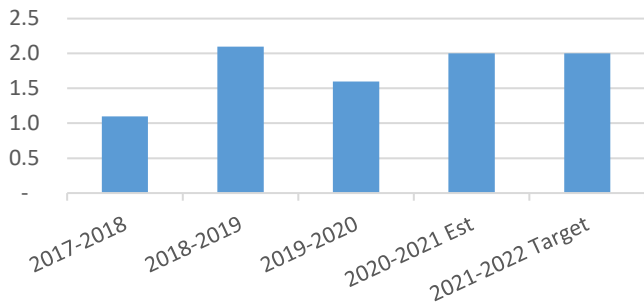


STRATEGIC SUPPORT
Organization-wide guidance and support to enable direct service delivery

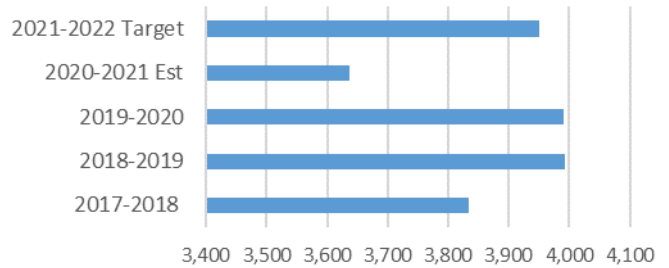


City Service Area Environmental and Utility Services DASHBOARD

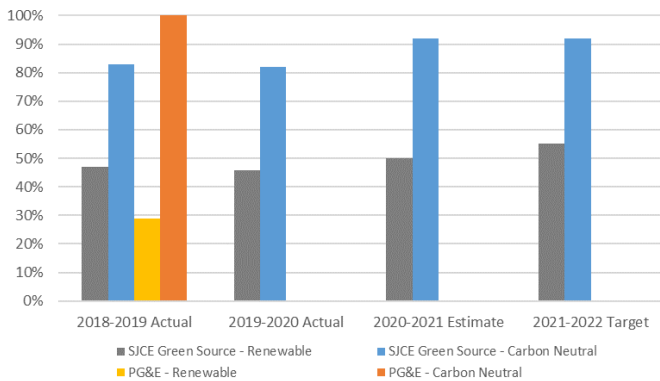
Number of Sanitary Sewer Overflows per 100 Miles of Sanitary Sewer Lines



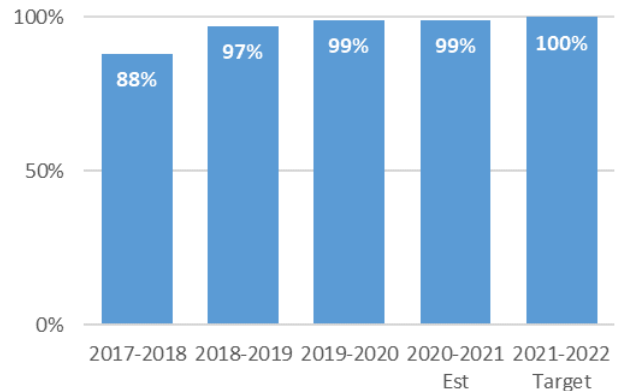
Millions of Gallons of Recycled Water Delivered Annually



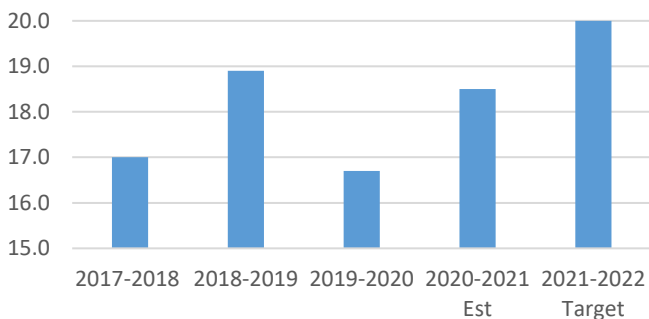
San Jose Clean Energy and PG&E Power Content



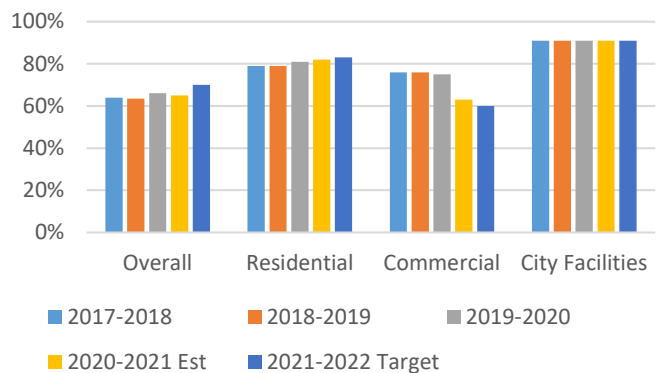
% of Trash Reduced from the Storm Sewer System



Millions of Gallons per Day Diverted from Flow to the Bay for Beneficial Purposes During the Dry Weather Period



% of Waste Diverted from Landfills



City Service Area

Environmental and Utility Services

BUDGET SUMMARY

Expected 2021-2022 Service Delivery

- ❑ **Utility Infrastructure Management** – Build, operate, and maintain the City’s wastewater, stormwater, recycled water, and potable water utility infrastructure to ensure system reliability and public health and safety.
- ❑ **Solid Waste Diversion** – Oversee programs to collect, recycle, and dispose of solid waste to maximize diversion from landfills and protect public health, safety, and the environment.
- ❑ **Promote Climate Action in the Community** – Provide leadership on climate action through policy, measures, or programs that reduces greenhouse gases and ensure a long-term water supply. Support environmentally sustainable practices throughout the community through education, public-private partnerships, and the implementation of the Climate Smart San José plan.
- ❑ **San José Clean Energy** – Continue full operations of the City’s Community Choice Aggregation program with the goals of providing residents and businesses with a choice of electricity providers while progressing towards meeting greenhouse gas emissions reduction goals.

2021-2022 Key Budget Actions

- ❑ **Utility Rates**
 - **Sanitary Sewer Service and Storm Sewer Service Rates** – Maintains current rates in 2021-2022.
 - **Recycle Plus Rates** – A 17% increase in single family dwelling and a 7% increase in multi-family dwelling rates will maintain cost recovery as contract expenditures increase due to annual cost-of-living adjustments and negotiated hauler payments.
 - **Municipal Water** – A 9% adjustment in budgeted revenues to the Municipal Water System in order to offset increased operating costs primarily due to increased costs for wholesale potable water purchases.
- ❑ **Energy Resiliency Strategic Planning** – Adds 1.0 Deputy Director, limit-dated June 30, 2023, to provide strategic leadership in support of the City’s continuing efforts to coordinate and develop a comprehensive package of strategies and programs aimed to improve energy resiliency at critical City-owned and community facilities, areas of new development, and for residents and businesses.
- ❑ **Community Energy Staffing Actions** – Adds 5.0 positions for a variety of strategic roles within the Community Energy Department. These roles will engage in projects ranging from communications and public information to risk management and regulatory compliance.
- ❑ **South Bay Water Recycling System Maintenance and Operations** – Adds one-time non-personal funding of \$3.5 million to support South Bay Water Recycling valve rehabilitation, master metering, and other deferred maintenance projects that are crucial to the recycled water system.
- ❑ **Climate Smart San José Implementation Funding** – Provides \$737,000 in one-time funding for Climate Smart San Jose staffing and non-personal expenses for Climate Smart San Jose implementation.

City Service Area Environmental and Utility Services BUDGET SUMMARY

City Service Area Budget Summary**

	2019-2020 Actuals **	2020-2021 Adopted	2021-2022 Forecast	2021-2022 Adopted
Dollars by Core Service *				
<i>Community Energy Department</i>				
Strategic Support - Other - Environmental & Utility Services	2,699,389	13,716,636	14,172,896	3,953,884
Strategic Support - Environmental & Utility Services	2,983,677	4,615,063	4,793,973	5,978,026
Providing Clean Energy to the Community	288,271,407	276,071,821	276,601,385	289,678,802
Community Energy Customer Support	7,089,268	8,625,390	8,469,209	8,615,583
Community Energy Community Programming	152,443	863,031	722,086	1,521,961
<i>Environmental Services Department</i>				
Strategic Support - Other - Environmental & Utility Services	21,526,801	20,895,032	20,704,504	21,303,018
Strategic Support - Environmental & Utility Services	13,188,178	13,811,838	14,705,927	14,857,352
Recycling & Garbage Services	152,305,465	160,771,020	182,654,596	182,465,177
Potable Water Delivery	42,364,360	43,847,539	46,690,495	46,758,905
Recycled Water Management	10,903,957	8,782,922	10,989,810	14,137,185
Wastewater Management	73,286,722	129,916,324	126,785,899	96,915,851
Stormwater Management	7,474,426	9,299,560	9,585,322	10,012,603
Sustainability and Environmental Health	5,008,997	6,478,383	5,623,358	6,711,358
<i>Transportation Department</i>				
Sanitary Sewer Maintenance	19,386,811	20,679,892	20,570,173	21,744,300
Storm Sewer Maintenance	5,809,691	8,112,059	7,928,316	8,153,103
Strategic Support - Other - Environmental & Utility Services	5,236,673	43,051	0	3,576
Strategic Support - Environmental & Utility Services	2,755,838	2,248,354	2,135,824	2,256,583
Total CSA	\$660,444,103	\$728,777,915	\$753,133,773	\$735,067,267
 Authorized Positions	 753.46	 761.36	 761.36	 769.16

* Fund Balance, Transfers, and Reserves for funds that may be managed by the departments in this CSA have been excluded from this display. This information can be found in Source and Use of Funds Statements elsewhere in this document.

** The positions displayed in the 2019-2020 Actuals column reflect those included in the 2020-2021 Adopted Budget. 2019-2020 Actuals may not subtotal due to rounding.

City Service Area

Environmental and Utility Services

OVERVIEW

Service Delivery Accomplishments

- In September 2019, City Council approved the Green Stormwater Infrastructure Plan that describes how the City will incorporate multi-benefit green infrastructure to improve water quality and supplement current traditional storm drain infrastructure. Staff focused on refining the implementation strategy, developing a public outreach plan, and identifying funding. Staff continued to make progress with the design and construction of the River Oaks project. Public meetings were conducted in March and May 2020, and the project is on track to complete the preliminary design and obtain California Environmental Quality Act clearance and permits this year, with construction expected to start in 2022.
- Climate Smart San José continued its fast-paced building electrification efforts by passing a comprehensive natural gas infrastructure prohibition for nearly every type of new construction; negotiated Electric Vehicle (EV) incentives at multiple San José dealerships and provided EV financial counseling in multiple languages in the transportation sector; began a community co-creation process to create a building decarbonization roadmap; and continued to roll out its Climate Smart Challenge web platform, highlighting over 60 climate positive actions that residents can take to lower their carbon footprint and save money.
- Maintained essential utility services during the Public Safety Power Shutdown (PSPS) and the COVID-19 pandemic shelter-in-place orders. Solid waste contractors developed contingency plans for PSPS and provided uninterrupted service during PSPS and the COVID-19 pandemic; staff scheduling was adjusted for the Municipal Water System, the wastewater and stormwater collection systems and pump stations, and the Plant to also maintain continuous and uninterrupted services during the COVID-19 pandemic.
- In September 2020, San José Clean Energy (SJCE) finalized a 15-year long-term power purchase agreement with Pattern Energy Group LP that will supply SJCE customers with up to approximately 950,000 MWh of renewable energy annually beginning in 2021.
- In January 2021, SJCE executed a Joint Powers Agreement to become a member of a newly formed California Community Power Agency (CC Power) Joint Powers Authority that includes several other CCAs. Joining CC Power provides SJCE the option to participate in larger projects that help ensure grid reliability such as long duration storage projects and could also assist with resource adequacy compliance obligations.

City Service Area

Environmental and Utility Services

OVERVIEW

Service Delivery Environment

- The Plant was reissued a new NPDES permit in April 2020 that governs pollutant removal at the facility with monitoring requirements remaining largely unchanged. Regional watershed permits that apply to all wastewater treatment plants discharging to San Francisco Bay were reissued in July 2019 for nutrients and in December 2017 for PCBs and mercury. Both watershed permits contain new monitoring requirements. The Title V air quality permit from the Bay Area Air Quality Management District was renewed and issued on March 20, 2017.
- The City's sanitary sewer collection system pipes continue to age, and many have exceeded the standard life span for their type of material. The City's 17 sanitary sewer pump stations are an average of 32 years old, while the standard life of a pump station is up to 25 years. As infrastructure ages towards and beyond useful life expectancy, increased operating costs materialize in more frequent monitoring and condition assessment visits as well as maintenance operations.
- On November 19, 2015, the Regional Water Quality Control Board (RWQCB) adopted a new National Pollutant Discharge Elimination System (NPDES) Stormwater Permit (Stormwater Permit) that regulates 76 municipalities in the San Francisco Bay Area. City staff, in conjunction with other regional stormwater agencies, are actively engaged in discussions regarding the requirements of the next Stormwater Permit which is currently in Administrative Draft form and scheduled to become effective July 1, 2022.
- A multi-year master planning effort for the storm sewer system is necessary due to an aging storm sewer infrastructure unsuitable for accommodating planned growth; deteriorating infrastructure, including outfalls; and increased regulatory interest in using "green infrastructure" approaches to address stormwater issues. As infrastructure deteriorates or otherwise does not support growth levels, increased operating costs materialize in more frequent monitoring and condition assessment visits as well as maintenance operations.
- As the default energy provider, SJCE provides customers with the ability to choose their source of energy and sets the generation retail rates for power used in the City. SJCE maintains a high customer participation rate, providing electric generation service to approximately 350,000 customer accounts, representing nearly all of the residents, businesses, and schools in the City.
- California's investor-owned-utilities, like PG&E, use the Power Charge Indifference Adjustment (PCIA) to recover above-market costs associated with their power portfolios. The PCIA fee is charged to all California electricity customers and has increased every year since the launch of SJCE, imposing millions of dollars in added costs to SJCE customers. City staff is engaged in ongoing efforts to reduce the PCIA in order to scale back costs for consumers.

City Service Area

Environmental and Utility Services

OVERVIEW

CSA Priorities/Key Services

- Operate and maintain the City's utilities, reliably and efficiently providing storm sewer, sanitary sewer, wastewater treatment, potable water, San José Clean Energy, and recycled water services.
- Continue to meet NPDES wastewater and Stormwater Permit compliance.
- Continue to implement critical capital improvement projects with an estimated value of \$1.4 billion over a ten-year period to rebuild and rehabilitate infrastructure at the Plant.
- Implement the Green Stormwater Infrastructure Plan to improve water quality.
- Make strategic investment to increase service levels and maintenance activity on the City's Sanitary Sewer Collection System in order to reduce the number and mitigate the impacts of SSOs.
- Develop and advance innovative strategies to create a more energy resilient City and advance community awareness of the Council-approved Climate Smart San José Plan which includes partnering with other agencies to pursue grants to promote a variety of goals such as energy efficiency, building electrification, and clean, renewable energy in the community.

City Service Area Environmental and Utility Services OVERVIEW

Budget Dollars at Work: Performance Goals

OUTCOME 1: RELIABLE UTILITY INFRASTRUCTURE

Strategic Goals	CSA Performance Measures	2019-2020 Actual	2020-2021 Target	2020-2021 Estimate	2021-2022 Target	5-Year Goal
Preserve the City's utility infrastructure to optimize service delivery capabilities	1. % of utility assets in working condition:					
	-SJ/SC Water Pollution Control Plant ¹	97%	95%	99%	95%	95%
	- Storm Sewer Inlets	98%	96%	99%	96%	99%
	- SJ Municipal Water	97%	98%	97%	100%	98%
	- South Bay Water Recycling	100%	100%	100%	100%	90%
	2. Ratio of Municipal Water System average residential water bill to weighted average residential water bill of the San José water retailers ²	89%	<100%	89%	<100%	<100%
Provide for collection, disposal & processing of solid waste	3. # of sanitary sewer overflows per 100 miles of sanitary sewer mains (annualized)	1.6	2.0	2.0	2.0	2.0
	1. % of waste diverted from landfills (State Goal: 50%) ³					
	- Overall ⁴	66%	70%	65%	70%	90%
	- Residential	81%	80%	79%	80%	90%
	- Commercial	75%	60%	63%	60%	75%
	- City Facilities	91%	92%	91%	91%	90%
	# of debris removals that address safety and obstructions in the public right-of-way (Priority 1 illegal dumping resources)	2,405	1,660	1,546	1,975	1,665
	Cubic yards of debris removed (Priority 1 illegal dumping requests)	4,925	2,880	2,681	3,803	2,995
	# of debris removals that reduce neighborhood blight (Priority 2 illegal dumping requests)	17,398	26,000	19,000	20,000	30,000

¹ The % of utility assets in working condition for the Plant is calculated based on an average number of hours critical equipment is unavailable during the year due to repairs.

² Other San José water retailers include San José Water Company and Great Oaks Water Company.

³ To continue increasing solid waste diversion and support the Council-approved Zero Waste Strategic Plan, new solid waste management infrastructure and programs will be necessary in the coming decade. The private sector has invested over \$100 million in recycling facilities in San José since 2007 and this level of investment will need to continue.

⁴ The measurement for the Overall diversion category is based upon the State's guidelines, which use a per-capita standard. Moreover, the Overall measurement for the City includes solid-waste streams outside of the Department's collection, and includes construction, demolition, and self-haul categories. The remaining three categories are those directly within the City's collection process, and diversion in these are measured by total collected versus total recycled.

City Service Area Environmental and Utility Services OVERVIEW

Budget Dollars at Work: Performance Goals

OUTCOME 2: HEALTHY STREAMS, RIVERS, MARSH, AND BAY

Strategic Goals	CSA Performance Measures	2019-2020 Actual	2020-2021 Target	2020-2021 Estimate	2021-2022 Target	5-Year Goal
Manage stormwater for suitable discharge into creeks, rivers, and the Bay	1. % of residents surveyed who understand that any substances that get washed down the street end up in the Bay without treatment through the storm drain system ¹	77%	N/A ¹	N/A ¹	70%	70%
	2. % of trash reduced from the storm sewer system.	99.4%	96.8%	99.4%	100%	100% ²
Manage wastewater for suitable discharge into the Bay	1. Mgd discharged to Bay during the average dry weather effluent flows (ADWEF) season ³	79.3 mgd	<120 mgd	75 mgd	<120 mgd	<120 mgd
	2. % of time pollutant discharge requirements for wastewater NPDES permit are met or surpassed	100%	100%	100%	100%	100%
Develop, operate, and maintain a recycled water system that reduces effluent to the Bay	1. Millions of gallons per day diverted from flow to the Bay for beneficial purposes during the dry weather period ⁴	16.7 mgd	18.5 mgd	18.5 mgd	20.0 mgd	20.0 mgd

¹ Data for this measure is collected through a biennial survey, last conducted by ESD in February 2020. The next survey is planned to be completed in 2021-2022, and those results will be reported in the 2022-2023 Proposed Budget.

² The current Stormwater Permit refers to a goal of 100% trash load reduction or no adverse impact to receiving waters from trash by July 1, 2022.

³ In accordance with the NPDES permit, the maximum effluent to the Bay during the dry weather period is restricted to 120 mgd. These measures continue to be below this trigger point, which is set by the State to protect wildlife habitat. The Plant continues to consistently meet permit discharge requirements.

⁴ Dry weather period is defined as the lowest continuous three months average rainfall between May and October, which during the fiscal year report period is July to September.

OUTCOME 3: “CLEAN AND SUSTAINABLE” AIR, LAND, AND ENERGY

Strategic Goals	CSA Performance Measures	2019-2020 Actual	2020-2021 Target	2020-2021 Estimate	2021-2022 Target	5-Year Goal
Reduce, reuse, and recycle solid waste at home, work, and play ¹	1. % of residents rating the City’s job of providing information on how to recycle as good or excellent ²	76%	N/A ²	N/A ²	83%	75%
Promote energy efficiency and clean, renewable energy in the community	2. Annual reduction in citywide greenhouse gas (GHG) emissions ³	N/A ³	5,551,782	N/A ³	5,543,316	N/A ⁴

¹ San José has one of the highest diversion rates among large cities in the country. The structure of the City’s commercial and residential programs facilitate effective sorting of garbage and recycling by residents and businesses. Customer outreach to neighborhoods, schools, and businesses will continue to help reduce recycle cart contamination and blight, as well as account for commercial customers.

² Data for this measure is collected through a biennial survey, last conducted by ESD in February 2020. The next survey is planned to be completed in 2021-2022, and those results will be reported in the 2022-2023 Proposed Budget.

³ Due to limited staffing and budget constraints, the Climate Smart program can only complete community-wide GHG inventories once every other calendar year.

⁴ The data collection methodology for this measure is under review and will be re-evaluated and refined in the next budget reporting phase in 2022-2023. Figures above are Annual Citywide GHG Emissions compared to Annual Reduction in Citywide GHG Emissions and measured in Metric Tons Carbon Dioxide Equivalent (MTCO_{2e}).

City Service Area Environmental and Utility Services OVERVIEW

Budget Dollars at Work: Performance Goals

OUTCOME 4: SAFE, RELIABLE, AND SUFFICIENT WATER SUPPLY

Strategic Goals	CSA Performance Measures	2019-2020 Actual	2020-2021 Target	2020-2021 Estimate	2021-2022 Target	5-Year Goal
Ensure availability of future water supplies.	1. Mgd of water conserved and recycled ^{1/2}	79	86	81	84	89
	2. Millions of gallons of recycled water delivered annually	3,990	3,950	3,637	3,950	4,500
Public is educated regarding water conservation, and the safe and appropriate use of recycled water and water resources	1. % of Municipal Water System customers demonstrating water conservation knowledge ³	91%	N/A ³	N/A ³	95%	95%
	2. % of Municipal Water System customers with water saving fixtures in their home or property ³	91%	N/A ³	N/A ³	95%	95%
	3. % of residents who are in favor of using recycled water ^{2/3}	82%	N/A ³	N/A ³	85%	95%

¹ The South Bay Water Recycling Program (SBWR) delivers more than 10,000 acre feet per year of recycled water from the Plant to over 700 customers for reuse in irrigation, industrial cooling, and other beneficial purposes. SBWR supplies more than 75% of all recycled water used in Santa Clara County.

² Starting in 2013-2014, data reported is based on County-wide water savings from both indoor and outdoor water conservation programs, passive water savings (from behavioral, policies, and code changes), and recycled water use. The County-wide data is collected and provided by SCVWD.

³ Data for this measure is collected through a biennial survey, last conducted by ESD in February 2020. The next survey is planned to be completed in 2021-2022, and those results will be reported in the 2022-2023 Proposed Budget.

City Service Area
Environmental and Utility Services
ADOPTED BUDGET CHANGES

Adopted Changes	Positions	All Funds (\$)	General Fund (\$)
COMMUNITY ENERGY DEPARTMENT			
• New Franchise Fee Agreement Review		300,000	300,000
• Energy Resiliency Strategic Planning	1.00	227,387	0
• Advancing Community Energy Community Programs	1.00	214,875	0
• Community Energy Risk Management and Contract Oversight Staffing	1.00	172,086	0
• Community Energy Legislative and Regulatory Compliance Staffing	1.00	151,812	0
• Community Energy Customer Outreach Staffing	1.00	146,374	0
• Community Energy Fiscal Support Staffing	1.00	134,580	0
<i>Subtotal</i>	6.00	1,347,114	300,000
ENVIRONMENTAL SERVICES DEPARTMENT			
• South Bay Water Recycling System Maintenance and Operations		3,500,000	0
• Regional Wastewater Facility Chemical Supplies		1,465,000	0
• Environmental Enforcement Data Management System Replacement		750,000	0
• Watershed Protection Division Laboratory Reorganization	2.00	434,784	0
• Solid Waste Enforcement and Compliance Staffing	2.00	367,895	0
• Geographic Information System Data Migration and Management Support		300,000	0
• Regional Wastewater Facility Process Control Staffing	2.00	260,540	0
• Regional Wastewater Facility Capital Improvement Program (Program Controls Lead) Staffing	1.00	185,217	0
• Employee Services Recruitment Staffing	1.00	151,425	4,545
• Regional Wastewater Facility Capital Improvement Program (Project Delivery Support) Staffing	0.00	49,524	0
• Environmental Health and Safety Group Electric Vehicle		46,000	0
• Climate Smart San José Plan Implementation	2.00	0	0
• Watershed Protection Stormwater Management Staffing	0.00	0	(27,764)
• BeautifySJ Management Consolidation and Operations	(8.00)	(1,383,916)	(1,361,686)
• City Facilities Solid Waste		(50,000)	(50,000)
• Reprographics Contractual Services Savings		(45,693)	0
• Rebudget: Laboratory Information Management System Replacement		700,000	0
• Rebudget: Biosolids Management Transition Planning and Implementation		380,000	0
• Rebudget: Zero Waste Strategic Plan Revision and Climate Smart Addition		300,000	0
• Rebudget: Water Pollution Control Plant Substation Maintenance Services		290,000	0

City Service Area
Environmental and Utility Services
ADOPTED BUDGET CHANGES

Adopted Changes	Positions	All Funds (\$)	General Fund (\$)
ENVIRONMENTAL SERVICES DEPARTMENT (CONT'D)			
• Rebudget: Regional Wastewater Facility Radio Systems Upgrade		234,291	0
• Rebudget: Legacy Lagoons Biosolids Remediation		190,000	0
• Rebudget: Waste Characterization Studies and Customer Satisfaction Survey		150,000	0
• Rebudget: Muni Water Fleet - Specialized Utility Truck		73,228	0
• Rebudget: Coyote Valley Groundwater Study		55,000	55,000
• Rebudget: Nine Par Groundwater		50,000	0
<i>Subtotal</i>	2.00	8,453,295	(1,379,905)

Adopted Changes	Positions	All Funds (\$)	General Fund (\$)
TRANSPORTATION DEPARTMENT			
• Sanitary Sewer Maintenance Equipment		625,000	0
• Sanitary and Storm Sewer Staffing	0.00	28,575	0
• Reprographics Contractual Services Savings		(30,528)	(23,715)
• Pavement Maintenance Staffing	(0.20)	(22,374)	0
• Rebudget: Storm Sewer Maintenance Vehicles		282,000	0
• Rebudget: Sanitary Sewer Maintenance Vehicles		267,000	0
• Rebudget: Sewer Lateral Grant		200,000	0
• Rebudget: Computerized Maintenance Management System Upgrade		170,000	0
<i>Subtotal</i>	(0.20)	1,519,673	(23,715)
<i>Subtotal Departments</i>	7.80	11,320,082	(1,103,620)

CITY-WIDE EXPENSES

ENVIRONMENTAL SERVICES DEPARTMENT

• Climate Smart San José Plan Implementation		737,000	737,000
<i>Subtotal Other Changes</i>	0.00	737,000	737,000
Total Adopted Budget Changes	7.80	12,057,082	(366,620)

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