

ENVIRONMENTAL SERVICES

The mission of the Environmental Services Department is to deliver world-class utility services and programs to improve our health, environment, and economy.

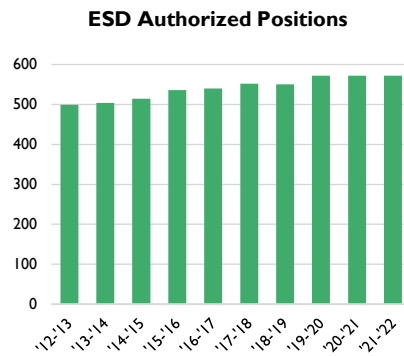
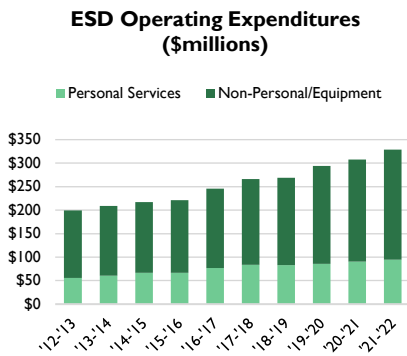
ENVIRONMENTAL SERVICES

The Environmental Services Department (ESD) provides recycling and garbage services, wastewater treatment, potable water delivery, stormwater management, and recycled water management. ESD also manages programs to conserve water and energy resources and achieve other environmental goals.

ESD coordinates Citywide efforts to protect and conserve air, land, water, and energy resources through policy development, education, and grant-seeking. This work is guided by the City's Climate Smart San José Plan and regulatory requirements.

Most ESD revenue comes from various customer fees and charges; approximately \$5 million of its budget, representing 1 percent of its operating expenditures, came from the General Fund in 2021-22.

In 2021-22, ESD's operating expenditures totaled \$328.5 million, including personal and non-personal expenditures. In addition, the Department was responsible for \$1.8 million in Citywide expenditures. Staffing in 2021-22 included 572 full-time equivalent positions, representing a 15 percent increase from ten years ago.



COVID-19 RESPONSE

Since 2020, ESD's Environmental Laboratory in the Watershed Protection Division has been partnering with Stanford University to detect SARS CoV-2, the virus that causes COVID-19, in wastewater samples collected from the San José-Santa Clara Regional Wastewater Facility. This research can be used to track community infection rates and help health officials in responding to diseases like COVID-19. More information on this research can be found on wbe.stanford.edu.

Climate Smart San José

On February 27, 2018, the San José City Council adopted the [Climate Smart San José Plan](#). The plan is a continuation of the 2007 San José Green Vision, and represents San José's commitment to meeting the greenhouse gas (GHG) emission reduction targets of the Paris Climate Agreement.

Climate Smart San José lays out eight goals, focusing on reducing air pollution, saving water, and creating a stronger and healthier community.

In November 2021, the San José City Council voted unanimously to adopt the goal of reaching net-zero greenhouse gas emissions by 2030, joining several cities across the nation. In doing so, the City announced its intention to offset the total amount of carbon dioxide it emits into the atmosphere through means such as using energy from carbon-free sources and encouraging more residents to drive electric vehicles.

Find more information on the City's [Climate Smart Dashboard](#).

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RECYCLING & GARBAGE SERVICES

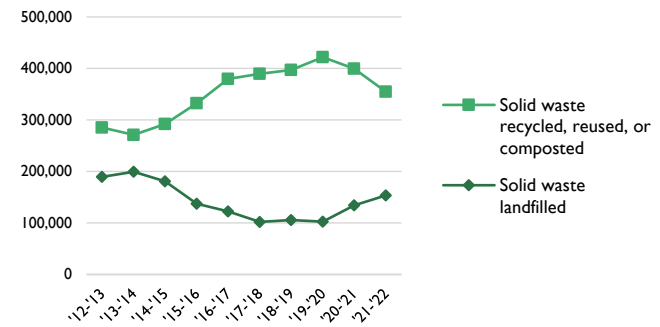
ESD provides recycling and garbage services to over 334,000 residential households in San José through contracted service providers. ESD also provides waste management programs and services for San José businesses, large events, public areas, and City facilities. The Department manages agreements for commercial collection and recyclables processing, organics processing, and residential and construction waste collection services in the city.

The state monitors each jurisdiction’s “per capita disposal rate” and requires that 50 percent of solid waste be diverted* from landfills. The Department of Resources Recycling and Recovery (CalRecycle) has taken a statewide approach to decrease California's reliance on landfills. For 2021-22, City Council approved rate increases of up to 17 percent for recycling and garbage services.

Since 2007, San José has diverted at least 60 percent of waste, including 63 percent in 2021-22, despite increases in the amount of residential waste landfilled. In 2021-22, a change in methodology contributed to the significant drop, but the Department reports it will provide a more accurate measure of solid waste diversion going forward. Disruptions in the recyclables market have necessitated the City expand its efforts to meet current and future state diversion requirements. This includes outreach to inform residents on the importance of eliminating liquids and foods from recycling bins, and exploring infrastructure and partnership opportunities to manage recyclables domestically.

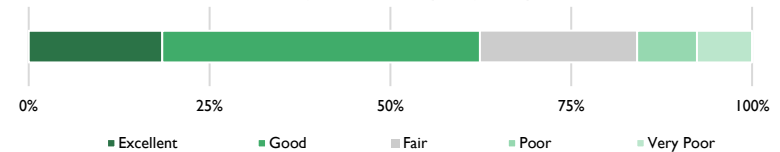
* “Diversion” refers to any combination of waste prevention, recycling, reuse, and composting activities that reduces waste disposed at landfills. (Source: CA Integrated Waste Management Board)

Tons of Residential Solid Waste Recycled vs. Landfilled

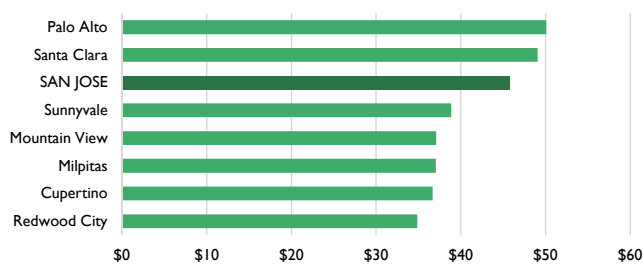


Note: Methodology changed in 2021 based on a new contract.

Community Survey 2022
Residents' ratings of trash, recycling, and yard waste services

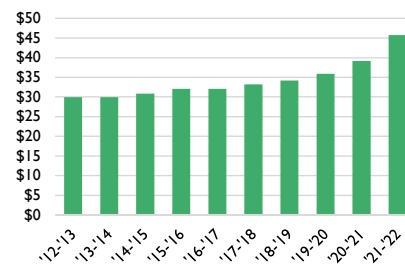


Comparison of Monthly Residential Garbage and Recycling Rates (2021-22)



Sources: Rates listed on local government websites for municipalities provided.
Note: Rates listed for all municipalities are for the 32-gallon cart size, except for Milpitas, which uses the 26-gallon bin.

San José Garbage and Recycling Monthly Bills (32-gallon cart)



What Can Be Recycled

Materials such as plastics, paper, metal, and glass can be placed in the recycling bin. Recycling is collected weekly from residential homes, mobile home parks, and apartments and condos. You can find out more about what specific materials can be placed in the recycling bin at: www.sanjoserrecycles.org/what-to-do/curbside/.

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STORMWATER MANAGEMENT

ESD manages regulatory programs, initiatives, and activities to prevent pollution from entering the storm sewer system and waterways.* The Department of Transportation (DOT) operates the City’s storm drains and storm sewer system, conveying rainwater into creeks and eventually the South San Francisco Bay (see *Transportation chapter*).

ESD’s programs protect water quality and the health of the South Bay watershed and the San Francisco Bay. One such program is the litter/creek cleanup program. Overall, 1,555 creek cleanup events were held and about 655 tons of trash were removed in 2021-22. Most of the cleanups in 2021-22 were performed as part of the City’s BeautifySJ program, which as of 2021-22, is led by the Parks, Recreation and Neighborhood Services Department. The City’s creek cleanup partners, which include Keep Coyote Creek Beautiful and South Bay Clean Creeks Coalition, conducted the remaining creek cleanups.

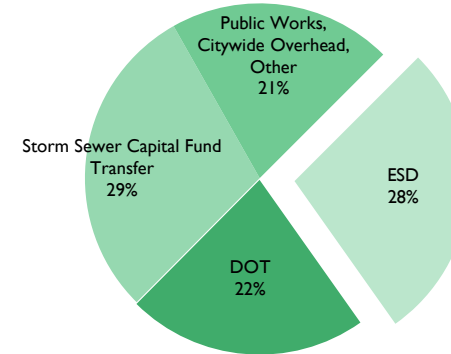
ESD estimates that the City has reduced the amount of trash discharged from the stormwater collection system into receiving waters by 100 percent since 2009 and met the July 2022 goal of 100 percent.**

The annual storm sewer fee for a single-family residence in 2021-22 was \$94.44. The annual fee has remained the same since 2011-12.

* These programs and activities are regulated by a state permit for municipal storm water systems. For more information, see the [California Water Boards’ webpage](#) on the subject.

** Calculation is based on a method specified in the Municipal Regional Stormwater NPDES permit; the regional permit is due to be reissued in 2022-23.

Breakdown of Storm Sewer Operating Fund Budgeted Expenditures

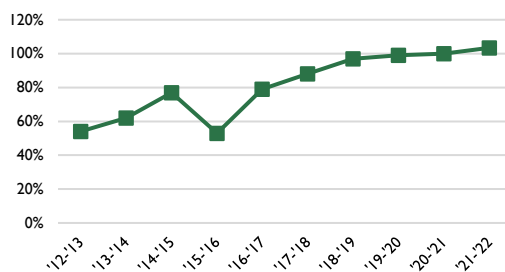


Source: 2021-22 Adopted Operating Budget

Baykeeper Consent Decree

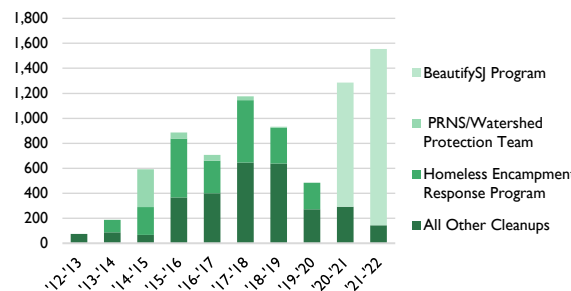
In June 2016, the City executed a consent decree to settle a lawsuit filed by the San Francisco Baykeeper. The consent decree stipulates that the City appropriate \$100 million over a ten-year period to implement projects intended to reduce the flow of pollutants from the City’s urban areas to receiving waters (e.g., green infrastructure).

Citywide Trash Load Reduction Rate



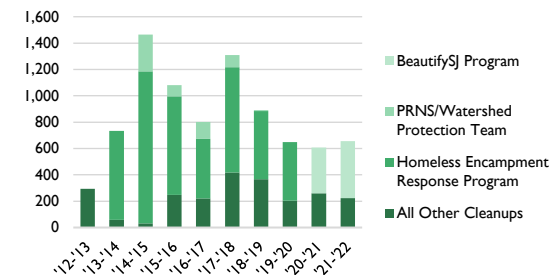
Note: Calculation is based on a method specified in the Municipal Regional Stormwater NPDES permit; the regional permit is due to be reissued in 2022-23.

Number of Creek Cleanups



Note: The City’s creek cleanups are now performed as part of the BeautifySJ Program. The Watershed Protection Team was dismantled in 2018-19 while the Homeless Response Team stopped performing encampment creek cleanups in 2019-20.

Tons of Litter Collected at Creek Cleanups



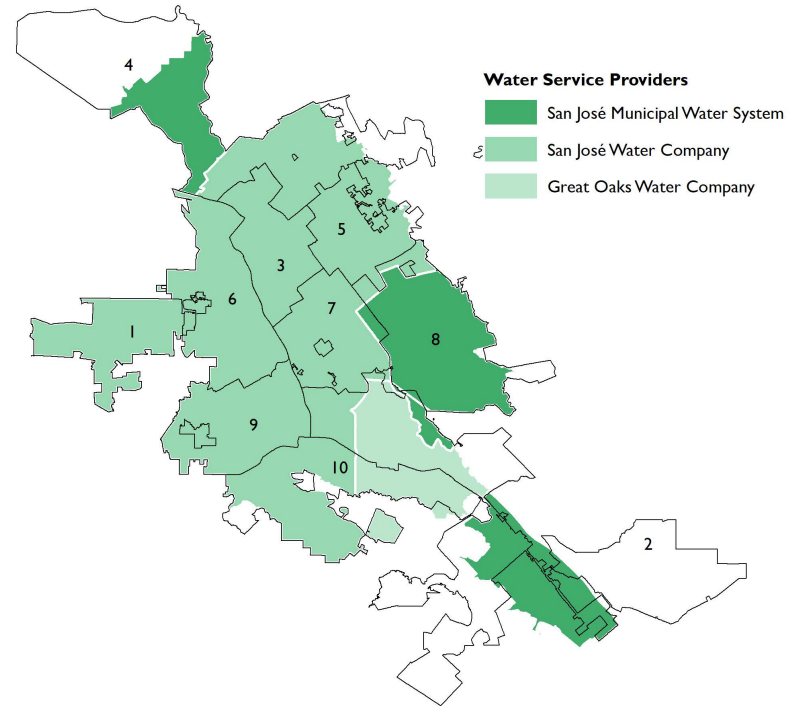
RETAIL WATER DELIVERY

ESD operates and maintains the San José Municipal Water System (Muni Water), which serves about 27,000 customers in North San José, Alviso, Evergreen, Edenvale, and Coyote Valley. Other local San José water retailers include Great Oaks Water Company (which serves Blossom Valley, Santa Teresa, Edenvale, Coyote Valley, and Almaden Valley) and the San José Water Company (which serves Downtown, West San José, Alum Rock, and Almaden Valley, among others).

The average monthly water bill for Muni Water customers was \$97.95. Muni Water rates have increased in recent years due to higher wholesale water rates and other inflationary costs; the increase is consistent with those of other San José retail water providers.

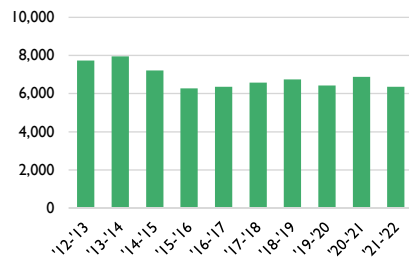
In 2021-22, Muni Water delivered 6,357 million gallons of water to its customers, down 18 percent from ten years ago. Muni Water met federal water quality standards in 99.6 percent of water samples taken (target: 100%).*

* For more information on water quality, see the [2021 Water Quality Report](#).

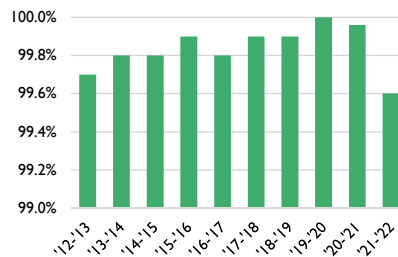


Note: According to ESD, areas in white are served by private well systems.
Source: Auditor map based on Environmental Services Department data

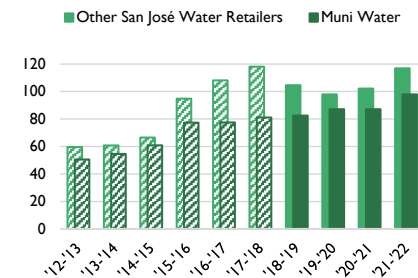
Millions of Gallons of Water Delivered to Muni Water Customers



% of Water Samples Meeting State and Federal Water Quality Standards



Comparison of Monthly Residential Water Bills



Note: Rates are based on water usage of 13 hundred cubic feet (HCF) whereas those prior to 2018-19 are based on 15 HCF; rates for 'Other San José Water Retailers' in 2018-19 are estimates.

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WASTEWATER TREATMENT

ESD manages and operates the San José-Santa Clara Regional Wastewater Facility – the largest advanced wastewater treatment facility in the Western United States. The facility is co-owned with the City of Santa Clara, and provides wastewater treatment for approximately 1.4 million residents in San José and surrounding communities. DOT maintains the City’s sanitary sewer system (see *Transportation chapter*) that flows to the facility. ESD also manages pretreatment programs to control for pollutants at their source. ESD wastewater treatment operations account for the largest share of ESD employees: 322 full-time budgeted positions out of 572 total.

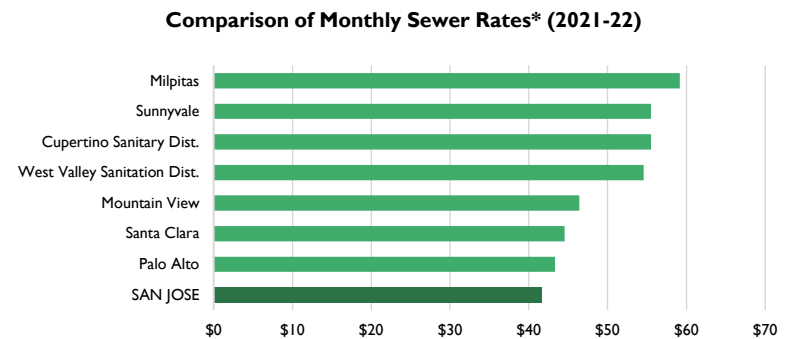
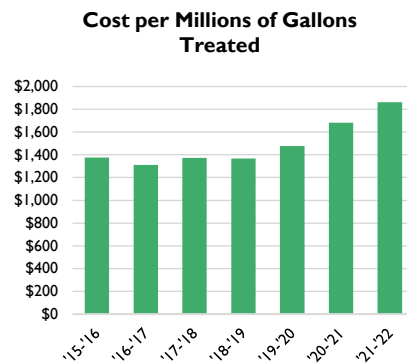
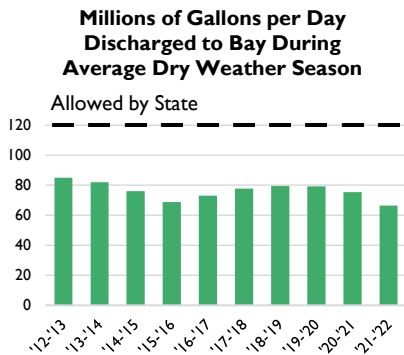
The Wastewater Facility continues to meet the Regional Water Quality Control Board’s permit requirements for water discharged into the San Francisco Bay. In 2021-22, pollutant discharge requirements were met or surpassed 100 percent of the time.

The cost per million gallons treated was \$1,862 in 2021-22. Aging infrastructure at the Facility has required increased maintenance and capital costs. In accordance with the Plant Master Plan adopted in 2013, the City is moving forward with over \$2 billion in long-term capital improvement projects to upgrade and rebuild the facility over the next 30 years.*



Aerial photo of the San José-Santa Clara Regional Wastewater Facility
Source: Environmental Services Department

* For more information, see the [Capital Improvement Program webpage](#).



Note: Based on [2021 Annual Self-Monitoring Report](#). In 2021, the dry weather period was from June to August.

* Sewer rates pay for costs of the sewer system as well as wastewater treatment. Sources: Rates listed on local government websites for municipalities provided.

RECYCLED WATER

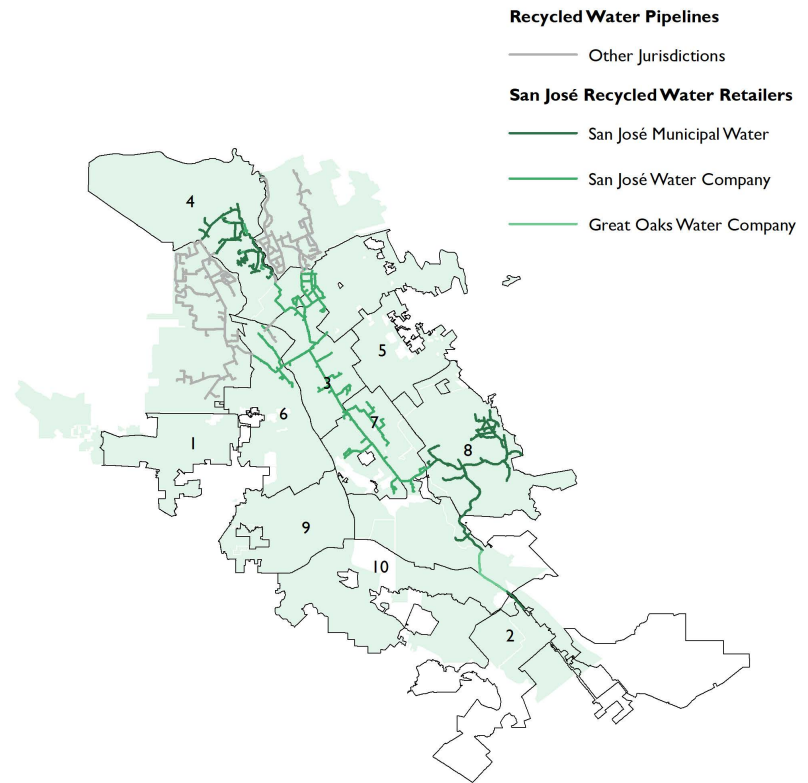
The South Bay Water Recycling System (SBWR) includes over 153 miles of pipeline that provides recycled water for parks, golf courses, school grounds, and commercial landscapes. In addition, SBWR also provides recycled water for agricultural, commercial, and industrial uses including cooling towers, power generation plants, and data centers, among others. SBWR currently provides recycled water to the cities of San José, Santa Clara, and Milpitas.

To provide SBWR customers higher quality recycled water, the cities of San José and Santa Clara partner with the Santa Clara Valley Water District to produce up to 8 million gallons per day of highly purified water at the Silicon Valley Advanced Water Purification Center. The purified water is mixed with the recycled water produced by the Regional Wastewater Facility.

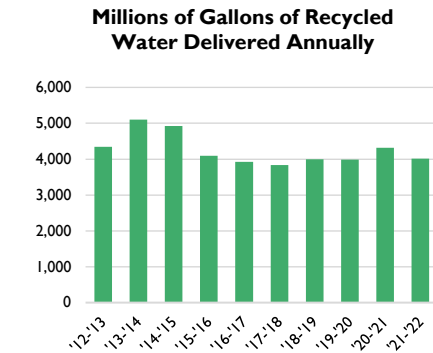
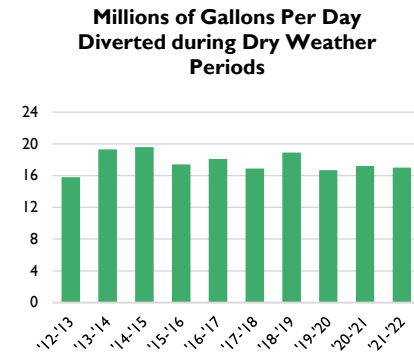
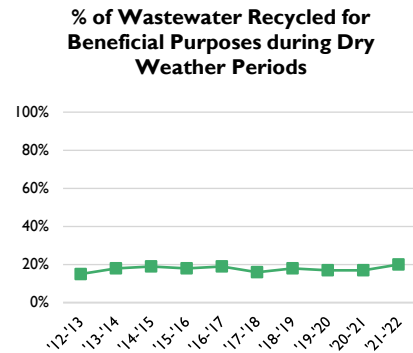
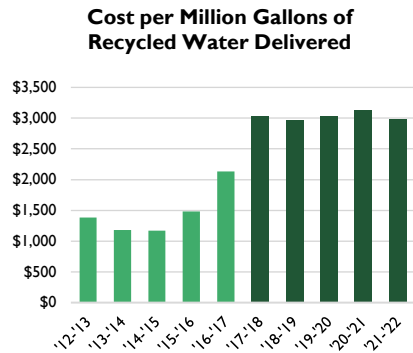
In 2021-22, SBWR delivered about 4 billion gallons of recycled water to 989 customers, who paid \$3.40* per hundred cubic feet of water. SBWR met recycled water quality standards 100 percent of the time during the same period.

The cost per million gallons of recycled water delivered was \$2,980 in 2021-22.

* This rate is for City of San José Municipal Water customers; other SBWR provider rates may vary; in 2021-22, SBWR offered the discounted wholesale rate of \$3.20 per hundred cubic feet to water recycling retailers.



Source: Auditor map based on Environmental Services Department data



Note: Figures for 2017-18 and later are not comparable to those of prior fiscal years due to a change in accounting methodology.

