

# 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:*

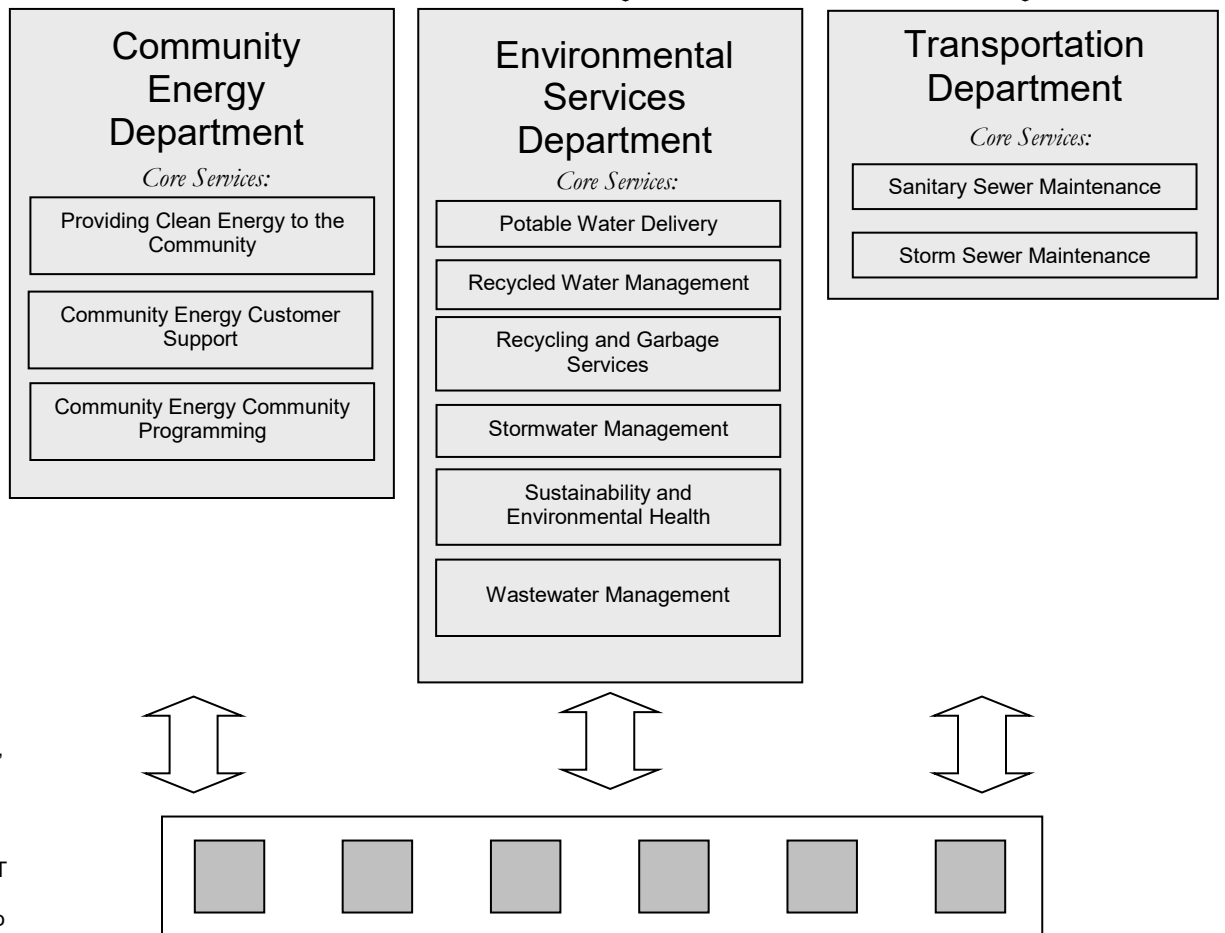
- Reliable Utility Infrastructure
- Healthy Streams, Rivers, Marsh, and Bay
- "Clean and Sustainable" Air, Land, and Energy
- Safe, Reliable, and Sufficient Water Supply

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

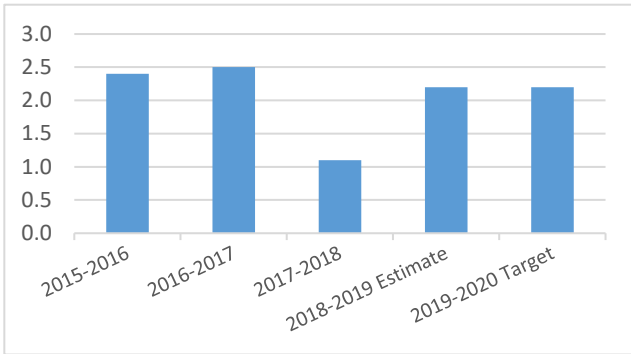
**CORE SERVICES**  
 Primary deliverables of the organization

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

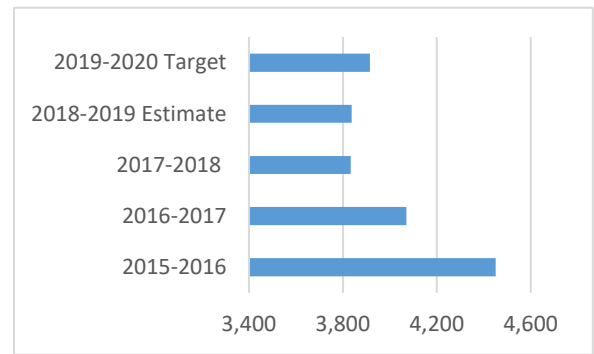
**STRATEGIC SUPPORT**  
 Organization-wide guidance and support to enable direct service delivery



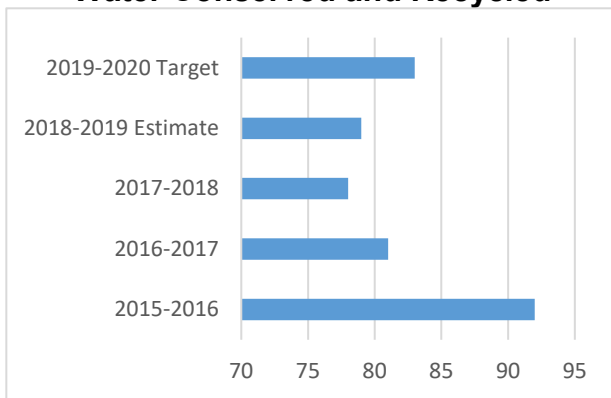
**Number of Sanitary Sewer Overflows per 100 Miles of Sanitary Sewer Lines**



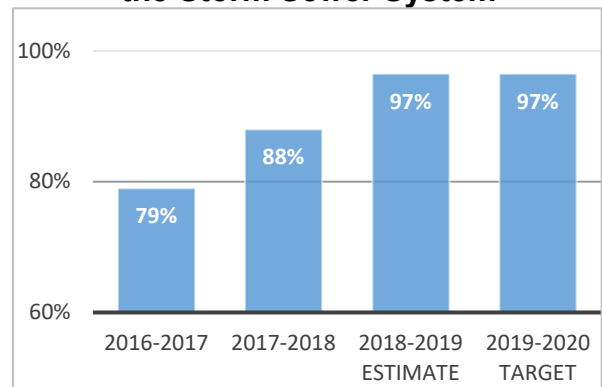
**Millions of Gallons of Recycled Water Delivered Annually**



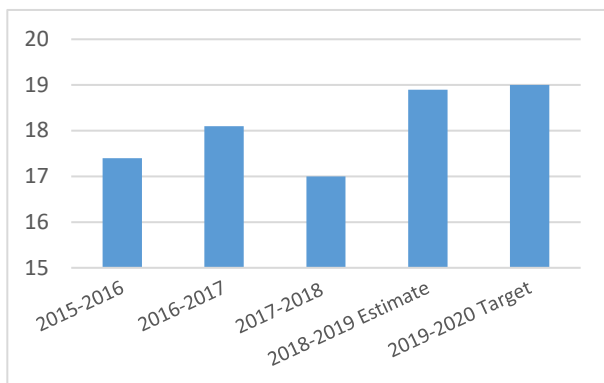
**Millions of Gallons per Day of Water Conserved and Recycled**



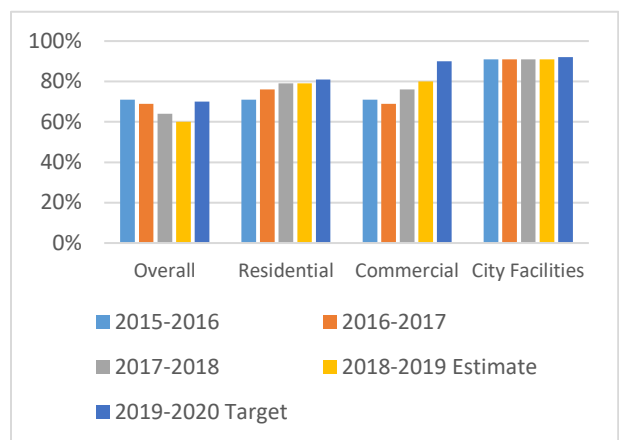
**% of Trash Reduced from the Storm Sewer System**



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



**% of Waste Diverted from Landfills**



## **Environmental and Utility Services**

### **Expected 2019-2020 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.
- ❑ **Pollution Prevention, Water Quality, and Habitat Protection** – Promote the health of the environment and South Bay Watershed through collection, treatment, and management of wastewater and stormwater runoff.
- ❑ **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.
- ❑ **Illegal Dumping Response** – Enhance the City’s illegal dumping response and prevention efforts to increase efficiency and effectiveness of city-wide clean-up efforts and protect environmental health.
- ❑ **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** – Implement and operate full operations of the San José Clean Energy program, including the final phase for residential solar customers scheduled to launch in February 2020.
- ❑ **Renewable and Greenhouse Gas Free Resources** – Provide cost effective electric generation rates by procuring cleaner electric supplies and offer customers at least one power mix option at ten percent or more renewables than PG&E and offer at least one power mix option that is 100% greenhouse gas free.
- ❑ **Renewable Energy, Electrification, and Energy Efficiency Programs** – Develop San José specific renewable energy, electrification, and energy efficiency programs that maintain and expand utility programs for low-income customers, drive further greenhouse gas reduction, and support local renewable energy projects.
- ❑ **Customer Service** – Explore the efficient use of technology while providing excellent customer service to City residents and businesses.

### **2019-2020 Key Budget Actions**

- ❑ **Sewer Service Rates** – The Sewer Service and Use Charge Fund is proposed to increase by up to 3.0% in 2019-2020 to allow for the continued rehabilitation and replacement of critical infrastructure and equipment at the Water Pollution Control Plant (Plant) and the sanitary sewer collection system.
- ❑ **Storm Sewer Service Rates** – No increases to the Storm Sewer Service Charge rates are proposed for 2019-2020. Storm Sewer Service Charge rates will be reassessed annually to ensure adequate resources to comply with the Municipal Regional Stormwater Permit.
- ❑ **Water Rates** – This 2019-2020 Proposed Budget assumes a 6.7% adjustment in budgeted revenues to the Municipal Water System in order to offset increased operating costs.
- ❑ **Recycle Plus Rates** – A 5.0% increase in single family dwelling and multi-family dwelling rates is proposed to address cost increases.

## **Environmental and Utility Services**

### **2019-2020 Key Budget Actions**

- ❑ **Sewer Emergency Repairs** – Adds ongoing overtime and non-personal/equipment funding to support the completion of sewer repair work associated with the expanded pavement maintenance program. The funding will allow the Department of Transportation (DOT) to effectively coordinate sanitary sewer repairs prior to the implementation of pavement projects. Over the next eight years, an estimated 75 miles of streets are expected to be resurfaced annually throughout the City and this funding allocation will help to ensure needed sewer repairs are completed prior to street repaving thereby protecting the City’s pavement investment and maximizing the useful life of the new pavement.
- ❑ **Street Sweeping Program Augmentation** – Adds 1.0 Maintenance Worker I/II and associated non-personal/equipment to improve street sweeping debris management as recommended by the City Auditor.
- ❑ **Water Pollution Control Plant Staffing** – Adds 1.0 Principal Engineer, 6.0 Wastewater Operator, and 2.0 Industrial Electrician positions to support the implementation of the Water Pollution Control Plant Capital Improvement Program (CIP). The Principal Engineer would provide the necessary managerial oversight of several liquids process capital projects while the Wastewater Operator and Industrial Electrician positions would support key operations and maintenance coordination activities on a range of active CIP projects currently underway at the Plant.
- ❑ **Municipal Water Operations and Maintenance Staffing** – Adds 3.0 Water Systems Operator and 2.0 Assistant Water Systems Operator positions and associated non-personal/equipment funding to effectively address more stringent regulatory requirements pertaining to water quality and maintenance of water system infrastructure.
- ❑ **RAPID Program Augmentation** – Adds 1.0 Senior Maintenance Worker and 2.0 Maintenance Worker I/II positions, along with associated non-personal/equipment funding, to support the City’s efforts to prevent and respond to illegal dumping by expanding existing efforts to quickly and effectively respond to illegal dumping requests and enhance waste diversion efforts.
- ❑ **Climate Smart San José** – Adds staffing and non-personal/equipment funding to support the City’s continuing efforts to advance the implementation of Climate Smart San José initiatives. By leveraging grant funds that have already been secured from other sources such as Bloomberg Philanthropies, Microsoft, and Pacific Gas & Electric Company, the City will have the opportunity to pilot and demonstrate greenhouse gas reducing strategies on a national stage.
- ❑ **Public Litter Can Expansion** – Allocates funds to supplement existing public litter can program by installing, servicing, and maintaining an additional 500 public litter cans (58 already installed) in heavily traveled pedestrian areas of the city, with a focus on areas that generate a high volume of “take-out” service in business districts.
- ❑ **Digital Customer Platform** – Adds funds to implement a digital customer platform for Recycle Plus customers that will simplify the customer experience and offer the option to submit service requests through the My San José resident reporting app or other appropriate digital platform.
- ❑ **Community Energy Contract Management** – Adds 1.0 Division Manager, 1.0 Analyst, and 1.0 Senior Account Clerk positions and associated non-personal/equipment funding to support, manage, track, and comply with the Community Energy Department’s Power Supply contracts totaling approximately \$240 million per year.
- ❑ **Community Energy Administrative Support** – Adds 1.0 Principal Office Specialist and non-personal/equipment funding to provide administrative support for two Deputy Directors and two Division Managers. In addition, non-personal/equipment funding will support third-party billing reconciliation and accounting services for more than 300,000 accounts, as well as fund subscriptions and licenses to a web-based, commercially available Customer Relationship Management tool and Utility Data Management service to improve customer services by accurately providing PG&E data to customers.

*City Service Area*  
**Environmental and Utility Services**  
**BUDGET SUMMARY**

**City Service Area Budget Summary\*\***

	<b>2017-2018 Actuals **</b>	<b>2018-2019 Adopted</b>	<b>2019-2020 Forecast</b>	<b>2019-2020 Proposed</b>
<b>Dollars by Core Service *</b>				
<i>Community Energy Department</i>				
Strategic Support - Other - Environmental & Utility Services	0	44,055,000	44,904,472	14,121,686
Strategic Support - Environmental & Utility Services	864,199	2,694,876	2,328,540	2,891,979
Providing Clean Energy to the Community	94,386	74,121,312	242,235,836	283,366,269
Community Energy Customer Support	22,731	4,440,363	7,584,662	7,827,225
Community Energy Community Programming	0	150,000	0	150,000
<i>Environmental Services Department</i>				
Strategic Support - Other - Environmental & Utility Services	15,326,245	20,986,750	19,321,177	19,561,747
Strategic Support - Environmental & Utility Services	14,753,880	14,843,564	14,838,738	15,996,663
Recycling & Garbage Services	125,252,008	134,147,580	151,769,814	153,955,688
Potable Water Delivery	39,013,256	42,595,810	43,166,117	44,007,889
Recycled Water Management	8,068,649	7,736,573	8,988,621	9,488,621
Wastewater Management	77,168,902	83,801,610	83,533,358	86,069,119
Stormwater Management	7,980,432	9,011,264	9,457,792	9,457,792
Sustainability and Environmental Health	2,518,404	1,579,917	5,169,229	7,110,991
<i>Transportation Department</i>				
Sanitary Sewer Maintenance	16,881,612	18,026,444	18,582,140	19,738,449
Storm Sewer Maintenance	7,411,990	7,935,833	7,441,055	7,740,853
Strategic Support - Other - Environmental & Utility Services	2,051,409	5,939,265	1,313,580	1,340,381
Strategic Support - Environmental & Utility Services	1,383,114	1,260,851	1,358,707	1,374,595
<b>Total CSA</b>	<b>\$318,791,217</b>	<b>\$473,327,012</b>	<b>\$661,993,838</b>	<b>\$684,199,947</b>
<b>Authorized Positions</b>	<b>703.06</b>	<b>724.46</b>	<b>725.96</b>	<b>752.46</b>

\* 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 2017-2018 Actuals column reflect those included in the 2017-2018 Adopted Budget. 2017-2018 Actuals may not subtotal due to rounding.

### ***Service Delivery Accomplishments***

- DOT continued to work to reduce the number and impacts of Sanitary Sewer Overflows (SSOs). In 2018-2019, DOT proactively cleaned approximately 900 miles of sewer lines and responded to 57% of sanitary calls within 30 minutes. The number of SSOs is estimated to align with the three-year average of 45 sanitary sewer overflows.
- During 2018-2019, the Municipal Water System is estimated to deliver approximately 5.3 billion gallons of potable water to customers in North San José, Alviso, Evergreen, Edenvale, and Coyote Valley. Improvements to the potable water distribution system included main extensions to improve reliability and rehabilitation of reservoirs providing fire protection.
- The Removing and Preventing Illegal Dumping (RAPID) team enhances the City's response to illegal dumping and reduces neighborhood blight. RAPID is currently comprised of six full time Maintenance Workers and a supervisor. From July 2018 to February 2019, RAPID cleaned 13,422 sites citywide, including collecting 42,564 mattresses. During the same timeframe, RAPID responded to an average of 85 requests per day, with an average response time of approximately 7 days. RAPID also proactively monitored known illegal dumping hot spot areas.
- Single-family and multi-family residents receive unlimited junk pick-ups at no additional charge. The Junk Pickup program is intended to reduce blight at single and multi-family properties and mitigate illegal dumping. In 2018-2019, over 7,300 tons of large item junk are estimated to be collected from single-family homes and multi-family properties, a 22% increase over 2017-2018 total tons. An extensive outreach campaign was deployed to increase junk pickup program awareness and participation, including new methods and an emphasis on reaching San José's non-English speaking population.
- San José's exclusive commercial wet/dry solid waste system achieved a 76% diversion rate for 2018 by processing all materials at the Republic Services' Material Recovery Facility or at Zero Waste Energy Development (ZWED) Corporation's Anaerobic Digestion Facility. Additionally, the Construction and Demolition Diversion program facilities achieved 77% diversion.
- In 2018-2019, the Household Hazardous Waste (HHW) Program is projected to accommodate approximately 16,000 residential appointments and 110 small business appointments. San José's permanent HHW facility, located at the Environmental Innovation Center, continues to be the most active drop-off location in the county. To raise program awareness, staff continued a public education and outreach campaign to promote no-cost drop off opportunities using sports partnerships with the San José Sharks and Earthquakes
- Council Districts continued to host neighborhood-led Beautification Days in 2018-2019. This program allowed residents to dispose of unwanted items, which are estimated to total over 400 tons of collected material in 2018-2019. Approximately 75% of the material collected is recycled, thereby increasing waste diversion. Local non-profits were also present at most cleanup events and are projected to collect over eight tons of donated items for reuse in 2018-2019. Over five tons of e-waste are also estimated to be collected during 2018-2019. The Council Districts are projected to host more than 40 cleanup events throughout the City during 2018-2019.
- The Large Trash Capture Project, which began in 2011, has installed 26 hydrodynamic separator devices at 21 locations throughout the City, treating a total of 9,485 acres. The City also receives trash load reduction credit for single-use bag and expanded polystyrene bans as well as creekside trash and homeless encampment cleanups. As a result, the City is on track to meet the Stormwater Permit's mandatory 80% trash load reduction goal by the established deadline of July 1, 2019.
- In 2018-2019, San José Clean Energy successfully launched three of the four planned phases of implementation. These included Phase I (Municipal accounts) in September 2018, Phase II (residential and large commercial accounts) in February 2019, and Phase III (small commercial accounts) in June 2019. The base product, GreenSource, is 45% renewable and 80% carbon-free. Customer opt-out of SJCE service has been less than 2%.

*City Service Area*  
**Environmental and Utility Services**  
**OVERVIEW**

***Service Delivery Accomplishments***

- In 2018-2019, the City continued its agreement with the Santa Clara Valley Water District (SCVWD) for a Pollution Prevention and Creeks Cleanup Project, previously known as the San José Watershed Community Stewardship Engagement Project. As requested by SCVWD, the City amended the agreement to fund Downtown Streets Team creek cleanup crews that conducted an estimated 258 cleanups and removed 100 tons of trash and debris from the City's waterways during the fiscal year.
- The Consent Decree between the City of San José and San Francisco Baykeeper requires the City to fund non-profits Keep Coyote Creek Beautiful and South Bay Clean Creeks Coalition \$100,000 each year through 2020-2021 for projects that mitigate the impacts of trash on Coyote Creek and Guadalupe River. Together, in 2018-2019 these groups have conducted 22 volunteer creek cleanups and removed an estimated 43 tons of trash and debris from the City's waterways.
- In 2018-2019, significant construction activity continued at the Water Pollution Control Plant, including on the Digester and Thickener Facilities Upgrade project, which is the largest project in the Plant's capital improvement program, with an estimated total cost of \$200.9 million. The project is rehabilitating four digesters and six dissolved air floatation tanks; installing a new above-ground gas piping system; and constructing a new sludge screening building. Construction also continued on the \$132.5 million Cogeneration Facility project, which is replacing outdated power generation equipment with new internal combustion engines, gas treatment system, cooling towers, and a new operations building. The new Cogeneration Facility will enable the Plant to generate up to 12 megawatts of power for supporting daily operations. Construction began on two critical projects: Advanced Facility Control and Meter Replacement – Phase 1 and Blower Improvements. Fifteen other projects continued to advance through various phases of feasibility/development and detailed design, including three large design-build projects: Headworks Improvements/New Headworks and Digested Sludge Dewatering Facility.

***Service Delivery Environment***

Aging storm sewer, sanitary sewer, and Plant infrastructure results in increased maintenance and rehabilitation/replacement costs. Master plans for these systems assist in identifying necessary long-term improvements. The first phase of the City-wide Storm Sewer Master Plan was completed in December 2017. The Sanitary Sewer Master Plan was completed in 2011-2012, with subsequent updates brought forward on an as-needed basis. The Plant Master Plan was adopted by the City Council in November 2013 and identified 114 projects and over \$2.2 billion in investments to rebuild and rehabilitate aging infrastructure at the Plant and make technology changes to benefit the community over a thirty-year period. The City is in the fifth year of implementing the most critical rehabilitation and capital improvement projects with an estimated value of \$1.4 billion over a ten year period.

***Wastewater***

- The Environmental Protection Agency (EPA), State Water Resources Control Board, and Regional Water Quality Control Board (RWQCB) are continuing to ramp up their regulatory and enforcement efforts to ensure that local agencies are in full compliance with the state-wide General Waste Discharge Requirements for Sanitary Sewer Collection Systems, and that agencies are effectively implementing sanitary sewer management plans for reducing SSOs.
- The City's 15 sanitary sewer pump stations are an average of 30 years old, while the standard life of a pump station is up to 25 years.
- The City continues to participate in the planning processes for restoration of the South Bay Salt Ponds (16,500 acres) and the U.S. Army Corps of Engineers Shoreline Levee Project to ensure that the City's interests are considered. These interests include protecting Alviso and the Plant from tidal inundation impacts due to projected sea level rise and providing habitat for endangered species.



### ***Service Delivery Environment***

- Plant pollutant removal performance is monitored in accordance with National Pollution Discharge Elimination System (NPDES) permit provisions that govern which pollutants must be monitored, how frequently, and from which sample points (effluent or influent). The Plant was reissued a new permit in September 2014, with monitoring requirements remaining largely unchanged. That five-year NPDES permit will expire in 2019, and a new permit with largely the same requirements will be issued in November 2019.
- Regional watershed permits that apply to all wastewater treatment plants discharging to San Francisco Bay impose additional monitoring, reporting, and special study requirements on the Plant. A regional watershed permit for nutrients was initially adopted in April 2014 and is scheduled for reissuance in May 2019. A separate regional watershed permit for polychlorinated biphenyls (PCBs) and mercury was re-issued December 2017.
- The current Title V air quality permit from the Bay Area Air Quality Management District (BAAQMD) was renewed and issued on March 20, 2017. The Title V program is designed to standardize air quality permits for major sources of emissions across the state and is required for facilities that emit more than the Major Source Thresholds (MSTs) of criteria pollutants. The criteria pollutants include carbon monoxide, ozone, lead, nitrogen oxides, particulate matter, and sulfur dioxide. The Title V permit incorporates the Plant's Permit to Operate, also issued by the BAAQMD, and all other applicable local, state, and federal air quality requirements.
- In accordance with SB 1383 in 2016, the California Department of Resources Recycling and Recovery (CalRecycle) is in process of finalizing new regulations that aim to lower climate change pollutants, such as methane, that result from landfill disposal of organics, including biosolids. The Plant currently disposes of biosolids to the nearby Newby Island landfill to be used as alternate daily cover. As a result of this new rule, staff anticipates the cost for disposal to be higher in the near future.

### ***Stormwater Management***

On November 19, 2015, the RWQCB adopted a new NPDES Stormwater Permit (Stormwater Permit) to regulate 77 municipalities in the San Francisco Bay Area. The Stormwater Permit included more specific guidelines for existing programs and required new or expanded efforts. City staff, in conjunction with other regional stormwater agencies, are actively updating existing programs to address the new and ongoing requirements of the current Stormwater Permit. Beginning in 2018-2019, the RWQCB and Bay Area municipalities began discussions regarding the next Stormwater Permit, scheduled to be issued in late 2020.

- The Stormwater Permit requires the City to reduce trash loads from the storm sewer system by 80% by September 2019. In January 2014, the City Council authorized submittal of the Clean Waterways, Healthy City: Long-Term Trash Load Reduction Plan, which provides a roadmap for achieving the permit-specified trash reduction goals.
- The City received approval of its Direct Discharge Trash Control Plan from the RWQCB Executive Officer in August 2016 and authorization to claim up to a 15% trash load reduction off-set for homeless encampment cleanups. The Direct Discharge Plan was developed to address trash from homeless encampments along creeks, and represents a collaborative effort among multiple departments including Environmental Services, Housing, and PRNS.
- The Stormwater Permit requires the City to submit a Green Stormwater Infrastructure Plan for RWQCB approval by September 2019 that describes how the City will incorporate multi-benefit green stormwater infrastructure (e.g., bioretention) to supplement current traditional storm drain infrastructure. In May 2017, Council approved the Green Stormwater Infrastructure Plan Framework that describes the purpose, tasks, and timeframes for development of the City's Green Stormwater Infrastructure Plan. The Plan will also support the City's effort to reduce urban runoff and meet stormwater pollutant limits established by the RWQCB.

*City Service Area*  
**Environmental and Utility Services**  
*OVERVIEW*

***Service Delivery Environment***

- The City conducts ongoing inspection programs to comply with the Stormwater Permit. These programs include inspections of construction sites, stormwater treatment measures, and industrial and commercial facilities that could potentially contribute to stormwater pollution. The City also responds to reports of illicit discharges to ensure they are detected, controlled, and eliminated.
- An aging storm sewer infrastructure unsuitable for accommodating planned growth and increased regulatory interest in using “green infrastructure” approaches to address stormwater issues are driving the need for a multi-year master planning effort for the storm sewer system.

***Solid Waste***

Trash generation correlates with many other community conditions, including graffiti and lower participation in other municipal environmental programs, such as curbside recycling and household hazardous waste disposal. These correlations are at the center of San José’s strategy to broaden the capacity of the City to reach a greater audience in the community and the ability to leverage resources of other public and non-governmental agencies that are already working to improve the quality of life in San José neighborhoods. Continuing partnerships are essential to the long-term success and sustainability of the City’s trash reduction efforts. The City will continue to seek out new and innovative partnerships with local organizations and agencies to further broaden its resource base with those entities that share the common goal of improving community health and well-being.

- After nearly two years of negotiations, the City reached agreements with current Recycle Plus contractors on the framework and cost provisions for future residential solid waste and recycling services for all households in San José (over 320,000 households) to the year 2036. On January 15, 2019, Council approved the framework which includes the following service enhancements for customers:
  - **Higher customer service standards** to assure responsive contractor call centers, ongoing customer satisfaction, minimal missed collections, and on-line platforms to make it easier for customers to connect with contractors for service requests and concerns;
  - **Outreach transitioned to the City** to provide ratepayer savings and more adaptive, cohesive education for customers;
  - **Non-collections limited** to provide customers with more reliable recycling collections. The new approach would restrict distribution of non-collection notices to instances when hazardous waste is present in containers or when garbage containers are overflowing. Contractors will be required to provide the City with clear and convincing documentation of these situations, thereby enabling City staff to take enforcement action when appropriate.
- In 2016, California passed SB 1383, which established methane emissions reduction targets in a statewide effort to reduce emissions of short-lived climate pollutants in various sectors of California's economy. Part of this bill sets targets to achieve a 50 percent reduction in the level of the statewide disposal of organic waste from the 2014 level by 2020 and a 75 percent reduction from the 2014 level by 2025. There are additional targets that not less than 20 percent of currently disposed edible food is recovered for human consumption by 2025 and procurement of recycled content paper goods as well as compost or Renewable Natural Gas for City operations. The regulatory requirements are being finalized. City staff believes that San José’s mixed waste processing system would comply with the regulations for organic waste diversion.

### ***Service Delivery Environment***

- The City is piloting with GreenWaste Recovery an innovative technology to recycle residual plastics in partnership with BioCellection Inc. BioCellection’s technology aims to chemically transform residual plastic film into dicarboxylic acid, an essential component in consumer plastic goods. Plastics are difficult to recycle and constitute a substantial amount of San José’s waste stream. If the pilot proves successful, GreenWaste could divert more San José material from landfill. This pilot aligns with the City’s goal to reach zero waste by 2022, the City’s Climate Smart Plan to reduce greenhouse gas emissions, and City Council’s direction to explore partnerships with local stakeholders to test, demonstrate, and replicate new recycling solutions to current recycling market challenges.
- In 2018, the recycling industry began to experience significant changes in the international commodity market as a result of China’s “National Sword” policy, which bans import of many post-consumer plastics and paper common in San José recycling facilities. The abrupt change to markets for recycled material stressed recycling facilities’ ability to sell material. In response to this shift, City Council passed a Resolution authorizing the City Manager to waive disincentives on the recycling processors if they did not meet their diversion requirements for 2018 due to the market disruptions. City staff continues to work with the processors to discuss the changing markets and develop standards that account for current market conditions. For future contractual diversion requirements, the City collaborated with Recycle Plus contractors to develop a new methodology that more directly evaluates recycling performance and is adaptable to changing recycling market conditions.
- In 2018-2019, the City phased out providing free, on-site garbage and recycling services to large special events in San José. Instead, the City is providing free dumpsters and back-end processing to events which ensures that their materials are separated at the Materials Recovery Facility, keeping events in compliance with State diversion mandates. The funds for this program will be used to promote important messages to San José residents around ‘recycle right’ with a focus on beverage containers.

### ***Sustainability***

With City Council approval of Climate Smart San José, a plan for reducing greenhouse gas emissions and ensuring a long-term water supply, the City has created a roadmap for engaging the entire community with the goal of reducing the City’s carbon footprint and achieving energy sustainability. In support of Climate Smart San José, the Silicon Valley Energy Watch Partnership with the Pacific Gas and Electric Company (PG&E), which enables staff to provide extensive energy efficiency education and outreach to the community, has been administered by the City since 2004. The City is currently implementing requirements on a new one-year agreement for 2019, and will begin negotiating for a new contract for 2020 and beyond.

- Staff monitors emerging renewable energy, energy efficiency, and building electrification technologies for possible implementation in the community and seeks to leverage scalable model programs to promote the advancement of these technologies in support of Climate Smart San José.
- The City continues to leverage existing partnerships and seize opportunities to establish new partnerships with the business community, neighborhood organizations, and academic institutions in order to achieve San José’s energy efficiency and greenhouse gas reduction goals. Examples include the Bloomberg American Cities Climate Challenge (ACCC) and the Bay Area Air Quality Management District (BAAQMD) Grant. The ACCC is a new initiative through Bloomberg Philanthropies that aims to accelerate and deepen U.S. cities’ efforts to combat climate change and promote a sustainable future for residents. San José has a unique opportunity to lead on meaningful climate action focused on sustainable transformation of our built environment while achieving economic and population growth. The BAAQMD grant is a two-year grant program, beginning in 2018, through which the City will develop and implement various policies and programs to demonstrate Zero Net Energy and Zero Net Carbon technologies for new homes.

*City Service Area*  
**Environmental and Utility Services**  
*OVERVIEW*

***Service Delivery Environment***

*Community Energy*

- San José Clean Energy (SJCE) is providing electric generation service to almost all of the residents, businesses, and schools in the city (with exception of residential customers with solar, that are expected to be enrolled beginning February 2020). The base service, GreenSource, is 45% renewable and 80% carbon-free, and is priced (inclusive of added PG&E fees) at a 1% discount to PG&E's generation service. Customer opt-out of SJCE service has been less than 2%.
- SJCE has taken numerous steps to operationalize including the following:
  - City Council has approved the SJCE Risk Management Policy, and a Risk Operation Committee (ROC) has formed and meets periodically to oversee the SJCE activities.
  - SJCE has entered into a \$50 million credit agreement with Barclays Bank for working capital and as collateral for power purchases.
  - SJCE has established electricity rate schedules that have similar structure those of PG&E and entered into power supply contracts to serve more than 300,000 customer accounts.

***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 service.
- Make strategic investments 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.
- Continue to meet NPDES requirements for both wastewater and stormwater permits.
- Implement reliability improvement projects to ensure optimum operation of existing South Bay Water Recycling Program infrastructure.
- 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 Water Pollution Control Plant.
- Advance community awareness of the Council-approved Climate Smart San José Plan; partner with other agencies and pursue grants to promote energy efficiency, building electrification, and clean, renewable energy in the community.
- Implement the strategies outlined in the Clean Waterways, Healthy City: Long-Term Trash Load Reduction Plan in order to achieve the trash load reduction goals specified in the Stormwater Permit.
- Continue to implement solid waste reduction programs in support of city-wide zero waste goals.
- Continue to prevent and respond to illegal dumping by proactively responding to illegal dumping requests and monitoring known illegal dumping hot spot areas to further the City's waste diversion efforts.
- Develop a Green Stormwater Infrastructure Plan to effectively guide the City's implementation of green stormwater infrastructure sufficient to meet water quality improvement goals.

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**OUTCOME 1: RELIABLE UTILITY INFRASTRUCTURE**

Strategic Goals	CSA Performance Measures	2017-2018 Actual	2018-2019 Target	2018-2019 Estimate	2019-2020 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 <sup>1</sup>	96%	95%	95%	95%	95%
	- Storm Sewer Inlets	99%	96%	99%	96%	99%
	- SJ Municipal Water	94%	98%	97%	98%	98%
	- South Bay Water Recycling	100%	90%	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 <sup>2</sup>	77%	<100%	80%	<100%	<100%
	3. Number of SSOs per 100 miles of sanitary sewer lines	1.1	2.0	2.2	2.2	2.0
Provide for collection, disposal & processing of solid waste	1. % of waste diverted from landfills (State Goal: 50%) <sup>3</sup>					
	- Overall <sup>4</sup>	64%	70%	60%	70%	90%
	- Residential	79%	83%	79%	81%	90%
	- Commercial	76%	80%	80%	90%	90%
	- City Facilities	91%	92%	91%	92%	95%
	# of debris removals that address safety and obstructions in the public right-of-way (Priority 1 illegal dumping resources)	1,970	N/A <sup>5</sup>	2,000	1,947	1,839
	Cubic yards of debris removed (Priority 1 illegal dumping requests)	3,378	N/A <sup>5</sup>	3,400	3,494	3,630
	# of debris removals that reduce neighborhood blight (Priority 2 illegal dumping requests)	14,717	N/A <sup>5</sup>	20,000	25,000	30,000
Cubic yards of debris removed	19,598	N/A <sup>5</sup>	32,000	37,000	40,000	

<sup>1</sup> 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.

<sup>2</sup> Other San José water retailers include San José Water Company and Great Oaks Water Company.

<sup>3</sup> 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.

<sup>4</sup> 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.

<sup>5</sup> This measure is new as of 2018-2019. As such, no data was available for analysis and inclusion for 2018-2019 Targets.

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

Strategic Goals	CSA Performance Measures	2017-2018 Actual	2018-2019 Target	2018-2019 Estimate	2019-2020 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 <sup>1</sup>	66%	N/A <sup>1</sup>	N/A <sup>1</sup>	70%	70%
	2. % of trash reduced from the storm sewer system.	88%	80% <sup>2</sup>	96.5%	96.5%	100% <sup>3</sup>
Manage wastewater for suitable discharge into the Bay	1. Mgd discharged to Bay during the average dry weather effluent flows (ADWEF) season <sup>4</sup>	78 mgd	<120 mgd	80 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 <sup>5</sup>	17.0 mgd	17.0 mgd	18.9 mgd	19.0 mgd	20.0 mgd

<sup>1</sup> Data for this measure is collected on a biennial basis via survey. The next survey is scheduled for 2019-2020. No survey will be conducted in 2018-2019.

<sup>2</sup> The next regulatory goal for trash load reduction is 80% by 2019.

<sup>3</sup> 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.

<sup>4</sup> 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.

<sup>5</sup> 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	2017-2018 Actual	2018-2019 Target	2018-2019 Estimate	2019-2020 Target	5-Year Goal
Reduce, reuse, and recycle solid waste at home, work, and play <sup>1</sup>	1. % of residents rating the City’s job of providing information on how to recycle as good or excellent <sup>2</sup>	45%	N/A <sup>2</sup>	N/A <sup>2</sup>	60%	75%
Promote energy efficiency and clean, renewable energy in the community	2. Annual reduction in citywide greenhouse gas (GHG) emissions <sup>3</sup>	N/A <sup>3</sup>	N/A <sup>3</sup>	N/A <sup>3</sup>	N/A <sup>3</sup>	N/A <sup>3</sup>

<sup>1</sup> 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.

<sup>2</sup> Data for this measure is collected on a biennial basis via survey. The next survey is scheduled for 2019-2020. No survey will be conducted in 2018-2019.

<sup>3</sup> This measure is new as of 2018-2019. The data collection methodology for this measure is under review and will be available in the 2020-2021 Proposed Budget.

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**OUTCOME 4: SAFE, RELIABLE, AND SUFFICIENT WATER SUPPLY**

Strategic Goals	CSA Performance Measures	2017-2018 Actual	2018-2019 Target	2018-2019 Estimate	2019-2020 Target	5-Year Goal
Ensure availability of future water supplies.	1. Mgd of water conserved and recycled <sup>1/2</sup>	78	85	79	83	89
	2. Millions of gallons of recycled water delivered annually	3,833	3,321	3,838	3,915	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 <sup>3</sup>	90%	N/A <sup>3</sup>	N/A <sup>3</sup>	91%	95%
	2. % of Municipal Water System customers with water saving fixtures in their home or property <sup>3</sup>	92%	N/A <sup>3</sup>	N/A <sup>3</sup>	93%	95%
	3. % of residents who are in favor of using recycled water <sup>2/3</sup>	84%	N/A <sup>3</sup>	N/A <sup>3</sup>	85%	95%

<sup>1</sup> 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.

<sup>2</sup> 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.

<sup>3</sup> Data for this measure is collected on a biennial basis via survey. The next survey is scheduled for 2019-2020. No survey will be conducted in 2018-2019.