

2015-2016

OPERATING BUDGET

**ENVIRONMENTAL
AND
UTILITY SERVICES
CSA**

Environmental and Utility Services



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

Primary Partners

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

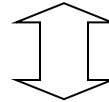
CITY SERVICE AREA
 A cross-departmental collection of core services that form one of the City's six key "lines of business"

MISSION STATEMENT
 Why the CSA exists

Environmental & Utility Services CSA

Mission:

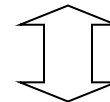
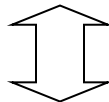
Provide environmental leadership through policy development, program design, and reliable utility services.



Outcomes:

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

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



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

Environmental Services Department

Core Services:

Natural and Energy Resources Protection

Potable Water Delivery

Recycled Water Management

Recycling and Garbage Services

Stormwater Management

Wastewater Management

Transportation Department

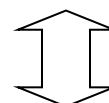
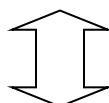
Core Services:

Sanitary Sewer Maintenance

Storm Sewer Management

CORE SERVICES
 Primary deliverables of the organization

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



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



Environmental and Utility Services

Expected 2015-2016 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 as well as protect public health and safety and the environment.
- ❑ **Promote Sustainability in the Community** – Support sustainable infrastructure, equipment, and behaviors throughout the community through education, public-private partnerships, and leadership of the City’s Green Vision.
- ❑ **Customer Service** – Explore the efficient use of technology while providing excellent customer service to City residents and businesses.

2015-2016 Key Budget Actions

- ❑ **Sewer Service Rates** – The Sewer Service and Use Charge fund will increase 5.5% in 2015-2016 to allow for the continued rehabilitation and replacement of critical infrastructure and equipment at the Water Pollution Control Treatment Plant (Plant) and the sanitary sewer collection system.
- ❑ **Storm Sewer Service Rates** – No increases to the Storm Sewer Service Charge rates are scheduled for 2015-2016. However, rates will be reassessed in 2016-2017 upon completion of the initial recommendations from the Storm Sewer Master Plan that are anticipated to be completed in 2017, as described in the 2016-2020 Adopted Storm Sewer System Capital Improvement Program (CIP).
- ❑ **Water Rates** – Municipal Water System rates will increase 28.0% in 2015-2016 due to wholesale cost increases, increased operating costs, and increased water conservation efforts.
- ❑ **South Bay Water Recycling Wholesale Recycled Water Rates** – The wholesale rate discount provided to retail agencies for industrial water use will be reduced from \$215 to \$105 per acre foot. This reduction is the second part of a two-year process to equalize the rate discounts for all use types and support cost recovery for operational costs that support critical system reliability.
- ❑ **Recycle Plus Rates** – A 4.0% increase in Single-Family Dwelling (SFD) Recycle Plus rates will fund the sorting of garbage to collect recycling from an additional 20% of SFD residences in Hauler District A and which is estimated to achieve an increase in diversion from approximately 30% to 60% in District A, as well as a Single-Family Large Item Collection Pilot program, which will provide limited, free-of-charge, on-call curbside collection of large items in 2015-2016. A 5.0% increase in Multi-Family Dwelling (MFD) rates will bring rates to cost recovery since growth and service level increases due to higher occupancy rates have contributed to increased contractual expenditures.
- ❑ **Sanitary Sewer Maintenance Staffing** – Adds 1.0 Civil Engineer to manage the root control, easement, and siphon cleaning programs in an ongoing effort to continue to reduce the number of Sanitary Sewer Overflows (SSOs) experienced throughout the network.

Environmental and Utility Services

2015-2016 Key Budget Actions

- ❑ **Regulatory Compliance for Operations and Maintenance** – Adds 1.0 Principal Engineering Technician to oversee and manage all of the environmental and hazardous materials compliance issues for the sewer maintenance operations performed by the Transportation Department (DOT). Staff operate out of four separate City service yards (West, South, Central, and Mabury). Inspections and compliance are mandated by the Fire Department, California Division of Occupational Safety and Health, and the Environmental Protection Agency (EPA) and this position will provide a single point of contact and management for DOT.
- ❑ **Bioretention Facility Maintenance** – Provides one-time funding to oversee and develop a maintenance program for the growing inventory of bioretention facilities that are being installed throughout the City as a requirement of the latest Stormwater National Pollutant Discharge Elimination System (NPDES) Permit. This technology is new and requires monitoring and review so that proper maintenance standards can be developed and compliance maintained.
- ❑ **Maintenance and Equipment** – To improve operational efficiency at the Plant, outdated equipment will be replaced or upgraded with current technology. Additionally, funding will be allocated for repair and maintenance of Plant infrastructure to avoid the greater repair costs that would result if this were deferred.
- ❑ **Plant CIP Delivery** – A top priority is to ensure the necessary program management, engineering, and technical support resources for planning and implementation of the Plant CIP are available. Following City Council approval of the Plant Master Plan (PMP) in November 2013, City staff engaged in a project validation process to confirm project needs, validate project assumptions, and evaluate the potential for packaging approximately 114 capital improvement projects to most effectively deliver the program. With program management support from MWH Americas, the project validation effort was completed in February 2014 and identified 33 project packages that will be initiated over the next ten years, translating into approximately \$1.4 billion in investment in that timeframe. The City's portion of funding for these projects is included in the Adopted 2016-2020 CIP, though the appropriate mix of bond and commercial paper financing is still being evaluated by staff. With the addition of 23.0 professional and technical positions in 2015-2016, the City is proactively planning for the delivery of critical Plant CIP projects identified through the PMP and project validation process. Staff is continuing to conduct thorough resource analyses and will bring forward additional proposals for resource augmentations as necessary to ensure effective delivery of Plant CIP projects.
- ❑ **Compliance with Permit Requirements** – Staffing adjustments will be made to better position the City in meeting current and future requirements of the City's Stormwater NPDES Permit. The provisions of the permit require the City to participate in and support pollutant reduction activities and studies on a local, regional, and state-wide level. The current permit, which was scheduled to expire in November 2014, was extended by the Regional Water Quality Control Board until the adoption of the new permit, which is anticipated to occur in late 2015. The staffing adjustments will allow greater flexibility in meeting technical and programmatic requirements of the current and future permit.
- ❑ **Single-Family Large Item Collection Pilot** – Approved SFD rate increases include an action to provide large item pickups at no additional cost for single-family residents during the fiscal year.

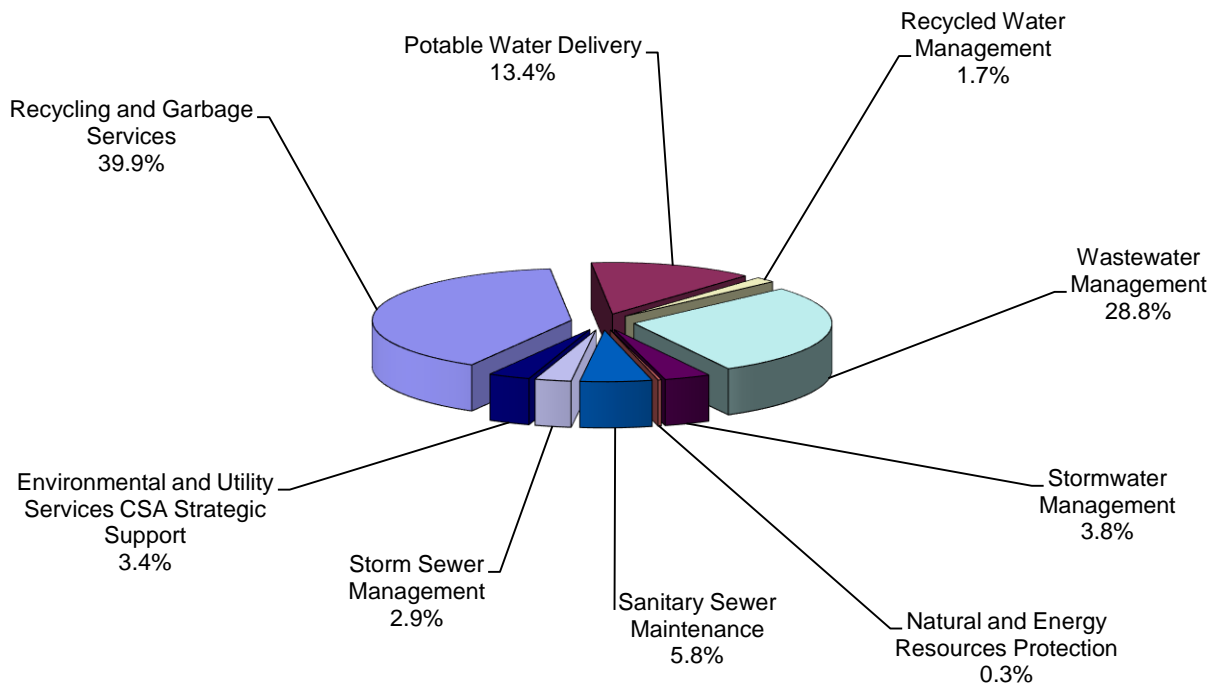
Environmental and Utility Services

2015-2016 Key Budget Actions

- **Sorting of Residential Solid Waste** – Approved SFD rate increases include an action to phase in additional residences from Hauler District A (downtown, north, and east San José) into the back-end processing program, which sorts and processes waste materials to further the City’s waste diversion goals. The additional funding for 2015-2016 represents the second phase of this effort. With the addition of this second phase, back-end processing will be funded for roughly 40 percent of the City's total single-family residences. This is projected to result in a waste diversion increase from approximately 30 to 60 percent for the District A service area receiving back-end processing. The program target remains to phase in all SFD garbage routes over the next five years.

2015-2016 Total Operations by Core Service

CSA Dollars by Core Service \$270,623,967



City Service Area Environmental and Utility Services OVERVIEW

City Service Area Budget Summary

	2013-2014 Actual 1	2014-2015 Adopted 2	2015-2016 Forecast 3	2015-2016 Adopted 4	% Change (2 to 4)
Dollars by Core Service					
<i>Environmental Services</i>					
Natural and Energy Resources Protection	\$ 1,126,402	\$ 1,372,869	\$ 708,845	\$ 720,534	(47.5%)
Potable Water Delivery	27,805,787	31,109,073	35,553,525	36,236,478	16.5%
Recycled Water Management	3,482,294	4,431,360	4,448,384	4,508,322	1.7%
Recycling and Garbage Services	98,799,714	105,503,449	104,674,008	108,152,855	2.5%
Stormwater Management	8,574,586	10,275,480	9,908,454	10,189,097	(0.8%)
Wastewater Management	61,324,715	73,162,524	72,622,252	77,888,408	6.5%
Strategic Support	7,512,356	7,201,483	7,672,834	8,020,993	11.4%
<i>Transportation</i>					
Sanitary Sewer Maintenance	14,800,357	18,164,900	15,006,963	15,726,667	(13.4%)
Storm Sewer Management	7,605,991	8,388,401	7,730,562	7,971,265	(5.0%)
Strategic Support	1,023,793	1,137,217	1,177,632	1,209,348	6.3%
Dollars by Core Service Subtotal	\$ 232,055,995	\$ 260,746,756	\$ 259,503,459	\$ 270,623,967	3.8%
Other Programs					
City-Wide Expenses	\$ 1,105,374	\$ 1,089,000	\$ 721,475	\$ 2,202,761	102.3%
General Fund Capital, Transfers & Reserves	0	5,095,000	1,800,000	0	N/A
Other Programs Subtotal	\$ 1,105,374	\$ 6,184,000	\$ 2,521,475	\$ 2,202,761	(64.4%)
CSA Total	\$ 233,161,369	\$ 266,930,756	\$ 262,024,934	\$ 272,826,728	2.2%
Authorized Positions	653.34	666.59	665.64	690.89	3.6%

Service Delivery Accomplishments

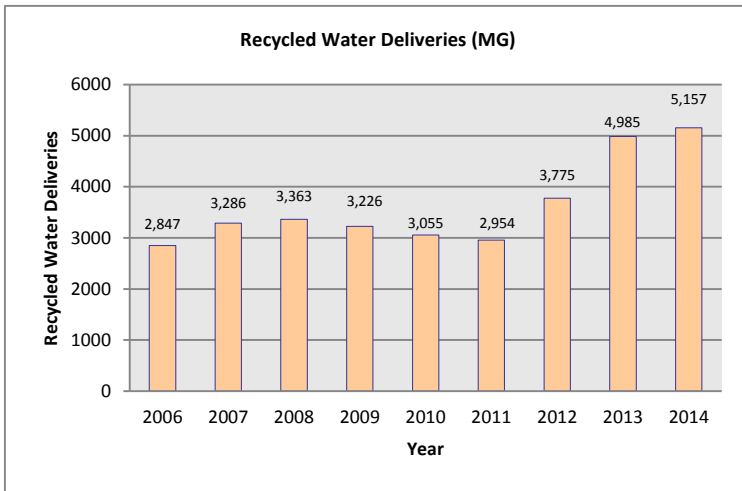
- An average dry weather effluent flow of 76 million gallons per day (mgd) was discharged from the Treatment Plant to the San Francisco Bay during summer 2014. This was well below the 120 mgd summer flow trigger, thereby meeting all National Pollutant Discharge Elimination System (NPDES) Permit requirements.
- As part of the Distributed Control System (DCS) Phase II project, staff replaced remaining controller hardware and related programming following the completion of the Phase I installation of new hardware and software at the Plant. During the Phase II project, the remaining old wiring and circuit boards were removed.
- A large maintenance project to the Plant's headworks was completed. This included the replacement of a bar screen at Headworks No. 2 with a new technology that is more efficient and requires less maintenance.
- Two clarifiers in the secondary area of the Plant were sandblasted and painted and mechanical components were repaired and painted.
- The Plant Air Compressor was replaced with a more efficient and reliable unit to support Plant-wide use of air for meters and valves.

Service Delivery Accomplishments

- In October 2013, City Council approved an amendment to the San José Municipal Code to update the single-use carryout bag regulations to eliminate the automatic increase to 25 cents and retain the required minimum charge of 10 cents for recycled content paper bags. Based on field observations since the approval of the updated regulations, the prevalence of single-use bags has reduced significantly, indicating that the 10-cent minimum charge has had the intended effect.
- The Sanitary Sewer Condition Assessment program video-inspected pipes near water bodies and pipes deemed to require frequent maintenance.
- Following an inspection of the City's Sanitary Sewer Collection System in 2010 by the EPA, the State Water Resources Control Board, and the Regional Water Quality Control Board, the City continues to implement and refine operational changes to reduce SSOs and improve response. In 2014-2015, DOT cleaned an estimated 978 miles of sewer lines and responded to an estimated 70% of reported sewer problems within 30 minutes. There were approximately five SSOs per 100 miles of sewer line and operations are constantly evolving towards achieving the five-year Strategic Plan annual goal of three SSOs per 100 miles of sewer line.
- In 2014-2015, DOT identified 13 pieces of equipment for replacement and ongoing funding was added to address these needs and ensure future replacement needs were properly addressed. An operational and well-maintained fleet is critical to reducing the quantity of and response times to SSOs and other reported sewer problems. Consistent equipment replacement improves the fleet's reliability and operational efficiency and increases the productivity of the maintenance crews.
- In coordination with ESD and the community, DOT identified approximately 40 miles of streets where monthly street sweeping was not effective in removing pollutants and debris due to a high percentage of the curbs being blocked by parked cars on sweep day. The installation of no parking signs on sweep days to reduce the number of parked cars and allow for effective sweeping was completed in spring 2015.
- In 2014-2015, ESD updated the Sewer Use Ordinance to add a definition and clarify permitting requirements to allow for the transfer of industrial wastewater permits in the event of changes of ownership. Updating the Sewer Use Ordinance to allow discharge permit transfers ensures the City has adequate regulatory authority over industrial users during a change of ownership. This change allows industrial users to continue to legally discharge during a change in ownership until a new discharge permit is issued.
- During 2014-2015, improvements to stormwater drainage systems included the completion of a storm sewer improvement project along Madrona Avenue and the replacement of pumps and electrical controls at the Gateway Pump Station.
- During 2014-2015, approximately 70,000 feet of sanitary sewers were rehabilitated, repaired, and/or replaced. In addition, the Sanitary Sewer Condition Assessment Program is progressing to meet the plan to clean and inspect 10% (200 miles) of the collection system annually.
- Solid waste recycling and landfill diversion rates remain among the highest achieved by any large city in the country, with an estimated diversion rate of 73%.

City Service Area
Environmental and Utility Services
OVERVIEW

Service Delivery Accomplishments



- South Bay Water Recycling (SBWR) water deliveries for summer 2014 averaged 19.6 mgd (14.1 mgd on an annual basis). This was up from the 19.3 mgd average in the summer of 2013 (13.6 mgd on an annual basis). The growth in 2014 recycled water delivery is attributable primarily to new users and increased use at large golf courses.
- The Plant’s conversion to a Computerized Maintenance Management System (CMMS) continues to progress, bringing the Plant closer to the overall goal of establishing a comprehensive, long-term asset management program.

- During 2014-2015, the Municipal Water System is estimated to deliver 7.7 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 2014-2015 Adopted Operating Budget included funding for large item collections for MFD property managers at no additional charges, which was designed to reduce blight at multi-family properties and mitigate illegal dumping. In the first year of this program, large item collections from MFD properties increased by 10 times compared to the previous year, with over 19,500 large items collected in 2014-2015.
- On September 17, 2013, the City Council approved a service delivery strategy to collect Recycle Plus payments for garbage and recycling services for all single-family residential households through the Santa Clara County Secured Property Tax Bill, beginning July 2015. An interdepartmental team comprised of staff from ESD, the Information Technology Department (ITD), and the Finance Department was formed in summer 2014 to implement the Customer Information System (CIS) to replace the City’s existing Integrated Billing System. The new CIS will bill for Municipal Water and multi-family Recycle Plus bills on a recurring monthly or bi-monthly basis. The City will also continue to bill for mobile home parks, some homeowner associations, and government-owned properties using carts for solid waste services.
- The Polystyrene Foam Disposable Food Service Ware Ordinance was expanded to include all restaurants. The ordinance adopted by the City Council on September 10, 2013 takes aim at a pervasive and persistent type of litter impacting the City’s waterways by phasing out food service-ware containers made from expanded polystyrene foam. The first phase of this ordinance became effective on January 1, 2014 for multi-state restaurant chains. The second phase of the ordinance became effective for all other restaurants, including mobile and street vendors, on January 1, 2015.

Service Delivery Accomplishments

- The City continued implementation of the EPA grant-funded Clean Creeks, Healthy Communities (CCHC) project. The objective of CCHC was to reduce trash through addressing homelessness, community engagement, and illegal dumping prevention along a three-mile stretch of Coyote Creek. To date, CCHC has removed 282 cubic yards of trash through 65 neighborhood and creek cleanups with the help of 1,044 volunteers. The program has organized 95 outreach events and reached an estimated 9,860 residents and students with their watershed protection and anti-litter messages. Most recent survey results reveal that 76% of residents are aware that their personal conduct can result in litter in Coyote Creek, which is a 31% increase from the baseline survey results of 58% of residents.

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 initial recommendations from the City-wide Storm Master Plan are anticipated to be completed in 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 an over \$2.2 billion investment to rebuild and rehabilitate the aging infrastructure at the Plant and make technology changes to benefit the community. Between October 2013 and February 2014, City staff worked with program management firm MWH Americas to validate project assumptions, confirm project needs and operational constraints, and evaluate the potential for packaging the projects identified in the Plant Master Plan to most effectively deliver the program. The project validation was completed in February 2014 and identified 33 project packages that will be initiated over the next decade, translating into approximately \$1.4 billion in investment in that timeframe.

Wastewater

- The EPA, State Water Resources Control Board, and Regional Water Quality Control Board 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 vast majority of the sanitary sewer collection system (80%) consists of small (6-inch and 8-inch diameter) sewer mains that serve established residential neighborhoods. These small-diameter neighborhood sewer systems are the most common locations for blockage and sewer backups.
- The City's 15 sanitary sewer pump stations are, on average, 30 years old. The standard design life of the mechanical and electrical components of a pump station is up to 25 years, and as such, a pump station should be rehabilitated with new pumps, motors, and control systems at least every 25 years.
- The Sanitary Sewer Master Plan Report, completed in September 2011, identified city-wide trunk sewer system deficiencies for existing, near-term, and long-term (i.e. City of San José Envision 2040 General Plan) land use scenarios, and recommended 93 capacity improvement projects, totaling approximately \$170.0 million. The near-term projects will be phased over a 20-year period.

City Service Area
Environmental and Utility Services
OVERVIEW

Service Delivery Environment

Wastewater (Cont'd.)

- The City continues to participate in the state and federal planning process for restoration of the South Bay Salt Ponds (16,500 acres) and the U.S. Army Corps of Engineers Shoreline Study to ensure that the City's interests are considered. These interests include protecting Alviso and the Plant from any potential tidal impacts, ensuring that Moseley Tract and Pond A18 issues are considered and addressed, and providing habitat for endangered species.
- Plant pollutant removal performance is monitored in accordance with the NPDES permit provisions that govern what pollutants must be monitored, how frequently, and from which sample points (effluent and/or influent). The Plant was reissued a new permit in September 2014, with monitoring requirements remaining largely unchanged. A regional nutrients watershed permit that applies to all wastewater treatment plants discharging to San Francisco Bay was also adopted in April 2014. The new nutrients permit requires effluent monitoring of total nitrogen and total phosphorus twice per month to track nutrient loads to the Bay from wastewater treatment plants. Although these monitoring requirements are new, the Plant has routinely monitored nutrients to assess removal performance and ensure quality of recycled water. The Plant treatment technology includes an advanced secondary process known as biological nutrient removal, which effectively removes up to 70% of the total nitrogen and up to 90% of the total phosphorus in the waste stream. Current regulatory priorities for the region that may affect future wastewater treatment compliance or operations are development and establishment of nutrient objectives for the Bay and numeric effluent limits for chronic toxicity. It is possible that the Plant will have nutrient effluent limits imposed as early as 2019. Numeric effluent limits for chronic toxicity are being pursued by the EPA and the California State Water Board.

Stormwater Management

- On October 14, 2009, the Regional Water Quality Control Board (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 engaged in discussions with San Francisco RWQCB staff to frame the requirements of the next Stormwater Permit, which is anticipated to be adopted in late 2015.
- The Stormwater Permit requires the City to reduce trash loads from the storm sewer system by 40% by 2014, which the City accomplished. The Permit also sets goals for a 70% reduction by 2017 and "no adverse impact" by 2022. In January 2014, the City Council authorized submittal of the Clean Waterways, Healthy City: Long-Term Trash Load Reduction Plan (Plan), which provides a roadmap for achieving the permit-specified trash reduction goals. Highlights of recently completed Plan actions include installation of structural trash capture controls, implementation of the second phase of the ordinance prohibiting the use of expanded polystyrene food ware at restaurants, and the installation of additional public litter cans. The Plan also includes implementing pilot programs to foster community engagement and build partnerships.

The City continues implementation of the Litter Outreach Strategy with the objective to raise public awareness regarding the problem of litter and foster community engagement and action. The City launched a three-year partnership with the San José Earthquakes to promote environmental topics. Litter was the first campaign topic and was focused at the Earthquakes' opening day through public announcements, signs, and a match day magazine advertisement. The campaign also included Valley Transportation Authority bus and light rail advertisements, online advertisements, and banners. Advertisements featured Earthquakes player images and messages to encourage proper disposal of litter to "score a clean neighborhood".

Service Delivery Environment

Stormwater Management (Cont'd.)

- Stormwater bioretention systems are being designed and installed with all new major developments and redevelopments to enhance the removal of pollutants running off the public streets and clean this runoff water before it enters the waterways. These facilities are mandated by Provision C.3 of the Stormwater Permit and are being installed in all municipalities in the San Francisco Bay region. Eleven sites have been installed in the City so far with several more being constructed in the near future. This is an entirely new type of infrastructure and maintenance programs are in the early stages of development state-wide. These facilities must be closely monitored and reviewed to ensure the accurate planning and budgeting of future maintenance activities.
- 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.
- The City will continue to actively pursue grant opportunities that will support Stormwater Permit compliance efforts and promote the City’s sustainability and watershed protection goals.

Solid Waste

- San José’s exclusive commercial wet/dry solid waste system continues as a model program throughout the country and achieved a diversion rate of over 70% for 2014 by processing all materials at either Republic’s Material Recovery Facility or Zero Waste Energy Development (ZWED) Corporation’s Anaerobic Digestion Facility. Additionally, the Construction and Demolition Diversion program facilities achieved another year of 75% diversion. The Environmental Innovation Center (EIC), which houses a Habitat for Humanity ReStore, Prospect Silicon Valley Clean Tech Demonstration Center, and the County of Santa Clara’s Household Hazardous Waste Facility, has attracted local and international visitors from the general public and business and environmental communities with nearly 500 visitors having toured the facility since its opening. In 2014-2015, the Household Hazardous Waste Program accommodated 10,596 San José appointments, the majority of which were made at the EIC. Staff estimate that the program will accommodate approximately 11,000 appointments in 2015-2016.

Sustainability

- In support of Green Vision Goal #2, *Reduce Per Capita Energy Use by 50%*, 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 ESD since 2004. The program is fully funded through 2015 and staff anticipate that additional funding will be made available near the end of this calendar year for 2016.
- Staff monitor emerging solar and other renewable energy technologies for possible implementation in the City, seek to leverage scalable model programs to promote the advancement of renewable energy, and monitor city-wide solar installation activities. These activities support Green Vision Goal #3, *Receive 100% of Our Electrical Power from Clean, Renewable Sources*.

City Service Area
Environmental and Utility Services
OVERVIEW

CSA Priorities/Key Services

- Operate and maintain the City's utilities – storm sewer, sanitary sewer, Plant, potable water, and recycled water – reliably and efficiently.
- 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 invest in capacity and condition assessments for the sanitary sewer collection system to reduce SSOs and support economic development and build-out of the General Plan.
- Continue to meet NPDES wastewater and stormwater permit compliance.
- 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 partner with other agencies and pursue grants to promote energy efficiency and clean, renewable energy in the community and support stormwater pollution prevention programming.
- Continue to implement solid waste reduction programs in order to achieve Zero Waste by 2022.
- Ensure accurate Recycle Plus single-family rates on the Santa Clara County Secured Property Tax Bill.
- Create recycling infrastructure jobs in San José and support public/private partnerships through the processing of an additional twenty percent of the single-family garbage stream beginning in July 2015.
- Increase awareness of proper disposal of bulky items through the large item collections included in multi-family garbage service rates and implement the enhanced single-family large item collection pilot program.

Budget Dollars at Work: Performance Goals

OUTCOME 1: RELIABLE UTILITY INFRASTRUCTURE

The utility infrastructure in San José, which includes the Plant, sanitary sewer system, storm sewer system, and water distribution system, is aging and requires increased maintenance. To maintain system reliability and minimize maintenance costs, the older infrastructure must be rehabilitated or replaced. For the Plant, the 2016-2020 Adopted Capital Improvement Program (CIP) includes funding of \$1.07 billion to rehabilitate and upgrade the infrastructure, including the headworks, primary and secondary tanks and clarifiers, digesters and gas lines, electrical motor control centers and switchgears, engines and generators, a new biosolids facility, and numerous other improvements. The 2016-2020 Sanitary Sewer System Adopted CIP provides funding of \$242.6 million, of which \$103.9 million is allocated in 2015-2016 to upgrade the existing pipe network to support the build-out of the General Plan and evaluate and rehabilitate the existing sanitary sewers, pump stations, and other infrastructure. The 2016-2020 Storm Sewer System Adopted CIP provides funding of \$52.3 million, of which \$31.0 million is allocated in 2015-2016 for master planning and improvements of the Storm Sewer System. For the collection system, investments in engineering and technical services are included in this budget to improve the efficiency and effectiveness of maintenance activities that reduce the number of SSOs. The 2016-2020 Adopted Water Utility System CIP provides funding of \$35.8 million, of which \$17.2 million is allocated in 2015-2016 for maintenance of existing infrastructure, improvements to the Water Utility System facilities, and replacement of manual-read with remote-read water meters to improve conservation efforts.

Strategic Goals	CSA Performance Measures	2013-2014 Actual	2014-2015 Target	2014-2015 Estimate	2015-2016 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	94%*	95%	97%	95%	95%
	- Storm Sewer lines	99%	95%	96%	95%	95%
	- SJ Municipal Water	96%	98%	98%	98%	98%
	- South Bay Water Recycling	96%	98%	98%	98%	98%
	2. Ratio of Municipal Water System average residential water bill to weighted average residential water bill of the San José water retailers**	83%	<100%	<100%	<100%	<100%
	3. Number of SSOs per 100 miles of sewer lines	4.4	4.0	4.9	4.0	3.0
Provide for collection, disposal & processing of solid waste	1. % of waste diverted from landfills (State Goal: 50%)					
	- Overall	73%	75%	73%	75%	77%
	- Residential	58%	63%	60%	63%	68%
	- Commercial	71%	75%	73%	75%	80%
	- City Facilities	92%	91%	91%	91%	91%

Changes to Performance Measures from 2014-2015 Adopted Budget: No

* The % of utility assets in working condition for the SJ/SC Water Pollution Control Plant is calculated based on an average number of hours critical equipment are unavailable during the year due to repairs.

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

City Service Area
Environmental and Utility Services
OVERVIEW

Budget Dollars at Work: Performance Goals

OUTCOME 1: RELIABLE UTILITY INFRASTRUCTURE

✓ *San José/Santa Clara Water Pollution Control Plant Infrastructure*

- A three-year Plant master planning process resulted in the City Council adoption of the Plant Master Plan (PMP) in November 2013. The PMP recommended 114 projects and a \$2.2 billion investment to rebuild and rehabilitate the aging infrastructure of the Plant and make technology changes to benefit the community. In anticipation of the significant CIP, in October 2013, the City awarded a contract for program management services to MWH Americas (MWH). Between October 2013 and February 2014, MWH worked with City staff to validate project assumptions, confirm project needs and operational constraints, and evaluate the potential for packaging the projects identified in the PMP to most effectively deliver the program. The project validation was completed in February 2014 and identified 33 projects totaling \$1.4 billion that will be initiated over the next ten years. The 2016-2020 Adopted CIP provides funding of \$1.07 billion, of which \$208.0 million is allocated in 2015-2016 to address critical infrastructure rehabilitation, replacement needs, and capital improvements at the Plant. Projects in the CIP include Secondary Wastewater Treatment projects (\$112.6 million); a new headworks facility (\$92.1 million); projects related to Electrical Systems and Power Generation projects (\$91.2 million); East Primary Rehabilitation, Seismic Retrofit, and Odor Control (\$36.0 million); Advanced Process Control and Automation upgrades (\$32.9 million); and other various improvements.

✓ *Sanitary Sewer Infrastructure*

Preventing and reducing the number of SSOs that occur in the City's Sanitary Sewer Collection System is critically important.

In order to address critical infrastructure needs in the sanitary sewer system, the following projects are included in the 2015-2016 Adopted Operating Budget and 2016-2020 Adopted CIP:

- Funding of \$97.0 million for design and construction of the Capacity Improvement Projects to support economic developments, of which \$36.3 million is programmed to complete work on the interceptor projects.
- Funding of \$104.2 million for design and construction of Rehabilitation Projects, which are selected based on condition assessment studies, video inspections, maintenance records and reports, and actual pipe failures, whether due to pipe corrosion or other physical deficiencies.
- Funding of \$12.5 million for the condition assessment program to inspect and evaluate the condition of existing sanitary sewer pipelines and identify the needs for pipeline rehabilitation and/or replacement.
- Funding of \$89,000 in the Transportation Department to add 1.0 Engineer II to manage the root control, easement, and siphon cleaning programs in an ongoing effort to improve operations and reduce the number of SSOs experienced throughout the network.

Budget Dollars at Work: Performance Goals

OUTCOME 1: RELIABLE UTILITY INFRASTRUCTURE

✓ *Storm Sewer Infrastructure*

In order to address critical infrastructure needs in the storm sewer system and meet the percentage of utility assets in working condition goal, transfers from operating funds to the 2016-2020 Adopted CIP are included in the 2015-2016 Adopted Operating Budget. Major items funded by this transfer include:

- Design and construction for the Alviso Pump Station (\$9.3 million) and a reserve for the Charcot Pump Station at Coyote Creek (\$2.0 million). The full cost of designing, constructing, and upgrading these pump stations and their associated pipe network is expected to total approximately \$52.0 million.
- Funding of \$7.9 million for the installation of up to 20 Large Trash Capture Devices at various locations within the City.
- Continued funding to develop and maintain updates to a City-wide Master Plan and associated Flow Monitoring Program (\$6.7 million).
- Funding of \$2.0 million for the Chynoweth Avenue Green Street project.
- Continuation of design and construction for the Park Avenue Green Street Pilot project (\$1.0 million).
- Continued funding to repair and restructure outfalls along local rivers and creeks (\$3.0 million).
- Funding of \$1.7 million for Storm Pump Station Rehabilitation and Replacement.
- Ongoing funding for the Alviso Storm Network Infiltration Control project (\$592,000) to address maintenance needs and to help improve the efficiency of the storm sewer system in Alviso.
- Funding of \$3.5 million for Urgent Flood Prevention and Repair projects.

✓ *Water Supply Infrastructure*

- The Municipal Water System (Muni Water) rates remain below the majority of other Santa Clara County Water agencies, even after a rate increase of 28.0% to account for higher wholesale water costs, increased operating costs, and increased water conservation efforts.
- Muni Water continues to meet its goal for the performance measure “% of utility assets in working condition”.

✓ *Solid Waste Management Infrastructure*

To continue increasing solid waste diversion and meet the Green Vision Goal of Zero Waste by 2022, new solid waste management infrastructure and programs will be necessary in the coming decade. The private sector has invested over \$100.0 million in recycling facilities in San José since 2007 and this level of investment will need to continue.

- During 2014, environmental inspectors completed the following solid waste management-related issues:
 - Investigated 852 complaints for potential compliance issues;
 - Determined 363 instances of solid waste violations;
 - Issued 175 Correction Notices, 76 Notices of Violation, and 41 Administrative Citations; and
 - Assisted three non-exclusive haulers with completing a franchise agreement.

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	2013-2014 Actual	2014-2015 Target	2014-2015 Estimate	2015-2016 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	49%	55%	NA*	55%	60%
Manage wastewater for suitable discharge into the Bay	1. Mgd discharged to Bay during the average dry weather effluent flows (ADWEF) season	82 mgd	<120 mgd	82 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***	19.2 mgd	14 mgd	14 mgd	14 mgd	14 mgd

Changes to Performance Measures from 2014-2015 Adopted Budget: No

* No survey conducted in 2014-2015. Data for this measure was collected from a new bi-annual survey last conducted in early 2014, and those results are reflected in the 2013-2014 Actual column.

** In accordance with the NPDES permit, the maximum annual discharge is 120 mgd.

*** 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.

✓ *Wastewater Program Implementation*

Since 1990, the City has invested considerable efforts in protecting local streams, rivers, and the San Francisco Bay salt marsh habitat. The Plant’s average dry-weather effluent flow was 82 mgd in 2013 and 76 mgd in 2014. These numbers are well below the 120 mgd trigger set by the State to protect wildlife habitat. The Plant continues to consistently meet permit discharge requirements.

Salt marsh habitat protection is a key element of San José’s watershed protection efforts. City staff actively participate in the South Bay Salt Pond Restoration Project, which aims to restore former salt ponds to salt marshes or managed pond habitat, as well as the South San Francisco Bay Shoreline Study, which studies flood protection requirements for the area.

The City continues to expand programs and partnerships to address priority pollutants and emerging threats to water quality. Along with the established dental amalgam, the City is exploring innovative programs to reduce mercury discharge to the Bay. Additionally, the City is evaluating efforts to continue providing safe and convenient disposal for unused medications, which is critical to addressing the emerging concern regarding the effects of these medications on water quality.

Budget Dollars at Work: Performance Goals

OUTCOME 2: HEALTHY STREAMS, RIVERS, MARSH AND BAY

✓ *Stormwater Program Implementation*

The NPDES Stormwater Permit, adopted in October 2009, requires the City to implement activities to limit non-stormwater discharges to the storm sewer system. This includes implementing “Best Management Practices” (BMPs) to reduce pollutants such as mercury and pesticides, implementing BMPs for municipal activities, enforcing State and local regulations, working with new development to minimize pollutants, and educating property owners on how to protect water quality. The Stormwater Permit places significant priority on developing and implementing programs to reduce trash and its impact on local waterways.

Trash generation correlates with many other community conditions, including graffiti and gang violence 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. Examples of how the City is using a collaborative approach with other City departments and/or outside organizations to reduce trash and improve community well-being include the Place-Based Neighborhoods Program Art Project and the anticipated San José Watershed Community Stewardship and Engagement Project grant program.

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.

City Service Area
Environmental and Utility Services
OVERVIEW

Budget Dollars at Work: Performance Goals

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

Strategic Goals	CSA Performance Measures	2013-2014 Actual	2014-2015 Target	2014-2015 Estimate	2015-2016 Target	5-Year Goal
Reduce, reuse, and recycle solid waste at home, work, and play	1. % of residents rating the City's job of providing information on how to recycle as good or excellent	54%	60%	NA*	60%	75%

Changes to Performance Measures from 2014-2015 Adopted Budget: No

* No survey was conducted in 2014-2015. Data for this measure was collected from a new bi-annual survey last conducted in early 2014, and those results are reflected in the 2013-2014 Actual column.

- ✓ The City’s Green Vision Goal #2 is to reduce the community’s per capita electrical energy use by 50% by 2022. To accomplish this, the City is exploring expanded partnerships, including the Local Government Partnership Program with PG&E, funded by the California Public Utilities Commission. The City administers the Silicon Valley Energy Watch Program, which provides technical assistance, educational events and workshops, and marketing and outreach and coordinates energy efficiency services within Santa Clara County. The City is also exploring foundation/grant funding opportunities and funding made available by the State of California through Cap & Trade revenues. The City continues to implement energy efficiency measures in its own buildings and will have enhanced capacity to accelerate projects now that an energy service company has been retained to help identify and finance projects.
- ✓ The City of San José achieved an estimated solid waste diversion rate of 73% for 2014 through administration of its residential, commercial, and civic garbage and recycling programs. 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.

Budget Dollars at Work: Performance Goals

OUTCOME 4: SAFE, RELIABLE AND SUFFICIENT WATER SUPPLY

Strategic Goals	CSA Performance Measures	2013-2014 Actual	2014-2015 Target	2014-2015 Estimate	2015-2016 Target	5-Year Goal
Ensure availability of future water supplies	1. Mgd of water conserved and recycled *	72 mgd	72 mgd	72 mgd	76 mgd	89 mgd
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**	75%	78%	NA**	78%	90%
	2. % of Municipal Water System customers with water saving fixtures in their home or property**	64%	66%	NA**	66%	75%
	3. % of residents who are in favor of using recycled water*	78%	80%	NA**	80%	90%

Changes to Performance Measures from 2014-2015 Adopted Budget: No

* 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.

** No survey conducted in 2014-2015. Data for this measure was collected from a new bi-annual survey last conducted in early 2014, and those results are reflected in the 2013-2014 Actual column.

- ✓ The South Bay Water Recycling Program (SBWR) delivers more than 10,000 acre foot 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.

City Service Area

***Environmental and Utility Services
ADOPTED BUDGET CHANGES***

Adopted Changes	Positions	All Funds (\$)	General Fund (\$)
ENVIRONMENTAL SERVICES DEPARTMENT			
• Single-Family Dwelling Waste Materials Processing - Phase II		2,500,000	0
• Environmental Services Department Salary Program		2,421,126	7,044
• Water Pollution Control Plant Capital Improvement Program Staffing	23.00	2,173,883	0
• Single-Family Large Item Collection Pilot		850,000	0
• Water Pollution Control Plant Filter Maintenance		475,000	0
• Paint Shop Spray Booth System Replacement		450,000	0
• Engine Generator Controls Replacement		400,000	0
• Municipal Water Conservation Program		350,000	0
• Electrical Engineering Contractual Services		183,104	0
• ESD Safety Review: Storm Sewer, Municipal Water, Integrated Waste Management		150,000	0
• Municipal Water System Vehicles		100,000	0
• Stormwater Compliance Program/Trash Reduction Staffing	1.00	96,609	0
• Municipal Water Office Administration Support Staffing		61,097	0
• District 5 Enhanced Beautification Days		18,000	18,000
• Single Family Garbage Billing Program Model Change: City Facilities Solid Waste Collection and Processing		0	664,000
• Water Conservation Staffing	0.00	0	48,876
• Integrated Waste Management Garbage Rate Assistance Programs Elimination	(1.00)	(100,434)	0
<i>Subtotal</i>	23.00	10,128,385	737,920
TRANSPORTATION DEPARTMENT			
• Transportation Department Salary Program		541,280	0
• Maintenance and Operations Regulatory Compliance Staffing	1.00	91,378	0
• Sanitary Sewer Maintenance Staffing	1.00	88,886	0
• Geographic Information Systems Management Staffing	0.25	20,579	0
• Single Family Garbage Billing Program Model Change: Illegal Dumping Response	0.00	0	16,804
• Rebudget: Non-Personal/Equipment (Computerized Maintenance Management System)		250,000	0
<i>Subtotal</i>	2.25	992,123	16,804
<i>Subtotal Departments</i>	25.25	11,120,508	754,724

City Service Area
Environmental and Utility Services
ADOPTED BUDGET CHANGES

Adopted Changes	Positions	All Funds (\$)	General Fund (\$)
CITY-WIDE EXPENSES			
• Single Family Garbage Billing Program Model Change: City Facilities Solid Waste Collection and Processing		101,000	101,000
• Rebudget: City-Building Energy Projects Program		590,480	590,480
• Rebudget: Silicon Valley Energy Watch (SVEW) 2015		282,806	282,806
• Rebudget: Burrowing Owl Habitat Management		190,000	190,000
• Rebudget: Property Assessed Clean Energy (PACE) Program		175,000	175,000
• Rebudget: Clean Creeks Healthy Communities		142,000	142,000
GENERAL FUND CAPITAL, TRANSFERS AND RESERVES			
• Earmarked Reserves: Environmental Services Department Late Fee Reserve		(1,800,000)	(1,800,000)
<i>Subtotal Other Charges</i>	0.00	(318,714)	(318,714)
Total Adopted Budget Changes	25.25	10,801,794	436,010

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