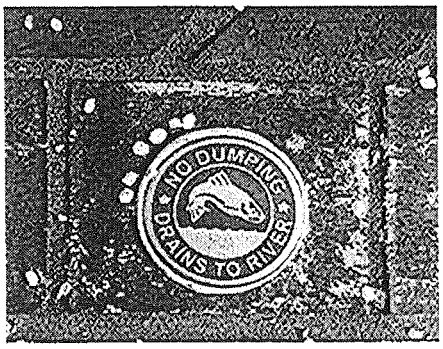
2014-2015

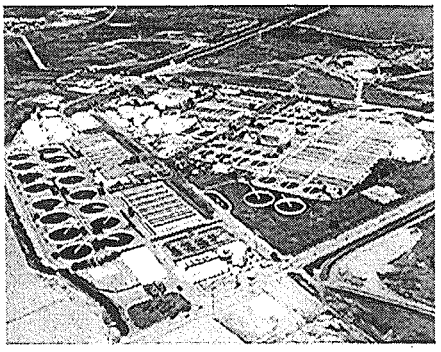
Operating Budget

Environmental and Utility Services CSA

City Service Area

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
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

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

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 2014-2015 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.
- **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.

2014-2015 Budget Actions

- **Sewer Service Rates** – No increases to the Sewer Service and Use Charge rates are scheduled for 2014-2015. The current residential rate levels are sufficient to allow for continued rehabilitation and replacement of critical infrastructure and equipment at the Water Pollution Control Treatment Plant (Plant) and the sanitary sewer collection system. Current projections suggest no rate increases will be needed until 2015-2016, when a Sewer Service and Use Charge increase of approximately 5% would be required. This estimate is preliminary and may change as the implementation timing of sanitary sewer improvements and Plant Capital Improvement Program (CIP) projects is refined, and development of a long-term funding strategy that will allow for a predictable base level of future investments nears completion.
- **Storm Sewer Service Rates** – No increases to the Storm Sewer Service Charge rates are scheduled for 2014-2015. However, rates will be reassessed in 2015-2016 upon completion of the initial recommendations from the Storm Sewer Master Plan that are anticipated to be completed in 2016, as described in the 2015-2019 Proposed Storm Sewer System CIP.
- **Water Rates** – Municipal Water System rates will increase up to 11.0% in 2014-2015 due to wholesale cost increases and increased operating costs.
- **South Bay Water Recycling Wholesale Recycled Water Rates** – The wholesale discount provided to water retailers for industrial recycled water users will be reduced to support cost recovery of system operations and maintenance.
- **Recycle Plus Rates** – A 3% increase in single-family dwelling (SFD) Recycle Plus rates will fund sorting of garbage to collect recycling and is estimated to achieve an approximate 65% diversion rate in the SFD sector. A 5% increase in multi-family dwelling (MFD) rates will fund the large item collection program to provide for more convenient access to these services for property managers.

Environmental and Utility Services

2014-2015 Budget Actions

- **Sanitary Sewer Overflows** – An operational and well maintained fleet is critical to reducing the quantity of and response times to Sanitary Sewer Overflows and other reported sewer problems. Funding is included to replace several vehicles which will further improve the fleet's reliability and operational efficiency, and increase the productivity of the sewer maintenance crews. Implemented in 2011-2012, the Sanitary Sewer Condition Assessment Program coupled video inspection of the collection system with computerized data analysis to provide early detection of deficiencies in the sanitary sewer system, thereby enabling more targeted and effective system cleaning, maintenance, and repair.

- **Sewer Pump Crew Maintenance** – Establishing ongoing funding to add one pump maintenance crew to maintain service levels at existing sanitary and storm pump stations and better position the City to address future expansion. The City currently has 20 sanitary sewer pump stations and 28 storm sewer pump stations, with each having daily, monthly, and annual maintenance schedules. In addition, several new pump stations are expected to come online in the near future. Properly maintaining the pump stations is critical, as these stations ensure sewage flows to the Plant and storm water make it into creeks and the Bay. The additional pump maintenance crew will improve service levels to existing pump stations and ensure the City will be able to meet demand that will result from growth in the near future.

- **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 120 discrete 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 32 construction projects and 10 programmatic studies that will be initiated over the next ten years. These projects translate into $1.4 billion in investment, with the majority being expended within the next decade. The City's funding portion for these projects is included in the Proposed 2015-2019 CIP, and funding options, including bond financing are continuing to be evaluated by staff. With the addition of several positions in 2014-2015, the City is proactively planning for the delivery of critical Plant CIP projects identified through the PMP and project validation process. Staff is conducting a thorough resource analysis and will bring forward additional proposals for resource augmentations to ensure effective delivery of Plant CIP projects.

- **Water Pollution Control Plant – Plant Attendant Staffing** – The Plant continues to experience challenges in hiring for journey level positions in a variety of professional trade groups—Mechanic, Operator, Instrument Control Technicians, and Heavy Equipment Operator. Funding for 9.0 Plant Attendant positions will create additional points of entry into all of these positions, expand the pool of qualified candidates for existing Plant Operator Trainee, Mechanic-In-Training, Instrument Control Technician, and Heavy Equipment Operator positions. These changes will be offset by the elimination of two Assistant Heavy Equipment Operators and one Maintenance Worker position. The additional Plant Attendant positions will also support knowledge retention as journey level staff transfer their knowledge to entry level personnel.

- **Compliance with Permit Requirements** – Staffing adjustments will be made to better position the City in meeting the future requirements of the City's National Pollution Discharge Elimination System (NPDES) permit for stormwater. 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 expires in late 2014 and

Environmental and Utility Services

2014-2015 Budget Actions

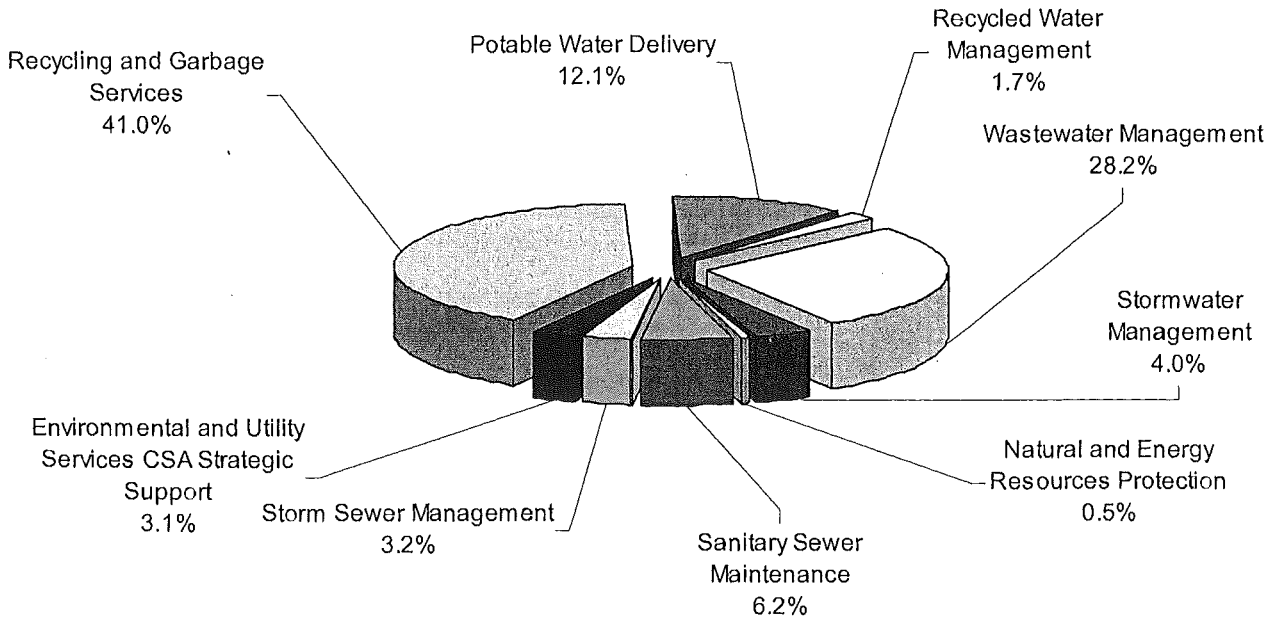
discussions are underway to shape requirements for reissuance. The staffing adjustments will allow greater flexibility in meeting technical and programmatic requirements of the current and future permit.

- **Enhanced Street Sweeping Parking Prohibition Program** – The ability to achieve and maintain clean streets throughout the City improves quality of life and assists in environmental compliance. The City provides street sweeping services to the approximate 3,000 curb miles of residential streets once a month through contractual services. To enhance the City's current program that prohibits parking on street sweeping days in specific areas, funding has been allocated to install up to 40 curb miles of prohibitive parking signs on residential streets that experience high parking impacts.

- **Sorting of Residential Solid Waste** – To support the City's efforts in achieving the Green Vision goal of diverting 100% of waste from landfills by 2022, funding is included to implement an initial phase of a residential conversion program whereby all waste materials collected from single-family residences are sorted and processed by the contractor prior to landfill conveyance. The goal of this program, commonly referred to as "back-end processing", would be to significantly increase the amount of materials recycled and the overall diversion rate of waste sent to landfills. Funding in 2014-2015 will support the initial phase of this residential conversion program and consists of a single service area comprising roughly 20% of the City's total single-family residences. Staff estimates an increase in diversion rate from 60% to 80%, which would position this service area to achieve one of the highest recycling rates in the country. The end goal is to strategically add hauler districts over the next seven years to include all residences.

2014-2015 Total Operations by Core Service

CSA Dollars by Core Service $256,876,708



City Service Area Budget Summary

	2012-2013 Actual 1	2013-2014 Adopted 2	2014-2015 Forecast 3	2014-2015 Proposed 4	% Change (2 to 4)
Dollars by Core Service					
Environmental Services					
Natural and Energy Resources Protection	$ 1,211,225	$ 1,770,965	$ 1,147,722	$ 1,169,169	(34.0%)
Potable Water Delivery	25,672,136	26,996,004	30,634,774	30,963,053	14.7%
Recycled Water Management	2,882,980	4,316,420	4,408,867	4,408,867	2.1%
Recycling and Garbage Services	97,753,247	101,735,151	102,464,357	105,371,996	3.6%
Stormwater Management	9,103,710	10,178,493	10,210,309	10,165,083	(0.1%)
Wastewater Management	56,903,910	64,789,300	69,853,813	72,415,204	11.8%
Strategic Support	6,040,892	6,862,071	7,046,745	7,071,994	3.1%
Transportation					
Sanitary Sewer Maintenance	13,899,400	16,786,322	14,447,115	15,929,115	(5.1%)
Storm Sewer Management	7,235,938	8,499,796	7,666,745	8,266,088	(2.7%)
Strategic Support	973,031	1,019,477	1,116,139	1,116,139	9.5%
Dollars by Core Service Subtotal	**$ 221,676,469**	**$ 242,953,999**	**$ 248,996,586**	**$ 256,876,708**	**5.7%**
Other Programs					
City-Wide Expenses	$ 4,305,332	$ 2,416,484	$ 257,000	$ 257,000	(89.4%)
General Fund Capital, Transfers & Reserves	0	0	0	5,095,000	N/A
Other Programs Subtotal	**$ 4,305,332**	**$ 2,416,484**	**$ 257,000**	**$ 5,352,000**	**121.5%**
CSA Total	**$ 225,981,801**	**$ 245,370,483**	**$ 249,253,586**	**$ 262,228,708**	**6.9%**
Authorized Positions	**646.34**	**654.34**	**653.34**	**666.59**	**1.9%**

Service Delivery Accomplishments

- 82.7 million gallons per day (mgd) were discharged from the Treatment Plant to the San Francisco Bay during summer 2013. This was well below the 120 mgd summer flow trigger, meeting all National Pollutant Discharge Elimination System (NPDES) Permit requirements.
- Major Plant maintenance overhaul projects to the existing engine generators in building 40 were completed and are fully operational.
- Various maintenance projects to Plant headworks were completed. These included improvements to the ferric chloride dosing station, major repairs project for barscreens, detritor, and grit classifiers.
- Four clarifiers in the nitrification area of the Plant were sandblasted, painted, and mechanical components were repaired and painted.
- In the primary treatment area of the Plant, two of the east primary tanks were overhauled for various mechanical components, one scum pump station was replaced with new pumps and equipment.
- The Sanitary Sewer Condition Assessment program video inspected pipes that are near surface waters and pipes deemed to cause frequent maintenance schedules.
- In September 2013, City Council adopted an ordinance to phase out Expanded Polystyrene (EPS) foam food service ware used by San José restaurants and food vendors. The first phase of the ordinance became effective on

Service Delivery Accomplishments

January 1, 2014 for multi-state restaurants and will begin at all other restaurants and smaller establishments, including mobile and street vendors, on January 1, 2015.

- 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, the prevalence of single-use bags has reduced significantly, indicating that the 10 cent minimum charge has had the intended effect.

- Following an inspection of the City's Sanitary Sewer Collection System by the Environmental Protection Agency, the State Water Resources Control Board, and the Regional Water Quality Control Board in 2010, the City continued to implement and refine several operational changes to improve sanitary sewer overflows (SSO) response and reporting. Through the implementation of these changes, the Department of Transportation is working towards achieving the five-year Strategic Plan goal of three SSOs per 100 miles of sewer line.

- The funding and implementation of several critical SSO reduction strategies occurred in 2013-2014, including an increase in the amount of sewer line cleaning performed on problematic sewer lines, chemical treatment of sewer lines to eliminate tree root intrusion and growth, and further analysis of sewer lines and maintenance practices to improve the efficiency and effectiveness of the preventive maintenance program.

- In 2013-2014, the Environmental Services Department modified the Food Service Establishment (FSE) Inspection Program to include an SSO adaptive risk-based approach. This approach prioritizes FSE inspections based upon whether the site is grease producing, has adequate pretreatment, the likelihood of an SSO to occur in that area (termed Collection System Risk, or CSR), and the potential for the site to generate grease (termed Fats, Oils, and Grease (FOG) Discharge Risk, or FDR), in addition to FOG violation history and last inspection date. This risk-based approach has increased inspection frequencies at locations most likely to cause or contribute to SSOs in San José, while maintaining a minimum frequency of at least once every five years at lower risk grease producing locations.

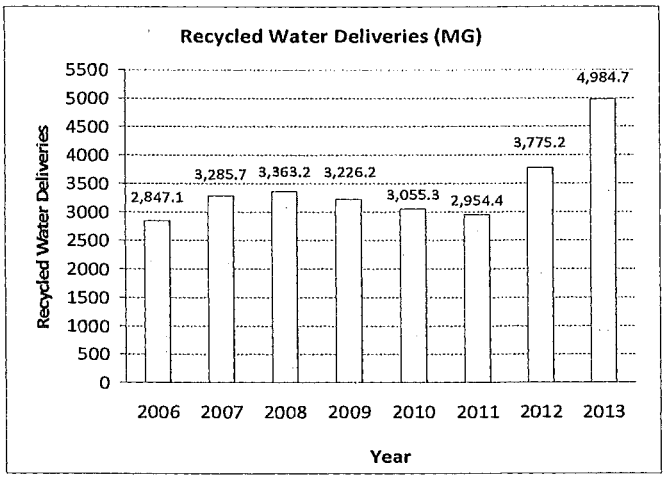
- The Department of Transportation, in coordination with the Environmental Services Department and the community, identified approximately 40 miles of streets where monthly street sweeping was not being effective in removing pollutants and debris due to a high percentage of the curbs being blocked by 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 summer 2013.

- In 2013-2014, the Environmental Services Department updated the Sewer Use Ordinance to implement the Environmental Protection Agency's 2006 Streamlining Rules. Implementing the Streamlining Rules allows industrial users to apply for a waiver of sampling requirements for pollutants not present in their wastewater discharge, thereby reducing unnecessary sampling and costs.

- During 2013-2014, improvements to stormwater drainage systems included the completion of storm sewer improvement projects in the Lincoln/San Carlos and Bird Avenue areas to address localized ponding and drainage problems.

- Through the end of 2013-2014, approximately 43,000 feet of sanitary sewers will have been rehabilitated and/or replaced. In addition, the Sanitary Sewer Condition Assessment Program is progressing to meet the plan to clean and inspect 10-percent (200 miles) of the collection system annually.

Service Delivery Accomplishments



- South Bay Water Recycling (SBWR) water deliveries for summer 2013 averaged 19.3 mgd (13.7 mgd on an annual basis). This was up from the 15.8 mgd average in the summer of 2012 (10.3 mgd on an annual basis). Recycled water delivery has rebounded appreciably between calendar years 2012 and 2013. The growth in 2013 recycled water delivery is attributed to warmer temperatures and below average rainfall, substantial local economic recovery, and an increase in recycled water demand by two power generating facilities, which are SBWR's largest customers.

- The Treatment Plant's conversion to a Computerized Maintenance Management System (CMMS) continues to progress, bringing the Treatment Plant closer to the overall goal of establishing a comprehensive, long-term Asset Management Program.

- By the end of 2013-2014, the Municipal Water System is forecasting the delivery of approximately 6.7 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.

- 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 74%.

- The new Zero Waste Energy Development Facility was completed and began receiving material for processing in December 2013. The Phase I facility is being commissioned to process up to 90,000 tons of organic waste annually, which will allow all of the organic waste from the commercial collection system to be handled in an enclosed facility.

- During 2013-2014, the City began accepting bulky expanded polystyrene (EPS) as an acceptable recyclable material at Neighborhood Clean-Up events and introduced 56 new compressed natural gas (CNG) vehicles to the single-family residential collection fleet.

- The City continued implementation of the EPA grant funded Clean Creeks, Healthy Communities (CCHC) project. The objective of CCHC is to reduce trash through addressing homelessness, community engagement, and illegal dumping prevention. To date, the CCHC has participated in or organized 65 outreach events and reached an estimated 1,700 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; an increase from 58% in the baseline survey.

Service Delivery Environment

Aging storm sewer, sanitary sewer, and Treatment Plant infrastructure result in increased maintenance and rehabilitation/replacement costs. Master Plans for these systems help identify necessary long-term improvements. The initial recommendations from the City-wide Storm Master Plan are anticipated to be completed in 2016. The Sanitary Sewer Master Plan was completed in 2011-2012, with subsequent updates on an as-needed basis. The Plant Master Plan was adopted by the City Council in November 2013, and identified 114 projects and over a $2.2 billion investment to rebuild and rehabilitate the aging infrastructure at the Plant and to 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 32 construction projects and 10 programmatic studies that will be initiated over the next ten years. These projects translate into $1.4 billion in investment, the majority of which will be expended in the next decade.

Wastewater

- The U.S. Environmental Protection Agency (EPA), the State Water Resources Control Board, and the 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 a Sanitary Sewer Management Plan 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 million. The near-term projects will be phased over a 20-year period.

- Over the last five years, the Treatment Plant has seen an unprecedented decline in staffing resources in all areas of engineering, operations, and maintenance. These declines are severely impacting the ability to deliver on long-term project planning and capital improvement projects recommended by the Plant Master Plan and through the project validation effort.

- 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 Treatment Plant from any potential tidal impacts, ensuring that Moseley Tract and Pond A18 issues are considered and addressed, and providing habitat for endangered species.

- Treatment 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). Currently there are no permit requirements to monitor nitrate, nitrite, or phosphate in the Plant final effluent. However, the Plant routinely monitors these nutrients to assess removal

Service Delivery Environment

Wastewater

performance and assure quality for recycled water. Current regulatory initiatives by Federal EPA and the California State Water Board have started a process for determining if water quality objectives should be established for nutrients, other than those already listed as conventional pollutants. A Water Board-stakeholder process including publically owned treatment plants to conduct nutrient studies in San Francisco Bay began in 2011 under the project title "Numeric Nutrient Endpoint" (NNE).

Stormwater Management

- On October 14, 2009, the Regional Water Quality Control Board adopted a new NPDES Stormwater Permit (Stormwater Permit) to regulate 77 municipalities in the 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 Regional Water Board staff to frame the requirements of the next Stormwater Permit which is anticipated to be adopted in fall 2014.

- The Stormwater Permit requires the City to reduce trash loads from the storm sewer system by 40% by 2014 and sets goals for a 70% reduction by 2017 and "no adverse impact" by 2022. In January 2014, City Council approved the Clean. Waterways, Healthy City: Long-Term Trash Load Reduction Plan, which provides an update on implementation of the Short-Term Trash Load Reduction Plan and a roadmap for achieving the permit specified trash reduction goals. Highlights of Short-Term Plan actions completed include installation of structural controls, adoption of an ordinance to phase out the use of polystyrene food ware at restaurants, and the Bring Your Own Bag Ordinance which was amended to eliminate the scheduled increase to a required minimum charge for recycled content paper bags. The Long-Term Trash Load Reduction Plan includes a continuation of Short-Term efforts and focuses on implementing community engagement and outreach pilot programs.

- The City will continue implementation of Litter Outreach Strategy with the objective to raise public awareness regarding the problem of litter and foster community engagement and action. The strategy includes a combination of new and ongoing tactics. Among the new tactics is a partnership with Litterati to host a trash photo contest utilizing Instagram as a way of increasing public awareness of litter using social media. Additionally, the City launched a three-year partnership with the San José Earthquakes to promote environmental topics, including anti-litter messaging.

- 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 Permit compliance efforts and promote the City's sustainability and watershed protection goals.

Solid Waste

- 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.

- In order to encourage proper disposal of large items and promote the large item collection program, funding for inclusion of a large item collection service in the multi-family service rate is proposed.

Service Delivery Environment

Solid Waste

- A grand opening for the Environmental Innovation Center (EIC) will be held in late May 2014. The original contractual completion date for construction was December 20, 2012. However, due to several issues, including the evaluation and remediation of lead-containing paint and bankruptcy of the original general contractor, completion of the project was delayed. Construction included the renovation of an existing warehouse for use as a Habitat for Humanity ReStore and Prospect Silicon Valley Demonstration Center, as well as the addition of a new 7,000 square foot building to serve as the largest permanent household hazardous waste drop-off facility in Santa Clara County. The EIC advances many of the City's Green Vision goals.

- On March 18, 2014, the City Council directed staff to proceed with a new technology vendor to help the City implement a California Energy Commission grant funded demonstration that would determine if gasification is a viable solution for the management of biosolids (sludge) from the Treatment Plant and biomass. Biomass is the woody fractions from the residential yard waste collection program and is currently trucked to the Central Valley and used as boiler fuel.

- San José's exclusive commercial wet/dry solid waste processing system has been underway for almost two years and has achieved a 70% diversion rate. Staff anticipates achieving approximately 75% diversion rate by the end of 2014-2015. The service generates green recycling jobs, provides feedstock for potential waste to energy operations, continues to provide stable franchise fee revenue for the General Fund, and accelerates progress toward renewable energy goals. Additionally, the Construction and Demolition Diversion (CDD) program has achieved a 75% diversion rate for facilities that are certified by the City. Due to the State Cal Green requirements, fewer City construction projects need to participate in the City's CDD program.

Sustainability

- In support of Green Vision Goal #2, *reduce per capita energy use by 50%,* the Silicon Valley Energy Watch Partnership with 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 2014 and staff anticipates additional funding will be made available later this year for 2015.

- Staff monitors emerging solar and other renewable energy technologies for possible implementation in the City, seeks to leverage scalable model programs to promote the advancement of renewable energy, and monitors city-wide solar installation activities. These activities support Green Vision Goal #3, *receive 100% of our electrical power from clean renewable resources.*

CSA Priorities/Key Services

- Operate and maintain the City's utilities – storm sewer, sanitary sewer, Treatment 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 Sanitary Sewer Overflows (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 National Pollutant Discharge Elimination System (NPDES) wastewater and stormwater permit compliance.

CSA Priorities/Key Services

- 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 to support stormwater pollution prevention programming.
- Develop a Strategic/Master Plan to guide the expansion, oversight, and fiscal integrity of the recycled water system into the future.
- Continue to implement solid waste reduction programs in order to achieve Zero Waste by 2022.
- Ensure a smooth transition of Recycle Plus billing to the Santa Clara County Secured Property Tax Bill in July 2015.
- Create recycling infrastructure jobs in San José and support public/private partnerships through the processing of twenty percent of the single-family garbage stream beginning in July 2014.
- Increase awareness of proper disposal of large items through the proposal to incorporate large item collections in the multi-family garbage service rates.
- Complete construction and commissioning of the Zero Waste Energy Development's dry fermentation anaerobic digestion and create energy from organic portions of San José commercial sector waste. Support the permitted expansion of this facility to allow organic waste from the residential sector and neighboring jurisdictions. Install and operate the Gasification Demonstration Project and prepare a long-term feasibility study with the California Energy Commission and partner technology providers.

Budget Dollars at Work: Performance Goals

OUTCOME 1: RELIABLE UTILITY INFRASTRUCTURE

The utility infrastructure in San José, which includes the Water Pollution Control Plant (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 2015-2019 Proposed Capital Improvement Program (CIP) includes funding of $887.0 million 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 2015-2019 Sanitary Sewer System Proposed CIP provides funding of $191.9 million, of which $70.0 million is allocated in 2014-2015 to upgrade the existing pipe network to support the build-out of the General Plan, and to evaluate and rehabilitate the existing sanitary sewers, pump stations, and other infrastructure. The 2015-2019 Storm Sewer System Proposed CIP provides funding of $56.4 million, of which $27.7 million is allocated in 2014-2015 for master planning and improvements of the Storm Sewer System. For the collection system, investments in fleet replacement and pump station maintenance are included in this budget to improve the efficiency and effectiveness of maintenance activities that reduce the number of SSOs. The 2015-2019 Proposed Water Utility System CIP provides funding of $ $25.9 million for maintenance of existing infrastructure, and improvements to the Water Utility System facilities, with $11.2 million allocated in 2014-2015.

Strategic Goals	CSA Performance Measures	2012-2013 Actual	2013-2014 Target	2013-2014 Estimate	2014-2015 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	99%*	95%	98%	95%	95%
	- Storm Sewer lines	97%	95%	99%	95%	95%
	- SJ Municipal Water	97%	98%	98%	98%	98%
	- South Bay Water Recycling	100%	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**	74%	<100%	<100%	<100%	<100%
	3. Number of SSOs per 100 miles of sewer lines	6.8	5.0	7.5	4.0	3.0
Provide for collection, disposal & processing of solid waste	1. % of waste diverted from landfills (State Goal: 50%)					
	- Overall	71%	75%	73%	75%	77%
	- Residential	60%	61%	60%	63%	68%
	- Commercial	70%	75%	73%	75%	80%
	- City Facilities	90%	89%	91%	91%	91%

Changes to Performance Measures from 2013-2014 Adopted Budget: Yes[1]

* 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.

[1]Changes to Performance Measures from 2013-2014 Adopted Budget:
X "% of customers rating service as good, based on reliability, ease of system use and lack of disruption" was deleted because it is a duplicate of a measure reported in the Environmental Services Department Core Services Potable Water Delivery and Recycled Water Management.

Budget Dollars at Work: Performance Goals

OUTCOME 1: RELIABLE UTILITY INFRASTRUCTURE

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

- A three-year Treatment Plant master planning process resulted in 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 Treatment Plant and to make technology changes to benefit the community. In anticipation of the significant capital improvement program, 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 32 construction projects and 10 programmatic studies that will be initiated over the next ten years. These projects translate into $1.4 billion in investment, the majority of which will be expended in the next decade. The 2015-2019 Proposed CIP provides funding of $887.0 million, of which $142.3 million is allocated in 2014-2015 to address critical infrastructure rehabilitation, replacement needs, and capital improvements at the Plant. Projects in the CIP include projects related to the future transition to a new biosolids management process ($146.7 million); Electrical Systems and Power Generation projects ($93.8 million); a new headworks facility ($88.4 million); Advanced Process Control and Automation upgrades ($30.9 million); Secondary Wastewater Treatment projects ($72.4 million); East Primary Rehabilitation, Seismic Retrofit, and Odor Control ($42.2 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 2014-2015 Proposed Operating Budget and 2015-2019 Proposed CIP:

- Funding of $81.5 million for design and construction of the Capacity Improvement Projects to support economic developments, of which $28.1 million is programmed to complete work on the interceptor project.
- Funding of $70.0 million for design and construction of Rehabilitation Projects which are selected based on hydrogen sulfide studies that analyze pipe corrosion, condition assessment studies, video inspections, maintenance records and reports, and actual pipe failures, whether due to pipe corrosion or other physical deficiencies.
- Ongoing funding of $1.2 million to replace aging sewer cleaning equipment (combination cleaning utility and maintenance trucks) in the Department of Transportation to continue to improve the effectiveness and efficiency of sewer line cleaning, blockage removal, and SSO response.
- Funding of $303,000 to increase resources in the Department of Transportation to maintain the storm and sanitary sewer pump stations. The inventory is increasing and one additional two-person crew is needed to ensure all pump stations are properly maintained.
- One-time funding of $300,000 for the establishment of a sewer lateral repair grant for qualifying residents to provide partial funding for costly repairs to the sewer lines under homeowner properties.

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 2015-2019 Proposed CIP are included in the 2014-2015 Proposed Operating Budget. Major items funded by this transfer include:

- Initiation of design for the Charcot Pump Station at Coyote Creek and continuation of design for the Alviso Pump Station ($2.0 million). $9.0 million will remain in a reserve for construction of the Alviso Pump Station. The full cost of designing and constructing these pump stations and altering the associated pipe system is expected to total $52.0 million.
- Funding of $11.5 million for the purchase and installation of up to 20 Large Trash Capture Devices at various locations within the City.
- Funding of $1.4 million for the Willow Glen-Guadalupe Phase III project.
- Continued funding to repair and restructure outfalls along local rivers and creeks ($2.4 million).
- Funding of $1.2 million for the Park Avenue Green Avenue Storm Sewer Improvements project.
- Continued funding to develop and maintain updates to a City-wide Master Plan and associated Flow Monitoring Program ($6.8 million).
- Funding of $3.6 million for Urgent Flood Prevention and Repair projects.

✓ *Water Supply Infrastructure*

- The Municipal Water System's rates still remain well below those of other San José retailers, even after a rate increase of up to 11.0% to account for higher wholesale water costs and increased operating costs.
- Municipal 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 meeting 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 investment will need to continue.

- Zero Waste Energy Development has completed Phase One construction and is digesting organic material from San José businesses as it completes the commissioning process and moves toward full capacity. It will process waste from other sources in San José and the region when Phase Two and Three of construction are completed.
- The Habitat for Humanity's ReStore and the County's Household Hazardous Waste operations at the EIC will divert furniture, appliances, and building materials from landfills as well as provide residents with a convenient and safe means to dispose of common toxic items.
- Environmental Inspectors will work to identify businesses that are not receiving service through the new commercial solid waste collection system to ensure they are included in the program.

Budget Dollars at Work: Performance Goals

OUTCOME 1: RELIABLE UTILITY INFRASTRUCTURE

✓ *Solid Waste Management Infrastructure*

- Installation and start-up of the small scale Gasification Demonstration unit is expected to be completed by summer 2014. With data from the demonstration study, the City will prepare a feasibility study that will help to determine if gasification is a viable solution for the commercial management of biosolids and biomass.
- The City has made progress in replacing and converting the Recycle Plus residential collection vehicles used by GreenTeam of San José and Garden City Sanitation to compressed natural gas (CNG) power. Fifty-six CNG powered collection vehicles went into service in 2013-2014, servicing GreenTeam's multi-family and single-family collection routes and Garden City's single family collection routes. By the end of 2013-2014, staff expects to have a total of 63 CNG collection vehicles. GreenTeam and Garden City Sanitation's fleet will be fully replaced or converted to CNG powered vehicles by June 2015.

Budget Dollars at Work: Performance Goals

OUTCOME 2: HEALTHY STREAMS, RIVERS, MARSH AND BAY

Strategic Goals	CSA Performance Measures	2012-2013 Actual	2013-2014 Target	2013-2014 Estimate	2014-2015 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	N/A*	55%	49%	55%	60%
Manage wastewater for suitable discharge into the Bay	1. Mgd discharged to Bay during the average dry weather effluent flows (ADWEF) season	85 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***	15.8 mgd	13.1 mgd	14 mgd	14 mgd	14 mgd

Changes to Performance Measures from 2013-2014 Adopted Budget: No

* No survey conducted in 2012-2013 due to availability of staffing resources. Data for this measure was collected from a new survey conducted in early 2014, and those results are reflected in the 2013-2014 Estimated 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 – 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 Treatment Plant's average dry-weather effluent flow was 85 mgd in 2012 and 82 mgd in 2013. 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 participates 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. Residential thermometer exchange and dental amalgam programs aim to reduce mercury discharge, and the City's efforts to provide safe and convenient disposal for unused medications are critical to addressing the emerging concern of the effects of these medications on water quality.

The NPDES stormwater permit, adopted in October 2009, directs significant enhancements to municipal maintenance activities, water quality monitoring, enforcement programs, and application of treatment and flow control measures to development projects. The City continues to review opportunities to realign operations to deliver new requirements, and has developed new and expanded programs, procured new monitoring equipment, and refined program and operational data tracking.

Budget Dollars at Work: Performance Goals

OUTCOME 2: HEALTHY STREAMS, RIVERS, MARSH AND BAY

✓ *Stormwater Program Implementation*

As a requirement of the permit, the City conducts activities to limit non-stormwater discharges to the storm sewer system, and to implement "Best Management Practices" (BMPs) to reduce pollutants such as mercury, pesticides, and trash.

This includes 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.

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 as well as our ability to leverage resources of other public and non-governmental agencies who 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 other outside organizations to reduce trash and improve community well-being include:

- Anti-Gang & Blight Coordination
- Place-Based Neighborhoods Program Art Project
- Clean Creeks, Healthy Communities

The initial partnerships identified in this plan are key first steps 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 our resource base with those entities that share the common goal of improving community health and well-being.

Budget Dollars at Work: Performance Goals

OUTCOME 3: "CLEAN AND SUSTAINABLE" AIR, LAND, AND ENERGY

Strategic Goals	CSA Performance Measures	2012-2013 Actual	2013-2014 Target	2013-2014 Estimate	2014-2015 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	N/A*	75%	54%	60%	75%

Changes to Performance Measures from 2013-2014 Adopted Budget: No

* No survey was conducted in 2012-2013 due to availability of staff resources. Data for this measure was collected from a new survey conducted in early 2014, and those results are reflected in the 2013-2014 Estimated column.

- ✓ The City's Green Vision Goal #2 is to reduce the community's 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 Silicon Valley Energy Watch Program (SVEW), 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. Through a Federal grant, 71 energy efficiency projects on City facilities were completed in 2013.

- ✓ The City of San José achieved a solid waste diversion rate of 74% for 2013-2014 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. In 2014-2015, innovations in the new commercial system will be piloted in the residential sector to help move the City closer to its zero waste goal. Customer outreach to neighborhoods, schools, and businesses will continue to help reduce recycle cart contamination and blight, as well as ensure that commercial customers are accounted for.

Budget Dollars at Work: Performance Goals

OUTCOME 4: SAFE, RELIABLE AND SUFFICIENT WATER SUPPLY

Strategic Goals	CSA Performance Measures	2012-2013 Actual	2013-2014 Target	2013-2014 Estimate	2014-2015 Target	5-Year Goal
Ensure availability of future water supplies.	1. Mgd of water conserved and recycled *	21.4	69	69	72	89
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**	N/A**	40%	75%	78%	90%
	2. % of Municipal Water System customers with water saving fixtures in their home or property**	N/A**	50%	64%	66%	75%
	3. % of residents who are in favor of using recycled water*	N/A**	75%	78%	80%	90%

Changes to Performance Measures from 2013-2014 Adopted Budget: Yes[1]

* Through 2012-2013, data reported was based on WPCP Tributary-wide flow savings from a subset of indoor water conservation programs and Tributary-wide recycled water use. 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 was conducted in 2012-2013 due to availability of staff resources. Data for this measure was collected from a new survey conducted in early 2014, and those results are reflected in the 2013-2014 Estimated column.

[1] Changes to Performance Measures from 2013-2014 Adopted Budget:

- ↺ "% of residents demonstrating water conservation knowledge" was revised to "% of Municipal Water System customers demonstrating water conservation knowledge" to reflect the fact that the water conservation program is specific to Municipal Water System customers.
- ↺ "% of residents with water saving fixtures in their home" was revised to "% of Municipal Water System customers with water saving fixtures in their home or property" to reflect the fact this measure pertains to residential and non-residential Muni Water System customers.
- ✕ "% of San José Municipal Water System drinking water samples meeting or surpassing State and federal water quality" was deleted because it is a duplicate of a measure reported in the Environmental Services Department Core Service Potable Water Delivery.

✓ The South Bay Water Recycling Program (SBWR) delivers more than 10,000 acre foot per year of recycled water from the Treatment 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.

✓ An ongoing joint effort between City staff and the Santa Clara Valley Water District to develop a comprehensive SBWR master plan in 2014-2015 will address future improvements and recommend a long-term rate approach to support system maintenance and capital investment.

Proposed Changes	Positions	All Funds ($)	General Fund ($)
ENVIRONMENTAL SERVICES DEPARTMENT			
• Single Family Dwelling Waste Materials Processing - Phase I		2,500,000	0
• Water Pollution Control Plant Vehicles		550,000	0
• Water Pollution Control Plant Filter Maintenance		475,000	0
• Multi-Family Dwelling Bulky Goods Collections		410,000	0
• Water Pollution Control Plant Capital Improvement Program Staffing	4.00	408,460	0
• Water Pollution Control Plant Safety Support		375,000	0
• Water Pollution Control Plant Wastewater Attendant Staffing	6.00	299,610	0
• Water Pollution Control Plant Process Control Upgrade		250,000	0
• Municipal Water Staffing	1.00	185,164	0
• Municipal Water Vehicles		150,000	0
• Water Pollution Control Plant Power and Air System Support		150,000	0
• Pollution Prevention and Water Pollution Control Plant Capital Improvement Program Outreach Support	1.00	120,398	0
• Nine Par Landfill Groundwater Contamination Clean-Up		113,400	0
• Water Pollution Control Plant Fiscal Staffing	1.00	85,282	0
• Municipal Water Conservation Outreach and Activities		75,000	0
• Electric Vehicle Lease Renewal		6,000	0
• Environmental Services Department Administrative Services Support and Watershed Protection Division Staffing	(2.00)	(156,766)	0
Sewer Service Conservation Program Elimination		(149,553)	0
• Integrated Billing System Transition Staffing		(48,216)	0
Subtotal	11.00	5,798,779	0
TRANSPORTATION DEPARTMENT			
• Sanitary Sewer and Storm Sewer Programs Fleet Replacement		1,200,000	0
• Sanitary Sewer and Storm Sewer Pump Crew Maintenance	2.00	303,335	0
• Sewer Lateral Replacement Grant		300,000	
• Street Sweeping Signage	0.25	275,008	35,000
• Electric Vehicle Lease Renewal		3,000	
Subtotal	2.25	2,081,343	35,000
Subtotal Departments	**13.25**	**7,880,122**	**35,000**

Proposed Changes	Positions	All Funds ($)	General Fund ($)
GENERAL FUND CAPITAL, TRANSFERS AND RESERVES			
• Transfers to Other Funds: Sewage Treatment Plant Connection Fee Fund - Former RDA SERAF Loan Repayment		5,095,000	0
Subtotal Other Charges	**0.00**	**5,095,000**	**0**
Total Proposed Budget Changes	**13.25**	**12,975,122**	**35,000**