

2012-2013

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
Environmental and Utility Services
SERVICE DELIVERY FRAMEWORK

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

MISSION STATEMENT
 Why the CSA exists

Environmental & Utility Services CSA

Mission:

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

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

Outcomes:

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

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

CORE SERVICES
 Primary deliverables of the organization

Environmental Services Department

Core Services:

- Natural and Energy Resources Protection
- Potable Water Delivery
- Recycled Water Management
- Recycling and Garbage Services
- Stormwater Management
- Wastewater Management

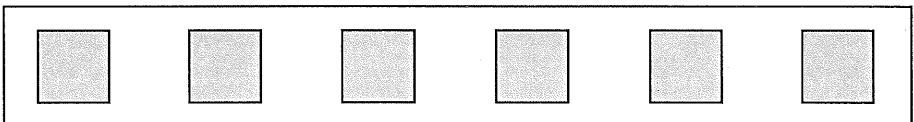
Transportation Department

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 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** – Collect, process, and dispose of solid waste to maximize diversion from landfills and protect public health, safety, and the environment.
- ❑ **Sustainable Facilities and Operations** – Reduce the City’s environmental footprint through energy efficiency and conservation, water conservation, environmentally preferable purchases, and Green Building.
- ❑ **Promote Sustainability in the Community** – Support sustainable infrastructure, equipment, and behaviors throughout the community through education, public-private partnerships, and implementation of the City’s Green Building Policy.
- ❑ **Recycled Water** – Operate and maintain a recycled water system that reduces effluent to the Bay and provides a reliable and high quality alternative water supply.
- ❑ **Customer Service** – Provide excellent customer service to City residents and businesses.

Impacts of Budget Actions

- ❑ **Sewer Service Rates** – No increases to the Sewer Service and Use Charge or Storm Sewer Service Charge rates are scheduled for 2012-2013. 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 (Treatment Plant), the sanitary sewer collection system, and the needs of the Storm Sewer System. Current projections suggest no rate increases may be needed until 2014-2015, when a Sewer Service and Use Charge increase of 3% would be required. This estimate is preliminary and may change as the Plant Master Plan project scopes are developed, costs are refined, technologies are evaluated, and as prices for the necessary goods and services, which fluctuate, are better known. Costs for Treatment Plant and sewer maintenance operations and financing for “Package 2” Plant Master Plan projects would also impact rate increases.
- ❑ **Water Rates** – Municipal Water System rates will increase by 9.5% solely due to wholesale water cost increases.
- ❑ **Recycle Plus Rates** – There will be no increase in Recycle Plus rates for 2012-2013, because contract savings from 2011-2012 will be available to offset the 2012-2013 contractual increases for the garbage hauler contracts.
- ❑ **Sanitary Sewer Overflows** – Several actions were approved to reduce the quantity of and response times to Sanitary Sewer Overflows (SSOs) and other reported sewer problems and to ensure compliance with Federal and State regulatory requirements. An expansion of the Video Inspection Program will aid in the early detection of deficiencies in the sanitary sewer system and enable more targeted and effective system cleaning, maintenance, and repair. An extensive Root Control Maintenance Program will utilize a safe chemical treatment process on selected sewer lines to prevent SSOs caused by root intrusion. The implementation of a First Responder Program will reduce SSO response time to 30 minutes or less to prevent and mitigate the impact of SSOs. Lastly, manhole covers equipped with monitoring devices that trigger alarms when the covers are opened or the water level inside the pipe reaches a certain level will be installed in select locations.

City Service Area
Environmental and Utility Services
BUDGET SUMMARY

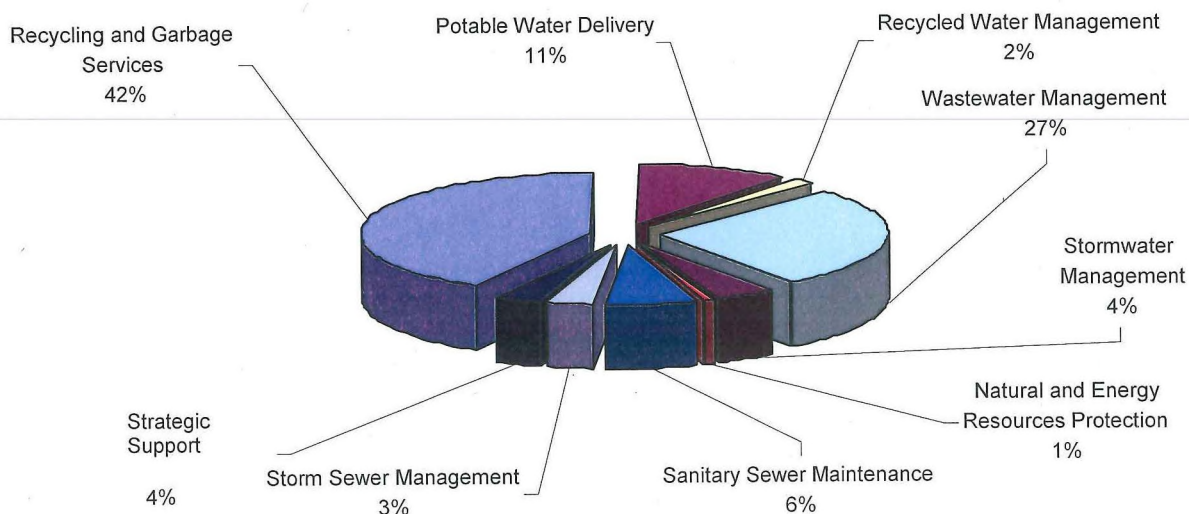
Environmental and Utility Services

Impacts of Budget Actions

- ❑ **Maintenance and Equipment** – To improve operational efficiency, aging sewer cleaning and maintenance equipment will be replaced. Additionally, funding will be allocated for repair and maintenance of Treatment Plant infrastructure to avoid the greater repair costs that would result if these actions were deferred.
- ❑ **Storm Sewer Retrofit Projects** – A grant reserve was established to allow the City to leverage external funding to support design and construction of Green Street projects which will retrofit existing roads to treat polluted road runoff prior to its entry into the storm sewer system. This will prevent auto and road related pollutants from entering local waterways and protect water quality. Two grant applications have already been submitted, and additional opportunities may be pursued in the Spring of 2013.
- ❑ **Plant CIP Delivery** - A top priority for the Water Pollution Control Capital Improvement Program (CIP) is to ensure the necessary program management, engineering, and technical support resources for planning and implementation of the CIP are available. A “packaged approach” for Treatment Plant CIP delivery was presented to the Transportation and Environment Committee in February 2012. Package 1 includes critical rehabilitation projects covering the various Treatment Plant process areas, and is shown in the 2013-2017 Adopted CIP. Package 2 includes projects that replace existing treatment process technologies with new technologies, rather than rehabilitating existing infrastructure. Most of the funding for these projects is not included in the CIP, and funding options, including bond funding, are currently being evaluated by staff. Package 3 includes projects that are to be constructed beyond the 10 to 15 year horizon. The Package 3 projects are end-of-life-cycle replacement projects for existing infrastructure, and new projects driven by regulatory requirements.
- ❑ **Treatment Plant Training Program** – Due to an unprecedented level of retirements and attrition at the Water Pollution Control Plant, the limited number of experienced staff will concentrate on day-to-day management and operations while technical, safety, and technological training will be provided through a contractual program. This more targeted and beneficial technical training program will prepare staff to address more complex activities.

2012-2013 Total Operations by Core Service

CSA Dollars by Core Service \$237,771,054



City Service Area
Environmental and Utility Services
OVERVIEW

City Service Area Budget Summary

	2010-2011 Actual 1	2011-2012 Adopted 2	2012-2013 Forecast 3	2012-2013 Adopted 4	% Change (2 to 4)
Dollars by Core Service					
<i>Environmental Services</i>					
Natural and Energy Resources Protection	\$ 1,605,567	\$ 2,158,129	\$ 1,577,581	\$ 1,830,002	(15.2%)
Potable Water Delivery	19,097,151	23,295,374	25,448,268	25,517,822	9.5%
Recycled Water Management	3,330,116	4,310,044	4,212,849	4,002,140	(7.1%)
Recycling and Garbage Services	91,603,414	97,280,997	99,650,288	100,071,713	2.9%
Stormwater Management	8,270,319	11,976,412	9,856,565	10,017,766	(16.4%)
Wastewater Management	55,112,712	61,488,813	62,242,451	65,129,860	5.9%
Strategic Support	5,360,986	6,961,064	6,748,498	6,752,229	(3.0%)
<i>Transportation</i>					
Sanitary Sewer Maintenance	10,985,193	14,018,603	11,958,452	15,166,944	8.2%
Storm Sewer Management	6,456,397	8,215,800	7,504,184	7,816,272	(4.9%)
Strategic Support	970,808	972,880	956,306	1,466,306	50.7%
Dollars by Core Service Subtotal	\$ 202,792,663	\$ 230,678,116	\$ 230,155,442	\$ 237,771,054	3.1%
Other Programs					
City-Wide Expenses	\$ 4,066,760	\$ 10,336,754	\$ 718,220	\$ 5,951,135	(42.4%)
General Fund Capital, Transfers & Reserves	385,923	0	0	0	0.0%
Other Programs Subtotal	\$ 4,452,683	\$ 10,336,754	\$ 718,220	\$ 5,951,135	(42.4%)
CSA Total	\$ 207,245,346	\$ 241,014,870	\$ 230,873,662	\$ 243,722,189	1.1%
Authorized Positions	646.51	650.94	649.89	645.34	(0.9%)

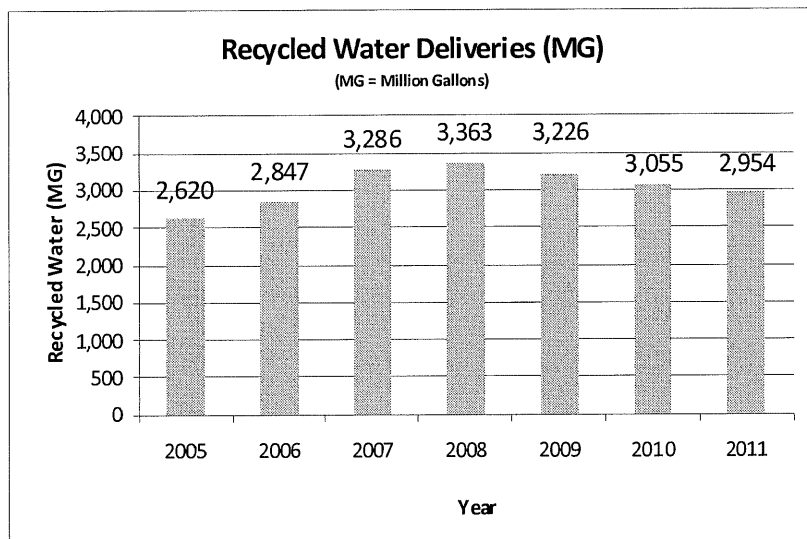
Service Delivery Accomplishments

- 91.2 million gallons per day (mgd) were discharged from the Treatment Plant to the San Francisco Bay during summer 2011. This was well below the 120 mgd summer flow trigger, meeting all National Pollutant Discharge Elimination System (NPDES) Permit requirements.
- Transition from a gaseous chlorine and sulfur dioxide disinfection system to a liquid sodium hypochlorite and sodium bisulfite disinfection system was completed at the Treatment Plant, significantly reducing the environmental and public safety risks associated with the transport, storage, and handling of gaseous chlorine.
- Four aging motor control systems were replaced at the Treatment Plant. Work on an additional four units is currently underway with construction scheduled to complete in 2012-2013. Work is also underway to improve the reliability and operating flexibility of the Treatment Plant's electrical distribution system.
- The City entered into a power purchase agreement to produce electrical power via fuel cell technology that uses Treatment Plant digester gas. This new 1.4 MW Fuel Cell is expected to be fully operational in 2012-2013. Completion of this project will advance the Treatment Plant's energy self-sufficiency goal and the City's Green Vision renewable energy goal of receiving 100 percent of electrical power from clean renewable sources.
- The Sanitary Sewer Condition Assessment program video inspected approximately 700,000 feet of sewers in 2011-2012.
- In January 2012, a comprehensive ordinance to reduce the use of single-use carry out bags was implemented.

City Service Area
Environmental and Utility Services
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Service Delivery Accomplishments

- 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 fully implemented several operational changes to improve SSO response and reporting as required.
- 98.9% of all sanitary sewer and 99% of storm sewer collection lines operated without obstruction, and 100% of all sanitary sewer line blockages were cleared within 4 hours. A First Response Pilot program began mid-January 2012, and based on its success, the permanent implementation of this program is included in this budget.
- During 2011-2012, improvements to stormwater drainage systems included the installation of four replacement engines for the Oakmead Pump Station in addition to replacement of neighborhood storm mains, inlets, manholes, curbs, and gutters reducing and preventing ponding and drainage problems.
- Through the end of 2011-2012, approximately 11,600 feet of sanitary sewers will have been rehabilitated, and 16,600 feet of sewers will have been replaced. Additionally, repairs at 30 locations have been completed following SSO incidents.
- A draft Sanitary Sewer Master Plan Report was completed in September 2011 to recommend a capacity improvement program for the City’s Trunk Sewer System. The Master Plan study identified city-wide trunk sewer system deficiencies for existing near-term and long-term (i.e., Envision San José 2040 General Plan) land use scenarios and recommended 93 capacity improvement projects totaling approximately \$170 million.
- The Sanitary Sewer Flow Monitoring Program provided flow and rainfall monitoring for the sewer master plan study, capital improvement projects and land use development projects.
- A comprehensive Energy Strategic Management Plan was completed in 2011-2012 and will guide



implementation and prioritization of combined heat and power capital improvement projects at the Treatment Plant over the next five to ten years.

million gallons per day (mgd) (8.1 mgd on an annual basis). This was down from the 14 mgd average in the summer of 2010 (8.4 mgd on an annual basis). The drop in annual use of recycled water was caused by decreased use of recycled water for irrigation due to cooler than average temperatures, and lower industrial cooling use due to a reduction in demand for electricity.

- 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.
- South Bay Water Recycling (SBWR) water deliveries summer 2011 averaged 13.1
- 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 71% in 2011-2012.

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 are in development to identify necessary long-term improvements. The Storm Master Plan will be completed in July 2013. The draft Sanitary Sewer Master Plan was completed in 2011-2012, and a final plan including CEQA documentation will be completed in 2012-2013, with subsequent updates to be incorporated on an as-needed basis. The Plant Master Planning effort reached a major milestone in April 2011 with City Council approval of a Preferred Alternative and initiation of the environmental review process. An Environmental Impact Report is being prepared for public comment and City Council consideration in spring 2013. Upon completion, the Plant Master Plan will guide capital improvements and land use changes to Plant lands over the next 30 years.

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.
- 82% of the sanitary sewer system is between 32 and 61 years old. The Pilot Sanitary Sewer Condition Assessment Program (SSCA) completed in 2011 revealed the need to invest in frequent monitoring of the high-risk pipelines based on a statistical analysis of pipeline samples. The key finding of the Pilot SSCA Project was that approximately 5% of the system has severe defects which would require repair or replacement within 5 years. The SSCA also recommends an annual budget of \$28 million for rehabilitation of the system for the first five years to keep the system from further deterioration and keep it at a satisfactory serviceable condition. In addition, an investment of \$2 million annually for ongoing pipe inspection by Closed Circuit Television (CCTV) to monitor the system condition is recommended for system condition assessment.
- The City's 15 sanitary sewer pump stations are an average of 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. Currently, three major pump stations, Montague, Spreckles, and Lamplighter are scheduled for major rehabilitation in the 2013-2017 Adopted CIP. The remaining pump stations will be prioritized for inclusion in future CIPs.
- The Sewer Master Plan Phase II (Master Plan), completed in September 2011, identifies 93 trunk sewer capacity improvement projects totaling approximately \$170 million. Approximately 65 percent of these projects are needed to address existing capacity deficiencies in the system. This need for capacity projects to address existing capacity deficiencies equates to an annual cost of approximately \$6 million per year for the next 20 years.
- Over the last five years, the Treatment Plant has seen an unprecedented level of staff vacancies in all areas of engineering, operations, and maintenance. The lack of staff resources is severely impacting the ability to deliver on long term project planning and capital improvement projects recommended by the Plant Master Plan Preferred Alternative. To address these challenges, additional Public Works resources will be assisting with Treatment Plant CIP projects, and a plan that increases reliance on consultant services for the delivery of the CIP is being developed.

City Service Area
Environmental and Utility Services
OVERVIEW

Service Delivery Environment

Wastewater

- The City is participating 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 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 substances that cause algae growth, other than those already listed as conventional pollutants. To that end, a Water Board-stakeholder process that includes publically owned treatment plants began to conduct nutrient studies in the San Francisco Bay in 2011 under the project title "Numeric Nutrient Endpoint" (NNE).
- In 2010, the City executed a 40-year Integration Agreement with the Santa Clara Valley Water District to collaborate on the development of local recycled water use. The agreement includes provisions for joint funding of SBWR operations, and joint funding towards the construction of a \$56 million Advanced Recycled Water Treatment Facility (AWTF). This facility is expected to be completed in spring 2013.

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. These new efforts include measures to address the stormwater impacts of land development; to dramatically and quantifiably reduce the amount of trash entering local creeks from the storm sewer system; and to implement pilot projects to treat stormwater suspected to contain elevated levels of key pollutants.
- 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 a 100% reduction by 2022. A comprehensive Trash Load Reduction Plan was submitted for review to the Water Board in February 2012. While it is currently projected that the City will be at 54% by 2014, reaching the 70% and 100% goals will require programmatic and structural investments. The City is working with regional groups that have secured grant funding to help support elements of the permit, and is actively pursuing additional grants to support City-specific implementation efforts.
- The City received a \$680,000 federal grant from the US EPA to implement a pilot project focusing on building community awareness and stewardship of Coyote Creek using an innovative approach to engaging the homeless in collecting and cleaning up the riparian area along a targeted stretch of Coyote Creek.
- The City is collaborating with other agencies and stakeholders through the Santa Clara Basin Watershed Management Initiative and the Zero Litter Initiative to develop and implement a County-wide strategic plan to prevent litter and its impacts on local streets and transportation corridors, creeks, and neighborhoods.
- 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.

Service Delivery Environment

Solid Waste

- The Stormwater NPDES Permit issued in 2009 marks a significant shift in regulatory approach in that it requires monitoring from all construction sites for discharges into the storm sewer system, and uses numeric limits to determine the need for follow up actions and regulatory violations. These new requirements became effective July 1, 2010 and are impacting the City's capital projects.
- For single-family households, the Recycle Plus Pilots program that began in 2009-2010 concluded during 2011-2012. The program, with 16,500 participants, included three pilots that targeted the diversion of organic waste. Staff is applying the findings from the pilots to evaluate city-wide implementation of program enhancements to move cost effectively towards zero waste. Research into opportunities to integrate new services as well as amend current programming to enhance service to residents is also ongoing.
- Renovation and construction of the Environmental Innovation Center (EIC) began in September 2011 and is slated for completion in January 2013, with a grand opening in spring 2013. In November 2011, a New Markets Tax Credit transaction closed, resulting in an additional \$4.5 million in funding for the project. The EIC advances the City's commitment to San José's Green Vision.
- The City Council approved new agreements for redesigned commercial solid waste service in June 2011, with implementation on July 1, 2012. It is estimated that the redesigned commercial system will increase the commercial solid waste diversion rate from 22% to over 80%, generate green recycling jobs, provide feedstock for potential waste to energy operations, decrease the greenhouse gas impact of the current system by providing 46 alternative fuel solid waste collection trucks to replace the existing aging fleet, provide stable franchise fee revenue for the General Fund, and accelerate progress toward renewable energy goals.
- Solid waste management planning efforts focus on addressing AB32 Climate Change goals by removing organics from the waste stream. Organics represent approximately 30% of the disposed waste by weight in San José. To this end, staff has completed analysis of the residential food waste and yard trimming collection pilots and included organic waste processing as part of the redesign for the commercial garbage and recycling program. Lastly, the City has been awarded a grant by the California Energy Commission to analyze and pilot a gasification technology that target organics as a feedstock for biomethane generation.
- Over the next 15 years, solid waste landfill space in the region will likely reach capacity. Sites for landfills are increasingly difficult to find in California, and with higher fuel prices and concerns about greenhouse gas emissions, local recycling processing infrastructure will need to be enhanced to handle various waste streams.

Sustainability

- In support of Green Vision Goal #2, *reduce per capita energy use by 50%*, staff is working to identify funds to continue implementation of energy efficiency measures in City facilities and develop and implement energy efficiency programs city-wide through replacement of lights and equipment with energy efficient options.
- The Silicon Valley Energy Watch Partnership with PG&E, a three-year program that runs through 2012, enables staff to provide extensive energy efficiency education and outreach to the community. The program is expected to be fully funded through 2014, pending a final decision from the California Public Utilities Commission which is expected in late 2012.
- Staff tracks existing and emerging solar and other renewable energy technologies for possible implementation in the City, evaluates and develops scalable model programs to promote the advancement of renewable energy, and facilitates the installation of solar infrastructure on City facilities and properties. These activities support Green Vision Goal #3, *receive 100% of our electrical power from clean renewable resources*.

City Service Area
Environmental and Utility Services

OVERVIEW

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.
- 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.
- Rehabilitate and replace the aging storm sewer and wastewater collection and treatment system infrastructure, focusing on completing the EIR for the Plant Master Plan Preferred Alternative, the final draft of the Sanitary Sewer Master Plan, and continuation of the development of the Storm Sewer Master Plan.
- Continue to comply with National Pollutant Discharge Elimination System (NPDES) wastewater permit.
- Continue to identify and implement energy efficiency projects in City facilities.
- 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 oversight and fiscal integrity of the recycled water system into the future.
- Continue to implement solid waste reduction programs in order to achieve 75% landfill diversion by 2013 and zero waste by 2022.
- Develop and build the Environmental Innovation Center at Las Plumas.

City Service Area
Environmental and Utility Services
OVERVIEW

Budget Dollars at Work: Performance Goals

OUTCOME 1: RELIABLE UTILITY INFRASTRUCTURE

The utility infrastructure in San José, which includes the sanitary sewer system, storm sewer system, Treatment Plant, 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 collection system, increased investments for expanded Root Control, expanded Sewer Video Inspection and First Responder are included in this budget to reduce the number of SSOs and improve SSO response times. The five-year CIP provides \$92.6 million to upgrade the existing pipe network to support the build-out of the General Plan, \$85.3 million to strategically evaluate and to rehabilitate the existing sanitary sewers, pump stations, and other infrastructure. For the Treatment Plant, the five-year CIP provides \$211.5 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, and numerous other improvements.

Strategic Goals	CSA Performance Measures	2010-2011 Actual	2011-2012 Target	2011-2012 Estimate	2012-2013 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	83%*	95%	85%	85%	90%
	- Storm Sewer lines	96%	95%	95%	95%	95%
	- SJ Municipal Water	98%	95%	95%	95%	95%
	- South Bay Water Recycling	100%	95%	95%	95%	95%
	2. % of customers rating service as good, based on reliability, ease of system use and lack of disruption:					
	- Potable	85%	N/A**	N/A**	N/A**	N/A**
	- Recycled	82%	N/A**	N/A**	N/A**	N/A**
	3. Ratio of Municipal Water System average residential water bill to weighted average residential water bill of other San José water retailers***	82%	<100%	84%	<100%	<100%
	4. Number of SSOs per 100 miles of sewer lines	8.5	N/A	8.1	5.0	3.0
Provide for collection, disposal & processing of solid waste	1. % of waste diverted from landfills (State Goal: 50%)					
	- Overall	69%	72%	71%	73%	77%
	- Residential	60%	62%	60%	61%	64%
	- Commercial	38%	38%	38%	75%	80%
	- City Facilities	84%	82%	84%	85%	85%

Changes to Performance Measures from 2011-2012 Adopted Budget: Yes¹

* The % of utility assets in working condition for the SJ/SC Water Pollution Control Plant is calculated based on average number of hours critical equipment are unavailable during the year due to repairs. The Plant's aging equipment and infrastructure are the primary drivers for this lower than anticipated number for 2010-2011, and the decreased estimate in the following year.

** Potable and recycled water customers are surveyed bi-annually in even numbered years. Results from the 2010 Municipal Water System Customer Survey are reported under the 2010-2011 Actual column. The next survey is scheduled for 2012, with results available in the 2013-2014 Proposed Operating Budget. Staff are evaluating the effectiveness of surveys versus other data collection methods and may recommend modifications to the current performance measures.

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

¹ Changes to Performance Measures from 2011-2012 Adopted Budget:

- + The "Number of SSOs per 100 miles of sewer lines" was added as this new measure is consistently used in the sanitary sewer maintenance industry as a key indicator of program effectiveness.
- × The "% of utility assets in working condition: - Sanitary Sewer Lines" was eliminated as the newly added "Number of SSOs per 100 miles of sewer lines" is a better indicator of sewer performance.

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Environmental and Utility Services
OVERVIEW

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 2013-2017 Adopted CIP are included in the 2012-2013 Adopted Operating Budget. Major items funded by this transfer include:

- Continuation of a comprehensive storm pump station rehabilitation capital program (\$3.1 million over five years) to replace or rehabilitate the oldest and least reliable pump stations, reducing the risk of localized flooding during storm events.
- Funding of \$1.1 million for Alviso Network Infiltration Control to address groundwater intrusion in the storm sewer system.
- Funding of \$870,000 for the Gold Street Storm Pump Station Force main project.
- Continued funding to repair and restructure outfalls along local rivers and creeks (\$1.3 million).
- Continued funding to develop and maintain updates to a City-wide Master Plan (\$3.6 million).
- A \$13.0 million reserve in 2013-2014 for the design and construction of the Charcot Pump Station. The full cost of designing and constructing this pump station and altering the associated pipe system is expected to total approximately \$22.0 million.

✓ *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 and meet the performance measure "Number of SSOs per 100 miles of sewer lines" and "Annual capital renewal investment as a % of value of the plant," the following projects are included in the 2012-2013 Adopted Capital and Operating Budget and 2013-2017 Adopted CIP:

- Funding of \$30.2 million for the 60" Brick Interceptor, Phase VIA and VIB, which will complete work on this interceptor project.
- Funding of \$19.0 million for a new Cast-Iron Pipe Remove and Replace program, to remove and replace the City's most corroded sewers.
- Funding of \$5.0 million to continue condition assessments, feasibility studies, and rehabilitation for aging pump stations.
- Funding of \$270,000 (\$207,000 ongoing) to implement a First Responder Program to ensure a quick and effective response (within 30 minutes) to any reported sanitary sewer problems in order to prevent and mitigate the impacts of SSOs and comply with the State mandated Sanitary Sewer System General Waste Discharge Requirements.
- Funding of \$460,000 (\$168,000 ongoing) for an enhanced sanitary sewer line Video Inspection Program that will identify system and maintenance deficiencies, improving maintenance activities.
- Ongoing funding of \$500,000 for a Root Control Program used for contractual services to provide a chemical root treatment to the sanitary sewer system to prevent SSOs caused by root intrusion.
- Funding of \$700,000 to replace aging sewer cleaning equipment (a combination cleaning truck, utility and maintenance trucks, trailers, and a dump truck) in the Department of Transportation to improve the effectiveness and efficiency of sewer line cleaning, blockage removal, and SSO response.

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 an approved Preferred Alternative consisting of a Technical Alternative and a Land Use Alternative. These were approved by the City Council on April 19, 2011. Environmental clearance is expected by spring 2013. The final Plant Master Plan will guide capital improvements over the next 30 years. The Technical Alternative includes long-term capital improvement projects focused on infrastructure rehabilitation, odor control, biosolids, and power generation, with a total projected cost of \$2.2 billion over the next 30 years (escalated at 2% annually).

- \$211.5 million in construction projects over five years are included in the 2013-2017 Adopted CIP to address critical infrastructure rehabilitation, replacement needs and capital improvements at the Plant. Projects in the CIP include three headworks projects (\$13.4 million); East Primary Rehabilitation, Seismic Retrofit, and Odor Control (\$31.3 million); a new iron salt feed station (\$1.9 million); Secondary and Nitrification Clarifier Rehabilitation (\$14.0 million); Digester Rehabilitation (\$63.6 million); Combined Heat and Power Equipment Repair and Rehabilitation (\$3.2 million); Advance Process Control and Automations upgrades (\$2.5 million); and other various improvements.

✓ *Water Supply Infrastructure*

- The Municipal Water System's rates will still remain well below those of other San José retailers, even after the approved rate increase of 9.5% to account for higher wholesale water costs.
- Municipal Water continues to meet its goal for the performance measure "*% of utility assets in working condition.*"

✓ *Solid Waste Management Infrastructure*

To continue to increase 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 Zero Waste Master Plan will guide the CSA five-year infrastructure goals and objectives, including facility upgrades to increase the processing capacity needed to achieve Zero Waste.
- The City Council approved new 11-year Recycle Plus residential solid waste service agreements in June 2010, which include higher diversion standards, processing services, and collection options designed to achieve Zero Waste.
- The City Council approved new contracts for the Commercial Solid Waste collection system which include significant investment in local recycling processing and solid waste collection infrastructure.
- The City Council approved maximum customer service rates for commercial solid waste customers in May 2012. These rates will ensure that Republic Services (the exclusive commercial solid waste franchisee that started on July 1, 2012) has the necessary revenue to fund their cost of operations, including collection equipment and labor, recyclables processing labor and machinery at their state of the art facility, and compensation paid to the City's contracted organics processor, Zero Waste Energy Development Company (ZWED), which will process food waste and other organics to produce energy and create beneficial compost. The revenue requirement also includes funding needed to pay for government fees such as Franchise Fees and AB939 Fees, and to allow for a profit margin.

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	2010-2011 Actual	2011-2012 Target	2011-2012 Estimate	2012-2013 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*	50%	N/A*	N/A*	60%
Manage wastewater for suitable discharge into the Bay	1. Mgd discharged to Bay during the average dry weather effluent flows (ADWEF) season	90 mgd	<120 mgd	92 mgd	<120 mgd	<120 mgd**
	2. % of time pollutant discharge requirements for wastewater NPDES permit are met or surpassed	100%	100%	99.3%	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 through recycled water during the ADWEF period	14 mgd	15 mgd	13.1 mgd	13.1 mgd	15 mgd

Changes to Performance Measures from 2011-2012 Adopted Budget: No

* Data come from the Water Focus Survey. The next Survey is scheduled for 2012, with results available in the 2013-2014 Proposed Operating Budget. Staff is evaluating the effectiveness of surveys versus other data collection methods and may recommend modifications to the current performance measures.

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

✓ *Wastewater Program Implementation*

Since 1990, the City has invested considerable effort in protecting local streams, rivers, and the San Francisco Bay salt marsh habitat. The Treatment Plant's average dry-weather effluent flow was 89.6 mgd in 2010 and 91.2 mgd in 2011. These numbers are well below the 120 mgd trigger set by the State to protect wildlife habitat. The Treatment Plant continues to consistently meet permit discharge requirements, however, there were two violations in December 2011 for total chloride residual (instantaneous maximum). These were due to operator error related to the installation of the new liquid disinfection system. The source of the error was identified and additional Plant Operator training was implemented to prevent reoccurrence.

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.

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 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.

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.

The City undertakes a variety of initiatives to reduce trash entering the storm sewer system and to address the impacts of trash and debris from creekside encampments. The City is partnering with the Santa Clara Valley Water District to leverage resources and other local agencies, and is collaborating with other cities to implement a large scale effort to markedly reduce the presence of trash in creeks.

To comply with the permit requirements, the following action is included in this budget:

- A \$500,000 Reserve for Grant Match in the Storm Sewer Operating Fund to leverage external funding for design, engineering, and construction of a Green Street Storm Sewer Retrofit in San José. Through these types of projects, the City will gain experience in retrofitting existing streets to integrate low impact development stormwater treatment measures as part of storm sewer system, while improving pedestrian and bicycle access and enhancing neighborhood livability.

Budget Dollars at Work: Performance Goals

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

Strategic Goals	CSA Performance Measures	2010-2011 Actual	2011-2012 Target	2011-2012 Estimate	2012-2013 Target	5-Year Goal
Procure, manage and conserve clean, economical and reliable sources of energy	1. % change in energy usage in all City accounts from 2007 baseline	-11.4%	-13%	-14.2%	-16.67%	-20%
	2. kW of renewable energy installed at City-owned sites	2,449 kW	3,334 kW	5,230 kW	6,250 kW	8,500 kW
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	85%	87%	N/A*	N/A*	N/A*

Changes to Performance Measures from 2011-2012 Adopted Budget: No

* Staff is evaluating the effectiveness of surveys versus other data collection methods and may recommend modifications to the current performance measures as part of the 2013-2014 budget process.

- ✓ A vital component of achieving Green Vision Goal #4, *build or retrofit 50 million square feet of Green Buildings*, is implementation of the City’s Green Building Policy. In 2007, the City revised the Green Building Policy to ensure achievement of the U.S. Green Building Council LEED Silver standard for all new City facilities larger than 10,000 square feet. The City Council also recommended reviewing how the City’s existing buildings could use the LEED for Existing Building green building guidelines, and asked for a program that would provide technical assistance and incentives for private sector adoption of green building techniques. In 2008, the City Council adopted a Private Sector Green Building Policy, which requires large developments to meet LEED Silver standards. The accompanying ordinance was adopted by the City Council in August 2009. In 2012, the City began participating in the U.S. Green Building Council’s LEED Volume Program, which will provide a discount rate for certifying 25 municipal buildings and help the City increase the number of buildings it is able to certify.
- ✓ 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. This program, called the Silicon Valley Energy Watch Program (SVEW), provides technical assistance, educational events and workshops, and marketing and outreach, to coordinate energy efficiency services within Santa Clara County. The City is aggressively implementing energy efficiency measures in its own buildings. In 2011-2012, 32 energy efficiency projects on City buildings were completed.
- ✓ The City of San José projects a solid waste diversion rate of 71% for 2011-2012 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 City’s extensive incentive-based programs make it easier to “Recycle Where You Live, Work, Learn and Play.” Customer outreach to neighborhoods, schools, and businesses, and a high level of customer satisfaction also contribute to the overall success of these well-designed programs.

Budget Dollars at Work: Performance Goals

OUTCOME 4: SAFE, RELIABLE AND SUFFICIENT WATER SUPPLY

Strategic Goals	CSA Performance Measures	2010-2011 Actual	2011-2012 Target	2011-2012 Estimate	2012-2013 Target	5-Year Goal
Decrease reliance on imported water	1. Mgd of water conserved and recycled	17.4	18.2	17.2	17.3	19.9
Public is educated regarding water conservation, and the safe and appropriate use of recycled water and water resources*	1. % of residents demonstrating water conservation knowledge*	N/A*	40%	N/A*	N/A*	N/A*
	2. % of residents with water saving fixtures in their home*	N/A*	56%	N/A*	N/A*	N/A*
	3. % of residents who are in favor of using recycled water**	59%	85%	N/A**	N/A**	N/A**
Meet or exceed drinking and recycled water quality standards	1. % of San José Municipal Water System drinking water samples meeting or surpassing State and federal water quality	99.6%	100%	99.5%	100%	100%
	2. % of time recycled water meets or surpasses State recycled water standards (Title 22)	100%	100%	99.9%	100%	100%

Changes to Performance Measures from 2011-2012 Adopted Budget: No

* Data come from a public opinion survey. The survey, scheduled for 2011-2012, was not performed as staff are evaluating the effectiveness of surveys versus other data collection methods and may recommend modifications to the current performance measures.

** Data for 2010-2011 came from a survey conducted by the SCVWD. The survey scheduled for 2011-2012 was not performed as staff are evaluating the effectiveness of surveys versus other data collection methods and may recommend modifications to the current performance measures.

- ✓ The South Bay Water Recycling Program (SBWR) delivers recycled water from the Treatment Plant to customers for reuse in irrigation, industrial cooling, and other beneficial purposes. Planned upgrades to Treatment Plant facilities through the 2013-2017 Adopted CIP will also ensure continued treatment of recycled water to meet customer needs and comply with regulatory requirements and meet current customer needs.
- ✓ The City and Santa Clara Valley Water District have executed a 40-year agreement to coordinate their efforts to develop SBWR. Efforts currently underway include a long-term plan for the operation and maintenance of SBWR and Advanced Water Treatment (AWT) facilities and an updated Master Plan to ensure continued reliable service to over 600 SBWR customers.
- ✓ The Water Conservation Program promotes efficient water use to help manage flows to the Treatment Plant and ensure long-term water supply reliability. This program also supports compliance with the statewide mandate for the San José Municipal Water System to reduce urban water consumption by 20% by 2020. Both water conservation and the SBWR Program have been a major factor in keeping flows to the Bay below the 120 mgd permit trigger. In 2012-2013, the City will continue funding a cost-sharing agreement with the Santa Clara Valley Water District for indoor water conservation, incorporate water conservation messages into other Department-wide outreach efforts for increased efficiency, and implement water conservation for the San José Municipal Water System.

Community and Economic Development

ADOPTED BUDGET CHANGES

Adopted Changes	Positions	All Funds (\$)	General Fund (\$)
CONVENTION FACILITIES			
• Non-Personal/Equipment Recategorization		(15,471,756)	0
• Convention Facilities Staffing	(9.00)	(1,160,553)	0
<i>Subtotal</i>	(9.00)	(16,632,309)	0
ECONOMIC DEVELOPMENT			
• Arts and Cultural Development Non-Personal/Equipment Funding Reallocation		0	(212,806)
• Work2future Program and Webgrants Coordination Staffing	0.00	(6,687)	38,049
• Enterprise Zone Program	1.00	189,349	189,349
• Small Business Advocate	1.00	125,738	125,738
• Spartan Keyes Neighborhood Action Center Lease		29,600	29,600
<i>Subtotal</i>	2.00	338,000	169,930
FIRE			
• Fire Development Fee Program	4.20	538,842	538,842
<i>Subtotal</i>	4.20	538,842	538,842
HOUSING			
• Housing Department Staffing Reorganization	(2.00)	(265,106)	0
• Community Development Block Grant Staffing	(1.00)	(132,285)	0
• Neighborhood Services Team Reorganization (formerly Neighborhood Engagement Team)	2.00	253,862	253,862
<i>Subtotal</i>	(1.00)	(143,529)	253,862
PLANNING, BUILDING AND CODE ENFORCEMENT			
• Urban Runoff Staffing Reorganization	(2.00)	(272,234)	0
• Building Fee Program	7.00	1,560,977	1,560,977
• Envision 2040 General Plan Implementation	2.00	817,865	817,865
• Planning Fee Program	4.75	588,675	649,787
• Planning Services Grants Staffing	1.00	128,984	128,984
• City Ordinance Staffing	1.00	113,446	113,446
• Rebudget: Building Development Services		728,000	728,000
• Rebudget: Envision 2040 General Plan Update		260,600	260,600
• Rebudget: Alameda Urban Village Master Plan and Zoning		150,000	150,000
• Rebudget: Planning Development Services - Peak Staffing Agreements		100,000	100,000
• Rebudget: Alum Rock Main Street District Rezoning		35,410	35,410
• Rebudget: Bay Area Air Quality Management District Risk Reduction Plan		18,500	18,500
<i>Subtotal</i>	13.75	4,230,223	4,563,569
PUBLIC WORKS			
• Public Works Development Fee Program	8.21	948,155	948,155
• Public Works Utility Fee Program	1.93	238,775	238,775
<i>Subtotal</i>	10.14	1,186,930	1,186,930
Subtotal Departments	20.09	(10,481,843)	6,713,133

City Service Area
Community and Economic Development
ADOPTED BUDGET CHANGES

Adopted Changes	Positions	All Funds (\$)	General Fund (\$)
CITY-WIDE EXPENSES			
• Arena Authority		60,000	60,000
• Convention and Visitors Bureau Marketing Program		(554,369)	(554,369)
• Cultural Affairs Special Projects		14,000	14,000
• Cultural Facilities Capital Maintenance Cost Sharing		(69,500)	(69,500)
• Economic Development/Incentive Fund		750,000	750,000
• Neighborhood Business Districts		45,000	45,000
• Miscellaneous Rebudgets		1,465,200	1,465,200
 GENERAL FUND CAPITAL, TRANSFERS AND RESERVES			
• Earmarked Reserves: General Plan Update		(951,593)	(951,593)
• Earmarked Reserves: Planning Development Fee Program		(520,821)	(520,821)
• Earmarked Reserves: Building Development Fee Program		(124,703)	(124,703)
• Earmarked Reserves: Rebudgets		22,207,903	22,207,903
Subtotal Other Changes	0.00	22,321,117	22,321,117
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Total Adopted Budget Changes	20.09	11,839,274	29,034,250

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