

2011-2012

OPERATING BUDGET

**ENVIRONMENTAL
AND
UTILITY SERVICES
CSA**

Environmental and Utility Services



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

Primary Partners

Environmental
Services
Transportation

CSA OUTCOMES

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

City Service Area
Environmental and Utility Services
SERVICE DELIVERY FRAMEWORK

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

MISSION STATEMENT
 Why the CSA exists

Environmental & Utility Services CSA

Mission:

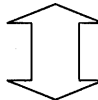
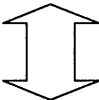
Provide environmental leadership through policy development, program design and reliable utility services.



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

Outcomes:

- Reliable Utility Infrastructures
- 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

Environmental Services Department

Core Services:

Natural and Energy Resources Protection

Potable Water Delivery

Recycled Water Management

Recycling and Garbage Services

Stormwater Management

Wastewater Management

Transportation Department

Core Services:

Sanitary Sewer Maintenance

Storm Sewer Management

CORE SERVICES
 Primary deliverables of the organization

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



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

Environmental and Utility Services

Expected 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 the community in implementing sustainable infrastructure, equipment, and behaviors through education, public-private partnerships, the City’s Green Building Policy, and implementation of the City’s Green Vision.
- ❑ **Green Vision Implementation** – Provide city-wide leadership to implement San José’s Green Vision.
- ❑ **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

- ❑ **Solid Waste Diversion** – New 11 year service agreements have been approved for Recycle Plus garbage, recycling, yard trimmings and street sweeping services for single-family dwellings (SFDs) and multi-family dwellings (MFDs). A 9% rate increase has been approved for SFD and MFD services to fund increased costs of collecting and sorting garbage and recycling material. This increase raises the rate for an average 32-gallon garbage cart by \$2.45 per month, from \$27.50 to \$29.95.
- ❑ **Sewer Service and Use Charge Rate Increase** – A 3% residential rate increase has been approved for the Sewer Service and Use Charge for 2011-2012. This raises the average payment by \$0.97 per month, from \$32.86 to \$33.83. The increase will allow for the continued rehabilitation and replacement of aging infrastructure at the Treatment Plant and in the sanitary sewer collection system, as well as replacement of operations and maintenance equipment.
- ❑ **Equipment Replacement** – To improve operational efficiency and reduce equipment maintenance costs, the Department of Transportation will replace aging sewer cleaning and maintenance equipment.
- ❑ **Stormwater Permit Compliance** – To continue implementing the requirements of the Municipal Regional Stormwater National Pollutant Discharge Elimination System (NPDES) Permit, funding is budgeted to continue installation and construction of structural trash controls in the storm sewer system and to implement other measures identified in the City’s Trash Load Reduction Plan; and to design and construct the City’s first Green Street Storm Sewer Retrofit project. In addition to this, specific actions to control and reduce PCBs and mercury as part of a regional grant effort designed to meet the Stormwater Permit requirements will be funded out of savings in the Storm Sewer Operating Fund.

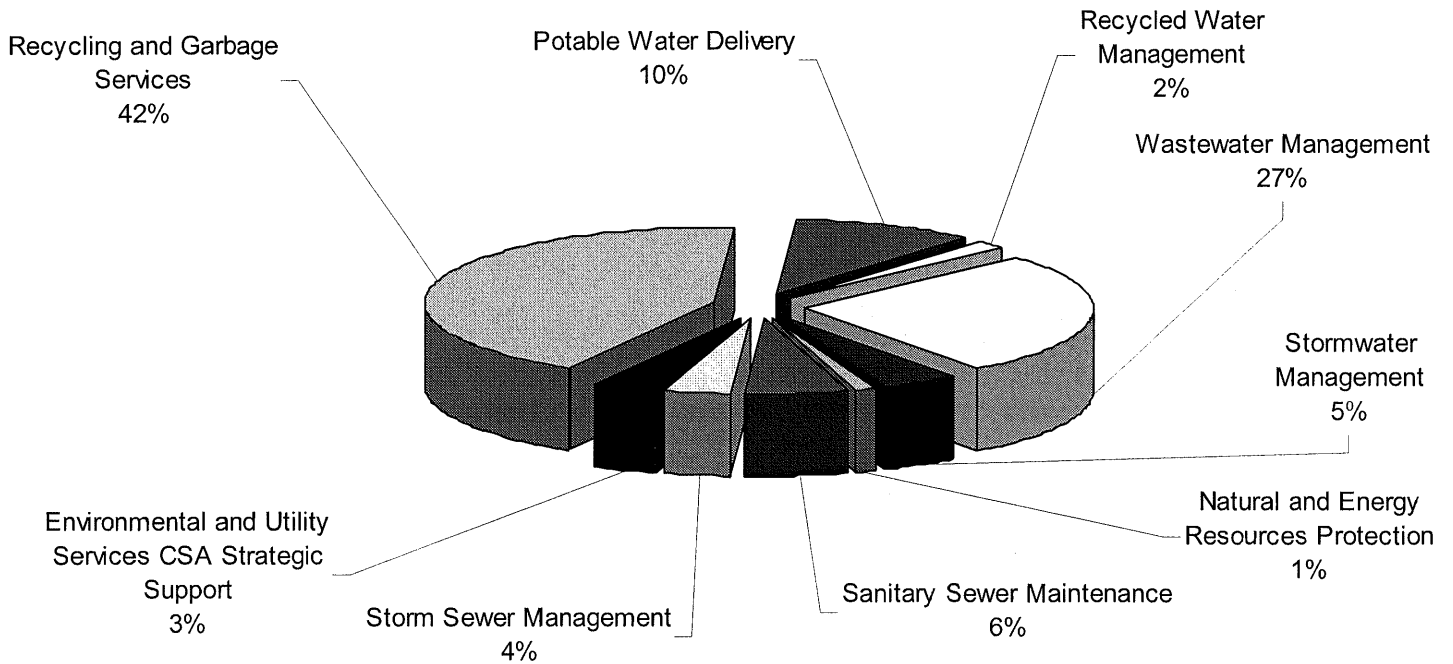
City Service Area
Environmental and Utility Services
BUDGET SUMMARY

Environmental and Utility Services

Impacts of Budget Actions (Cont'd.)

- ❑ **Storm Sewer Infrastructure Rehabilitation** – A 3% residential rate increase and increases of up to 3.1% for various categories of commercial users are approved for the Storm Sewer Service Charge for 2011-2012. The residential rate increase will raise the rate by \$0.23 per month, from \$7.64 to \$7.87. The commercial rate will vary according to the type of commercial user. The increase funds capital improvements for the Storm Sewer System, as well as operating needs, including NPDES Stormwater Permit compliance. The 2012-2016 Adopted Capital Improvement Program (CIP) includes funding to replace or rehabilitate the older pump stations in order to reduce the risk of localized flooding, for Alviso Storm Sewer System rehabilitation, to repair and restructure outfalls along local rivers and creeks, and for a number of neighborhood projects and improvements throughout the City.
- ❑ **Wholesale Water Cost Increases** – Due to wholesale water cost increases Municipal Water System rates will increase by 5.9%.

2011-2012 Total Operations by Core Service



City Service Area
Environmental and Utility Services
OVERVIEW

City Service Area Budget Summary

	2009-2010 Actual 1	2010-2011 Adopted 2	2011-2012 Forecast 3	2011-2012 Adopted 4	% Change (2 to 4)
Dollars by Core Service					
<i>Environmental Services</i>					
Natural and Energy Resources Protection	\$ 1,749,872	\$ 2,124,144	\$ 2,191,696	\$ 2,158,129	1.6%
Potable Water Delivery	19,672,115	21,747,481	23,224,730	23,295,374	7.1%
Recycled Water Management	3,845,137	4,140,527	4,390,434	4,310,044	4.1%
Recycling and Garbage Services	91,795,343	92,866,323	97,758,262	97,280,997	4.8%
Stormwater Management	6,722,637	11,665,597	9,827,083	11,976,412	2.7%
Wastewater Management	60,550,913	60,574,211	60,657,896	61,488,813	1.5%
Strategic Support	6,691,882	6,744,764	7,248,692	6,961,064	3.2%
<i>Transportation</i>					
Sanitary Sewer Maintenance	12,260,004	12,630,587	11,793,122	14,018,603	11.0%
Storm Sewer Management	7,810,668	8,088,380	7,755,973	8,215,800	1.6%
Strategic Support	913,475	980,752	1,043,195	972,880	(0.8%)
Subtotal	\$ 212,012,046	\$ 221,562,766	\$ 225,891,083	\$ 230,678,116	4.1%
Other Programs					
City-Wide Expenses	\$ 1,469,780	\$ 11,588,274	\$ 1,295,168	\$ 10,336,754	(10.8%)
General Fund Capital, Transfers & Reserves	0	385,923	0	0	(100.0%)
Subtotal	\$ 1,469,780	\$ 11,974,197	\$ 1,295,168	\$ 10,336,754	(13.7%)
Total	\$ 213,481,826	\$ 233,536,963	\$ 227,186,251	\$ 241,014,870	3.2%
Authorized Positions	654.83	647.51	648.76	650.94	0.5%

Service Delivery Accomplishments

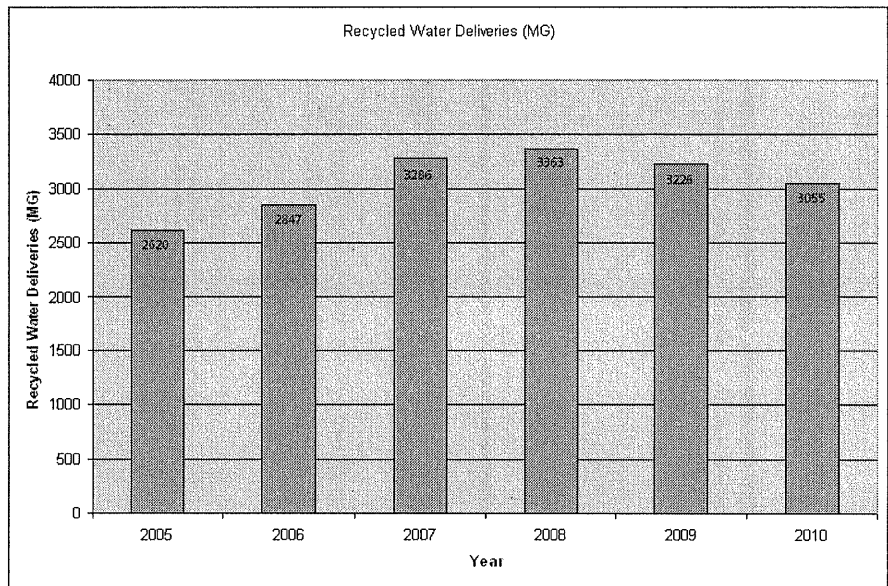
- The average of 89.6 million gallons per day (mgd) discharged from the Treatment Plant to the San Francisco Bay during the summer of 2010 was well below the 120 mgd summer flow trigger, meeting all National Pollutant Discharge Elimination System (NPDES) Permit requirements.
- 98% of all sanitary sewer and 95% of storm sewer collection lines operated without obstruction, and 90% of all sanitary sewer line blockages were cleared within 4 hours.
- During 2010-2011, the stormwater drainage system completed the installation of approximately 4,545 linear feet of neighborhood storm mains, installed new inlets, manholes, curbs and gutters, and upgraded existing pump stations.
- In 2010-2011, approximately 22,700 feet of sanitary sewers were rehabilitated, and 7,500 feet of sewers were replaced.
- The Sanitary Sewer Condition Assessment program video inspected approximately 300,000 feet of sewers in 2010-2011.
- The number of Sanitary Sewer Overflows (SSO) was reduced by 62 (26%), from 242 in 2009 to 180 in 2010 due to improved sewer line cleaning operations and other system improvements.

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Environmental and Utility Services
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Service Delivery Accomplishments

- The Sanitary Sewer Flow Monitoring Program (Master Planning) project will complete the Sanitary Sewer Capacity Assessment (Phase II Study) for the City's East and West Service areas and update the Phase I Capacity Master Plan for the South, Central, and North areas in 2011-2012. To support this effort, over 120 sites have been monitored for dry- and wet-weather flow data and over 2,000 sanitary sewer manhole elevations have been surveyed. The Master Planning updates developed network models and scenarios based on the City's Geographic Information System, City's land use, water consumption, flow data, and other factors. The current model includes all sewer mains that are 10-inches and larger in diameter and roughly 466 miles of pipes. This represents approximately 20% of the entire collection system.

- South Bay Water Recycling (SBWR) water deliveries for summer 2010 averaged 14 mgd (8.4 mgd on an annual basis). This was unchanged from the 14 mgd average in the summer of 2009 (8.8 mgd on an annual basis). The drop in annual use of recycled water was caused by a combination of factors. Cooler than average temperatures resulted in less recycled water needed for irrigation, while industrial cooling use decreased due to a reduction in demand for electricity associated with the continued downturn in the local economy.



- Solid waste recycling and landfill diversion rates remain among the highest achieved by any large city in the country. The City's waste diversion achievements received extensive recognition recently, when the City won the 2009 Governor's Environmental and Economic Leadership Award for waste reduction, the 2009 Solid Waste Association of North America Recycling System Gold Excellence Award, and two 2009 California Resource Recovery Association awards: "Closing the Loop" for organics compost marketing and "Working Towards Zero Waste" for Special Events recycling. In 2010, the City established a new household hazardous waste (HHW) drop-off facility, open to residential and small business generators. The facility, operated by the County's Department of Environmental Health, collects HHW materials on a monthly basis, serving 800 participants during each event. The City is also preparing to expand this facility, and will construct new permanent structures on the site, which will accommodate an increase in operational days per month. The expanded facility is anticipated to be open for public services in late 2012.

Service Delivery Environment

Environmental and Utility Services CSA

- 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 Sanitary Sewer Master Plan will be completed in 2011-2012, with subsequent updates on an as-needed basis. The Plant Master Plan is rounding out a three-year planning effort, currently entering the environmental review stage. A preferred alternative for the Plant Master Plan was approved by City Council on April 19, 2011. Next steps include preparations of a Plant Master Plan Environmental Impact Report and a final Plant Master Plan for public comment and the City Council's consideration in early 2013.

Wastewater

- The U.S. Environmental Protection Agency (EPA), the State Water Resources Control Board, and the Regional Water Quality Control Board performed an inspection of the City's Sanitary Sewer Collection System in June 2010. As a result of the inspection, the City was required to address deficiencies related to Sanitary Sewer Overflow (SSO) response, reporting and employee training. Staff fully rectified the deficiencies as required. The EPA and the State are continuing to ramp up their efforts to ensure that local agencies are in full compliance with the State-wide General Waste Discharge Requirements for Sanitary Sewer Systems.
- Eighty-two percent of the sanitary sewer system is between 32 and 61 years old. The aging sewers may require a significant increase in replacement expenditures in the near future.
- The average age of the City's 15 sanitary sewer pump stations is 30 years. The standard for the design life of the mechanical and electrical components of a pump station is 10 to 25 years, and as such, a pump station should be rehabilitated with new pumps, motors and control systems at least every 25 years.
- Information such as video images of the sewers, flow monitoring data, construction records and maintenance histories of the sanitary sewer collection system is compiled to support asset management and ultimately prevent sanitary sewer overflows from occurring. Funding to upgrade the Computerized Maintenance Management System (CMMS) and the Pump Station Supervisory Control and Data Acquisition (SCADA) is included in the 2011-2012 Adopted Operating Budget because new and enhanced computerized modeling technology, database software, and system hardware are needed to analyze and store the data in order to enable efficient and effective overall management of the collection system among the planning, engineering, operating and maintenance departments.
- The Treatment Plant is developing a Master Plan, which includes a long-term Capital Improvement Program as well as a land use plan. Now in its third year, the master planning process has resulted in a Preferred Alternative consisting of long-range improvements to the Plant's facilities and operations over the next 30 years, and a plan for new uses of Plant lands comprised of a mix of recreational, environmental, and economic development uses. The City Council adopted the Preferred Alternative of the Plant Master Plan in April 2011, and an EIR will be prepared for the Preferred Alternative based on Council direction.
- In 2010, the EPA and the State Water Resources Control Board proposed new water quality regulations for nutrients and toxicity testing, among other concerns. The City continues to track and comment on proposed regulations based on experience in managing the NPDES permits for the Treatment Plant and stormwater in order to ensure that new regulations sensibly and effectively protect the environment.

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Service Delivery Environment

Wastewater (Cont'd.)

- 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 and Treatment Plant'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.
- The Treatment Plant's conversion to a Computerized Maintenance Management System continues to progress in conjunction with the overall goals of establishing a comprehensive, long-term Asset Management Program. The new system continues to provide more data and enable analysis; allowing for more efficient organization and enhanced tracking of critical assets. The next phases of system implementation will include the incorporation of a more rigorous inventory system, with the goal of improving productivity through a more efficient means of procuring parts and planning work orders.
- The Plant has initiated an aggressive energy management program and implemented several projects in 2009-2010 and 2010-2011 that have reduced energy usage. These projects received rebates from PG&E based on the energy saved, which offset the cost of the projects. Additional energy savings projects are in progress for implementation in 2011-2012.

Water Supply

- Green Vision Goal #6, *recycle or beneficially reuse 100% of wastewater (100 mgd)*, will require significant increases in recycled water utilization over the next 10 years. The City is continuing to work closely with local industry, non-profit organizations, other agencies, and universities to increase local awareness of opportunities to use recycled water.
- Long term challenges related to the City's population and economic growth, uncertainty about the Sierra snow pack, the environmental impacts of using the Delta as a water delivery system, and global warming's effects on water supply continue to make conservation and water recycling important priorities.
- The City has been awarded \$2.5 million from Proposition 84 funding which provides \$5.4 billion to State and local agencies for improving programs aimed at preserving natural resources and funding water programs. It is expected that the grant agreement will be brought forward for City Council consideration by the end of 2011.
- In 2010, the City executed a 40-year Integration Agreement with the Santa Clara Valley Water District (District) to collaborate on the development of local recycled water use. The agreement includes provisions for joint funding of SBWR operations, joint funding towards the construction of a \$52 million Advanced Recycled Water Treatment Facility (AWTF). The City will provide a cash contribution up to \$11 million minus costs incurred by the City for preparation, design, and construction.
- Since 2008, the City has obtained an additional \$11 million in federal grants through the US Bureau of Reclamation (USBR) Title XVI program, and over \$20 million in new federal obligations. The City has also been awarded an additional \$2 million in federal grants through the USBR WaterSMART Grant program, as presented to the City Council on September 13, 2011.

Service Delivery Environment

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 new Stormwater Permit includes more specific guidelines for existing programs and requires 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 – polychlorinated biphenyls (PCBs) and mercury. City departments are working diligently to implement the Stormwater Permit requirements.
- The Stormwater Permit requires the City to reduce trash loads from the storm sewer system by 40% by 2014. The Permit also includes targets intended for future permit cycles – a 70% reduction by 2017, and a 100% reduction by 2022. A comprehensive Trash Load Reduction Plan that is framed by three main strategies – prevention, interception, and clean-up – is under development and will be submitted to the Water Board in February 2012.
- The City is working with regional groups that have secured grant funding to help support elements of the Stormwater Permit, and is actively pursuing grants to support City-specific implementation efforts. To date, these efforts have resulted in grant funding that will address a portion of the costs for the Trash Reduction, polychlorinated biphenyls (PCBs), and mercury provisions of the Permit; as well as a project that will create a pesticide-free park, Integrated Pest Management (IPM) demonstration projects, and provide IPM training for City staff, private landscape maintenance professionals, and residents.
- 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.
- In 2009, the State Water Resources Control Board issued a new statewide NPDES permit to cover stormwater management for construction activities. This permit marks a significant shift in regulatory approach in that it requires monitoring from all construction sites and uses numeric limits to determine the need for follow up actions and regulatory violations. These new requirements became effective July 1, 2010 and will impact the City's capital projects.
- Increased regulatory interest in using “green infrastructure” approaches to address stormwater issues, combined with an aging storm sewer infrastructure unsuitable for accommodating planned growth, are driving the need for a multi-year master planning effort for the storm sewer system.

Solid Waste

- For single-family households, the Food for the Earth program that began in 2009-2010 will conclude during 2011-2012. The program, with 16,500 participants, includes three pilots that target the diversion of organic waste. Two of the three pilots – the Yard Trimmings Cart Pilot and the Garbage Processing Pilot – were successfully completed during 2010-2011. The Food Scraps Pilot was completed in August 2011.
- The City is entered into a construction agreement for the development of the Environmental Innovation Center (EIC) on Las Plumas Avenue in May 2011. Staff plans to bring forward agreements to secure additional funding for the EIC to City Council for consideration in Fall 2011. The EIC is envisioned to be a state of the art facility that advances the City's commitment to San José's Green Vision through clean technology innovation and job creation.

City Service Area
Environmental and Utility Services
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Service Delivery Environment

Solid Waste (Cont'd.)

- The City Council approved the redesign of the City's commercial solid waste services on April 15, 2011. The redesigned service will provide the most comprehensive and innovative solid waste collection, recycling and organics processing system in the United States. Full implementation will occur in 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 approximately 50 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.
- City 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 already begun residential food waste and yard trimming collection pilots and issued a request for proposals for organic waste processing as part of the redesign for the commercial garbage and recycling program. Lastly, staff is pursuing grants, and other sources of funds, that target organics as a feedstock for biomethane generation, and is aligning these opportunities with the Water Pollution Control Plant operations and master planning process.

Sustainability

- In support of Green Vision Goal #2, *reduce per capita energy use by 50%*, staff is working to identify funds in addition to federal stimulus funding to implement 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 City's Solar America City program, a DOE grant that runs through 2011, provides renewable energy education and financing models to the community.
- In order to reduce greenhouse gas emissions and advance the City's Green Vision, the City is collaborating with local hauling companies to convert diesel trucks to run on alternative fuels.
- Staff tracks existing and emerging solar and other renewable energy technologies for 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 city-wide. These activities support Green Vision Goal #3, *receive 100% of our electrical power from clean renewable resources*.
- Given the current economic climate, staff is focusing on opportunities for increasing State and federal monetary support and subsidies for development and deployment of renewable energy technologies to meet long-term City energy and climate goals.
- 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.

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.
- Rehabilitate and replace the aging storm sewer and wastewater collection and treatment system infrastructure, focusing on completing the Plant Master Plan, Sanitary Sewer Master Plan, and initiating the Storm Sewer Master Plan.
- Provide city-wide leadership and support for the implementation of San José's Green Vision.
- Continue to identify and implement energy efficiency opportunities in City facilities.
- Continue to partner with other agencies and pursue grants to promote energy efficiency and clean, renewable energy in the community, including waste-to-energy and biomass-to-energy facilities; and to support stormwater pollution prevention programming.
- Improve and support the information systems used to manage the sanitary sewer collection system in order to improve the effectiveness of maintenance activities and reduce blockages and overflows.
- Continue to invest in capacity and condition assessments for the sanitary sewer collection system to support economic development and build out of the General Plan and to minimize overflows and back-ups.
- Continue to meet National Pollutant Discharge Elimination System (NPDES) wastewater permit compliance.
- Implement NPDES stormwater permit requirements, adopted in October 2009.
- Continue to promote water conservation and to invest in and expand the recycled water system.
- Continue to implement solid waste reduction programs in order to achieve 75% landfill diversion by 2013 and zero waste by 2022.
- Develop 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. In order to maintain system reliability and minimize maintenance costs, the older infrastructure needs to be rehabilitated or replaced. For the collection system, the five-year CIP provides \$66.1 million to rehabilitate the existing sanitary sewers and \$103.2 million to upgrade the existing pipe network to support the build-out of the General Plan. For the Treatment Plant, the five-year CIP provides \$305.0 million to rehabilitate and upgrade the existing headworks, primary and secondary tanks and clarifiers, digesters and gas lines, electrical motor control centers and switchgears, engines and generators, and other improvements.

Strategic Goals		2009-2010 Actual	2010-2011 Target	2010-2011 Estimate	2011-2012 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%	95%	95%	95%
	- Sanitary Sewer lines	98%	98%	98%	98%	98%
	- Storm Sewer lines	93%	95%	95%	95%	95%
	- SJ Municipal Water	99%	95%	98%	95%	95%
	- South Bay Water Recycling	93%	95%	99%	95%	95%
	2. % of customers rating service as good, based on reliability, ease of system use and lack of disruption:					
	- Potable	85%	90%	85%	N/A*	90%
	- Recycled	82%	85%	82%	N/A**	95%
	3. Ratio of Municipal Water System average residential water bill to weighted average residential water bill of other San José water retailers***	81%	<100%	81%	<100%	<100%
Provide for collection, disposal & processing of solid waste	1. % of waste diverted from landfills (State Goal: 50%)					
	- Overall	70%	69%	70%	72%	76%
	- Residential	N/A****	N/A****	N/A****	62%	64%
	- Commercial	N/A****	N/A****	N/A****	38%	80%
	- City Facilities	N/A****	N/A****	N/A****	82%	85%

Changes to Performance Measures from 2010-2011 Adopted Budget: Yes¹

- * Potable 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 Estimate/Actual column. The next survey will be conducted in 2012, with results available in the 2013-2014 Proposed Operating Budget.
- ** 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 Estimate/Actual columns. The next survey will be conducted in 2012, with results available in the 2013-2014 Proposed Operating Budget.
- *** Other San José water retailers include: San José Water Company and Great Oaks Water Company.
- **** This measure was added as part of the 2010-2011 Adopted Operating Budget, and has not had enough data collection to provide results.

¹ Changes to Performance Measures from 2010-2011 Adopted Budget:

☪ “Ratio of Municipal Water System average residential water bill to weighted average residential water bill of other San José water retailers” was revised to accurately reflect the type of average used to calculate the ratio.

✓ *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 2012-2016 Adopted CIP are included in the 2011-2012 Adopted Operating Budget. Major items funded by this transfer include:

- Continued funding of a comprehensive storm pump station rehabilitation capital program (\$1,600,000 for 2011-2012) to replace or rehabilitate the oldest and least reliable pump stations, reducing the risk of localized flooding during storm events.

Budget Dollars at Work: Performance Goals

Outcome 1: Reliable Utility Infrastructure (Cont'd.)

✓ *Storm Sewer Infrastructure*

- Addition of \$1,200,000 for Alviso Network Infiltration Control to address groundwater intrusion issues in the storm sewer system.
- Addition of \$600,000 for the Camden/Graystone Storm Sewer Improvement project and \$294,000 for the Lower Bird Avenue Storm Sewer Improvements project.
- Addition of \$920,000 for the Gold Street Storm Pump Station Force main project.
- Continued funding to repair and restructure outfalls along local rivers and creeks (\$1,300,000).
- Continued funding to develop a system-wide master plan as well as a North San José specific master plan (\$4,300,000).

✓ *Sanitary Sewer Infrastructure*

The Sanitary Sewer Master Plan Studies Phase I identified capacity deficiencies in the sewer system for the north, south, and central areas based on the City's 2020 General Plan criteria. The ongoing Phase II studies will prioritize sewer capacity improvement projects for the east and west areas and update the Phase I results, incorporating the approved preferred land-use alternatives for General Plan 2040. The Phase II Study is being finalized, with recommendations for system capacity improvements to be available in winter 2011.

In order to address critical infrastructure needs in the sanitary sewer system and meet the performance measure "*Annual capital renewal investment as a % of value of the plant,*" the following projects are included for 2011-2012:

- Funding of \$2,500,000 to conduct condition assessment, feasibility studies and rehabilitation to address aging pump stations.
- Funding of \$2,984,000 to investigate the structural condition of approximately 70,000 feet of reinforced concrete pipes, the majority which were built in the early 1980s, and rehabilitate if conditions warrant.
- Funding of \$5,000,000 to initiate a Condition Assessment and Repair Program to focus attention on the estimated 500,000 feet of sewers that are located near major bodies of water, hospital, airport, and major roadways.
- Funding of \$1,478,000 to replace aging sewer cleaning equipment (combination cleaning trucks, utility and maintenance trucks, and dump truck) in the Department of Transportation to improve the effectiveness and efficiency of sewer line cleaning, blockage removal, and overflows.
- Funding of \$250,000 to develop and support an improved Computerized Maintenance Management System in the Department of Transportation to improve the effectiveness of sanitary sewer maintenance activities and reduce blockages and overflows.

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

In 2007-2008, staff began development of a 30-year master plan to identify and plan for future needs of the treatment plant. The three-year master planning process has resulted in an approved Recommended Preferred Alternative consisting of a Technical Alternative and a Land Use Alternative. The Recommended Preferred Alternative was approved on April 19, 2011, and environmental clearance is expected to be completed by early 2013.

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Budget Dollars at Work: Performance Goals

Outcome 1: Reliable Utility Infrastructure (Cont'd.)

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

The Technical Alternative includes long-term capital improvement projects focused on odor control, biosolids, and renewable energy. The total projected cost of all technical improvements identified in the Technical Alternative is \$2.2 billion over the next 30 years (escalated at 2% annually).

In order to meet the performance goal “Annual capital renewal investment as a % of value of the Plant,” \$305.0 million in construction projects over five years are included in the 2012-2016 Adopted CIP to maintain and update the Treatment Plant’s infrastructure. These projects include two new gas turbines (\$46.8 million); structural rehabilitation to four digesters, replacement of existing digester gas and sludge lines, pilot testing of digester mixing systems, and improvements to dissolved air flotation thickeners (\$37.7 million); headworks enhancements (\$38.7 million); east primary concrete tank repair and stainless steel conversion (\$20.2 million); and secondary and nitrification clarifier rehabilitation and upgrades (\$12.8 million).

✓ *Water Supply Infrastructure*

- Despite a 5.9% rate increase for Municipal Water System customers, the System’s rates will still remain well below those of other San José retailers.
- Muni Water continues to meet its performance 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 infrastructure and programs will be necessary in the coming decade. Over the next 15 years, solid waste landfill space in the region will likely reach capacity. Sites for landfills are becoming increasingly difficult to find in California and with higher fuel prices and concerns about green house gas emissions, local recycling processing infrastructure will need to be enhanced to handle various waste streams.

- 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.

Budget Dollars at Work: Performance Goals

Outcome 2: Healthy Streams, Rivers, Marsh and Bay

Strategic Goals	CSA Performance Measures	2009-2010 Actual	2010-2011 Target	2010-2011 Estimate	2011-2012 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	50%	50%	50%	50%	60%
Manage wastewater for suitable discharge into the Bay	1. Mgd discharged to Bay during the average dry weather effluent flows (ADWEF) season	88 mgd	105 mgd	90 mgd	90 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 through recycled water during the ADWEF period	14.3 mgd	16 mgd	14 mgd	15 mgd	20 mgd

Changes to Performance Measures from 2010-2011 Adopted Budget: No

* 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 88 mgd in 2009 and 89.6 mgd in 2010. 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.

To support the Wastewater Program and continue to meet or surpass the pollution discharge requirements, this budget includes the transition of a temporary position to permanent status to provide ongoing technical support for a comprehensive air regulation compliance program.

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Budget Dollars at Work: Performance Goals

Outcome 2: Healthy Streams, Rivers, Marsh and Bay (Cont'd.)

✓ *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. During the first year of implementation, the City realigned operations to deliver new requirements, developed new and expanded programs, procured new monitoring equipment, and refined program and operational data tracking.

In support 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 is collaborating with other cities to implement a large scale effort to markedly reduce the presence of trash in creeks.

To comply with the new permit requirements, the following augmentations are included in this budget:

- Funding of \$300,000 to support the design, engineering, and construction of a Green Street Storm Sewer Retrofit in San José. Through this project, the City will gain experience in retrofitting existing streets to integrate low impact development stormwater treatment measures as part of storm sewer system, while also improving pedestrian and bicycle access and enhancing neighborhood livability;
- Funding for a position to oversee the development and implementation of the City's comprehensive Trash Load Reduction Plan that will meet the Stormwater permit's aggressive trash reduction goals; and
- A reserve to address various elements of the Stormwater Permit has been augmented by \$2.2 million, for a total reserve of \$4.0 million. Use of the Permit Reserve may include the purchase and installation of additional structural trash controls in the storm sewer system and other trash control measures as specified in the Trash Load Reduction Plan, additional Green Street Storm Sewer Retrofits, and projects or studies triggered by water quality monitoring and pump station monitoring as required by the permit. The trash controls will capture and prevent trash from entering the system and local creeks. The final Trash Load Reduction Plan, which will specify the actions needed to reduce trash loading to creeks by 40% by 2014, is scheduled for City Council consideration in December 2011.

Budget Dollars at Work: Performance Goals

Outcome 3: “Clean and Sustainable” Air, Land and Energy

Strategic Goals	CSA Performance Measures	2009-2010 Actual	2010-2011 Target	2010-2011 Estimate	2011-2012 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	-13%	-10%	-10%*	-13%	-26%**
	2. kW of renewable energy installed at City-owned sites	20 kW	10,348 kW	2,625kW*	3,334kW	16,670kW**
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%	90%***	85%***	87%	90%

Changes to Performance Measures from 2010-2011 Adopted Budget: No

* This figure will be based on calendar year 2010 data vs. the Green Vision baseline year of 2007.

** This figure will be based on calendar year 2015 vs. the Green Vision baseline year of 2007.

*** Biennial measure. Results from the survey conducted in 2009-2010.

- ✓ The Green Vision, a 15-year effort to accomplish sweeping economic and environmental advances, and its 10 goals, were adopted by City Council in October 2007. These ambitious goals acknowledge that a vital economy is not at odds with a sustainable, healthy environment. Each of the 10 goals offers an opportunity to re-examine current service delivery models, expenditures, investments, and priorities, and to integrate Green Vision elements into existing City processes, programs, and policies. Success requires strategic use of limited resources, robust interdepartmental cooperation, and partnerships with external organizations.
- ✓ A vital component of achieving Green Vision Goal #4, *build or retrofit 50 million square feet of Green Buildings*, is the 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.
- ✓ 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.
- ✓ As diversion levels of garbage draw closer to Zero Waste, an evaluation of emerging technologies will be required to identify additional diversion opportunities within our waste streams. Some new technologies that have already been identified will provide the added benefits of energy generation and reductions in greenhouse gas emissions, along with waste diversion.
- ✓ The City of San José achieved a solid waste diversion rate of 70% for 2009-2010 through administration of its residential, commercial, and civic garbage and recycling programs. San José has one of the highest diversion rates among large cities nationwide. 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.

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Budget Dollars at Work: Performance Goals

Outcome 4: Safe, Reliable and Sufficient Water Supply

Strategic Goals	CSA Performance Measures	2009-2010 Actual	2010-2011 Target	2010-2011 Estimate	2011-2012 Target	5-Year Goal
Decrease reliance on imported water	1. Mgd of water conserved and recycled	17.1	18.5	N/A*	18.2	25.0
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*	68%	N/A*	40%	52%
	2. % of residents with water saving fixtures in their home	N/A*	48%	N/A*	56%	62%
	3. % of residents who are in favor of using recycled water	N/A*	75%	N/A*	85%	90%
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	99.8%	100%	99.5%	100%	100%
	2. % of time recycled water meets or surpasses State recycled water standards (Title 22)	99.9%	100%	100%	100%	100%

Changes to Performance Measures from 2010-2011 Adopted Budget: No

* Data comes from the Water Focus Survey. The next Survey is scheduled to occur in 2011 with results available by January 2012.

- ✓ 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 2012-2016 Adopted CIP will also ensure continued treatment of recycled water to meet customer needs and comply with regulatory requirements, meet current customer needs, and support expanded uses of recycled water.
- ✓ The City and Santa Clara Valley Water District have executed a 40-year agreement to coordinate their efforts to develop SBWR. These efforts include a long-term plan for the operation and maintenance of SBWR and AWT facilities and an updated Master Plan to ensure continued reliable service to over 600 SBWR customers.
- ✓ The City plays an important role in ensuring future water supplies through its water conservation and water recycling programs. Both of these programs serve a dual purpose: (1) conserving potable water supplies, and (2) reducing the amount of wastewater flowing to the San José/Santa Clara Water Pollution Control Plant. Both programs have been a major factor in keeping flows to the Bay below the 120 mgd permit trigger.
- ✓ The Water Conservation Program promotes efficient water use and supports the indoor water conservation efforts of the Santa Clara Valley Water District through cost sharing agreements. Water conservation reduces flows to the Treatment Plant and helps preserve water supply to support population growth, as well as to offset the effects of climate change and potential drought. This program also supports compliance with the statewide mandate to reduce urban water consumption by 20% by 2020. A drought response program for the Municipal Water System customers was also implemented from June 1, 2009 to May 31, 2010. The city-wide water conservation plan was in its third year of implementation in 2010-2011.

City Service Area
Environmental and Utility Services
ADOPTED BUDGET CHANGES

Adopted Changes	Positions	All Funds (\$)	General Fund (\$)
ENVIRONMENTAL SERVICES DEPARTMENT			
• Environmental Services Department Employee Total Compensation Reduction		(4,674,457)	(9,777)
• Treatment Plant Technical Document Management Program	(4.00)	(460,811)	0
• Environmental Services Department Administrative Staffing	(1.50)	(150,746)	0
• Non-Profit Recyclers Funding		(146,473)	0
• Municipal Environmental Compliance Staffing	(1.00)	(137,609)	(26,363)
• Fleet Staffing and Vehicle Pool Program		(28,000)	0
• Environmental Services Department Annual Retirement Contribution		2,561,622	3,599
• Treatment Plant Capital Staffing	7.00	706,190	0
• Treatment Plant Clarifier Maintenance		750,000	0
• Environmental Services Department Unemployment Contribution		529,742	744
• Stormwater Permit Green Street Project		300,000	0
• Integrated Billing System Transition Support		165,000	0
• Plant Air Regulations Compliance	1.00	140,764	0
• Water Pollution Control Plant Succession Planning	1.00	127,168	0
• Municipal Water Asset Management System		125,000	0
• Stormwater Permit Trash Control Program	1.00	124,301	0
• Environmental Services Department Staffing Relocation		102,349	0
• Rebudget: Structural Trash Controls		1,700,000	0
• Rebudget: Water Pollution Control Plant Training Program (Mechanics)		264,000	0
• Rebudget: Integrated Pest Management Projects		100,000	0
• Rebudget: Silicon Valley Energy Watch Grant		74,000	74,000
<i>Subtotal</i>	3.50	2,172,040	42,203
TRANSPORTATION DEPARTMENT			
• Transportation Department Employee Total Compensation Reduction		(923,729)	0
• Right-Sizing Pavement Maintenance Program Staffing	(0.60)	(47,880)	0
• Transportation Department Administrative Staffing	(0.47)	(37,896)	0
• Fleet Staffing and Vehicle Pool Program		(32,000)	0
• Street Landscape Maintenance Staffing	(0.25)	(29,616)	0
• Sanitary Sewer System and Storm Sewer Equipment Replacement		1,310,000	0
• Pump Station SCADA Upgrade		900,000	0
• Transportation Department Annual Retirement Contribution		598,499	0
• Sanitary Sewer System Staffing Support		334,711	0
• Computerized Maintenance Management System Upgrade		250,000	0
• Transportation Department Unemployment Contribution		124,904	0
• Rebudget: Sewer Cleaning Equipment		168,000	0
<i>Subtotal</i>	(1.32)	2,614,993	0
<i>Subtotal Departments</i>	2.18	4,787,033	42,203

City Service Area
Environmental and Utility Services
ADOPTED BUDGET CHANGES

Adopted Changes	Positions	All Funds (\$)	General Fund (\$)
CITY-WIDE EXPENSES			
• Energy Efficiency Program		(100,000)	(100,000)
• Pesticide Management Demonstration		50,000	50,000
• Storm Fees		7,640	7,640
• Rebudget: Recovery Act - Energy Efficiency and Conservation Block Grant		6,537,000	6,537,000
• Rebudget: City-Building Energy Projects Program		1,335,946	1,335,946
• Rebudget: Recovery Act - Solar Market Transformation		354,000	354,000
• Rebudget: Energy Efficiency Program		270,000	270,000
• Rebudget: Silicon Valley Energy Watch (SVEW) Innovator Pilots		247,000	247,000
• Rebudget: Recovery Act - Retrofit California Program		195,000	195,000
• Rebudget: Pesticide Management Demonstration		100,000	100,000
• Rebudget: Recovery Act - Local Energy Assurance Planning (LEAP)		45,000	45,000
<i>Subtotal Other Changes</i>	0.00	9,041,586	9,041,586
Total Adopted Budget Changes	2.18	13,828,619	9,083,789