

PROPOSED

SAN JOSE / SANTA CLARA WATER POLLUTION CONTROL PLANT

700 Los Esteros Road
San Jose, California 95134

Five-Year 2011-2015 Capital Improvement Program

Submitted by

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Environmental Services Department

City of San Jose

TO: Treatment Plant Advisory Committee

Chuck Reed	(Chair) Mayor, City of San Jose
Nora Campos	Councilmember, City of San Jose
John M. Gatto	Boardmember, Cupertino Sanitary District
Bob Livengood	(Vice Chair) Mayor, City of Milpitas
Patricia Mahan	Mayor, City of Santa Clara
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Madison Nguyen	Councilmember, City of San Jose
Ed Shikada	Deputy City Manager, City of San Jose

Water Pollution Control Capital Program

2011-2015 Proposed Capital Improvement Program

Overview

Introduction

The San José/Santa Clara Water Pollution Control Plant (Plant) is a regional wastewater treatment facility serving eight tributary sewage collection agencies (Agencies), including municipalities and sanitary sewer districts. The service area includes the following cities and adjacent, unincorporated County territory: San José, Santa Clara, Milpitas, Cupertino Sanitary District, West Valley Sanitary District (Campbell, Los Gatos, Monte Sereno and Saratoga), County Sanitation Districts 2-3, Sunol and Burbank Sanitary Districts. The Plant is jointly owned by the cities of San José and Santa Clara and is administered and operated by the City of San José's Environmental Services Department (ESD), which is also responsible for planning, designing and constructing new wastewater treatment and water reuse facilities.

Capital costs are estimated annually by ESD staff and are reviewed and recommended as a budget by the Treatment Plant Advisory Committee to the San José City Council for appropriation. The costs are allocated to each Agency based on its contracted-for capacity in the Plant. Each Agency is responsible for its allocated share of Plant costs, as well as its own sewage collection system maintenance, operation, and capital costs; debt service on bonds issued by the Agency for sewer purposes; and any other sewer service related costs. Each Agency is also responsible for establishing and collecting its respective sewer service and use charges, connection fees or other charges for sewer service.

A revenue program is prepared annually by each Agency to establish its sewer service and use charge rates. Rates are adopted by ordinance, or resolution, of the governing

body of each Agency. The Agencies' revenue programs, ordinances and resolutions are submitted to the City of San José, as the administering agency, for review to determine conformance with State Water Resources Control Board (SWRCB) revenue program guidelines and are then submitted by San José to the SWRCB for review and certification.

This program is part of the Environmental and Utility Services City Service Area (CSA) and supports the following outcomes: *Reliable Utility Infrastructure* and *Healthy Streams, Rivers, Marsh, and Bay*.

Program Priorities and Objectives

The Plant Capital Improvement Program (CIP) projects are prioritized using the following criteria established by ESD:

- Projects needed for health and safety.
- Projects needed to maintain the quality of effluent flow.
- Projects mandated by regulatory agencies.
- Projects that ensure adequate process reliability.
- Projects that enhance efficiency and effectiveness.

Sources of Funding

The 2011-2015 Proposed CIP provides funding of \$393.5 million, of which \$97.3 million is allocated in 2010-2011.

Revenues for the Five-Year CIP are derived from several sources: Contributions from the City of Santa Clara and Other Agencies (\$95.5 million); transfers from the City of San José Sewer Service and Use Charge Fund

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Sources of Funding (Cont'd.)

(\$216 million) and the Sewage Treatment Plant Connection Fee Fund (\$15.5 million); Interest Earnings (\$12.4 million); Calpine Metcalf Energy Center Facilities Repayments (\$1.9 million); and federal grants from the US Bureau of Reclamation (\$500,000). In addition, \$51.6 million in available fund balance is programmed to support projects identified in this five-year program.

Contributions from the City of Santa Clara and other agencies are determined by agreements with the participating agencies, financing plans, anticipated expenditures for the Plant and the amount and characteristics of flows from each agency's connections to the treatment plant. These contributions reimburse the City for actual project expenditures. In this Proposed CIP, contributions from the City of Santa Clara and the other agencies total \$95.5 million, which represents an \$8.9 million (10%) increase compared to the 2010-2014 Adopted CIP. This increase results from the additional capital investments proposed in this CIP, including such projects as the Plant Electrical Reliability project, and increases to the Plant Infrastructure Improvements, Equipment Replacement Program, and Plant Master Plan projects.

The Sewer Service and Use Charge Fund is an operating fund that derives its revenues from fees imposed on San José's residential, commercial, and industrial users of the sanitary sewer system and represents the largest source of funding for this capital program. Transfers from the Sewer Service and Use Charge Fund to the Water Pollution Control Capital Improvement Program over the five years of the CIP reflect a \$6.0 million (3%) increase compared to the 2010-2014

Adopted CIP. This level of transfers assumes rate increases of 6% in 2010-2011, as well as the two following years. This rate increase, discussed further in the 2010-2011 Proposed Operating Budget, would ensure adequate funding for the Sanitary Sewer and Water Pollution Control operating and capital needs.

An annual transfer of \$3.1 million is anticipated from San José's Sewage Treatment Plant Connection Fee Fund and is programmed as part of the 2011-2015 Proposed CIP.

Program Highlights

Digester Rehabilitation

The Digester Rehabilitation project, which began in 2008, will include structural rehabilitation of four digesters to address cracks in the digestion tanks, replace existing digester gas and digested sludge lines, and facilitate pilot testing of digestion processes and equipment. This CIP includes \$62.0 million for the Digester Rehabilitation Project.

Plant Electrical Reliability Program

The 2011-2015 Proposed CIP includes \$64.9 million for the Plant Electrical Reliability Program. The current power distribution network has grown in a patched manner over the years, and many electrical system components have reached the end of their useful life. This program consists of multi-phase construction projects to enhance the overall safety and reliability of the Plant electrical systems. Projects included in the proposed CIP include installation of a standby generator, engine generator replacement, switchgear upgrades and replacement, and breaker replacement.

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Program Highlights (Cont'd.)

Plant Electrical Reliability Program (Cont'd)

Several elements of the Plant Electrical Reliability program have already been implemented and construction to add new switchgear and cables to create an interim ring buss distribution system is almost complete. Design is in progress to prepare several more projects for construction to start in 2010 to replace additional switchgears and motor control centers.

Plant Master Plan Project

The Plant initiated a Plant Master Planning project in 2005. The Plant Master Plan will be the blue print for the Plant's development over the next 30 years, covering expected wastewater flows and loads to the Plant, rates, staffing, Plant infrastructure, use of the buffer lands, bio-solids processing, and many other operational items. Four key conditions drive the need for the Master Plan: new regulations, community growth, community values, and infrastructure rehabilitation. The Plant Master Plan will strive to balance environmental, economic, and community social preferences with the technical needs of the Plant in its land use recommendations.

In the 4th Quarter of 2007, staff selected a consultant to develop the Plant Master Plan which includes a 30-year CIP, a buffer-land management plan, a financing plan, and a staffing plan. The Master Plan is projected to be completed by 2011 with environmental clearance completed in 2012. Following the completion of the consultant's report, it is estimated that it will take two to three years to assess the report recommendations and evaluate financing options, before significant work on projects will commence. In this CIP,

\$2.4 million is proposed to fund the remainder of the consultants' work on this Plant Master Plan. Additionally, a recommendation to establish a reserve for Plant Master Plan Improvements (\$10.0 million) is included in this CIP, to fund some of the projects arising out of the Plant Master Plan report.

The Master Plan will set directions for the many complex projects required for the Plant due to aging infrastructure and future regulations, and serve as a tool to identify and prioritize near-term CIP projects for upgrades and replacements. The current five-year CIP has been modified to address the major upgrades expected for liquids treatment and energy generation and an overhaul of the entire solids treatment process. Major progress was made to identify the future treatment processes and technologies for liquids and solids as well as renewable energy generation.

Preliminary Master Plan recommendations have identified future wastewater treatment processes that help shape expectations for the future physical footprint of the Plant's operational area. This footprint is expected to enable land use planning of the Plant's 2,600 acres, which include the bufferlands, biosolids treatment area, and Pond A18.

Public outreach and stakeholder involvement have been a major component of this process. Over 6,000 community members have toured the Plant in 2008 and 2009, the Plant Master Plan website has also provided the public with up-to-date information on the Plan's progress. A Community Advisory Group (CAG) has been formed and is meeting monthly for detailed sessions to discuss the complex issues facing the Plant.

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Program Highlights (Cont'd.)

South Bay Action Plan

A South Bay Action Plan (SBAP) has been a requirement of the Plant's National Pollution Discharge Elimination System (NPDES) permit since 1991 and includes projects necessary to maintain average dry weather effluent flow from the Plant at below the 120 million gallons per day (mgd) flow trigger, in order to protect salt marsh habitat for endangered species in the South Bay. The requirement has changed from adherence with specific elements included in the discharge permit to the submission of an annual work plan that allows for adaptive management. In June 1997, both the San Francisco Bay Regional Water Quality Control Board (Regional Board) and the San José City Council approved the Revised South Bay Action Plan (RSBAP). The RSBAP was included as a provision of the 1998 NPDES permit and included the Expanded Water Recycling, Industrial Water Recycling/Reuse, Groundwater Inflow/Infiltration Reduction, and Environmental Enhancement Pilot projects. In February 1998, Council approved a financing plan that identified \$127 million in funding sources for the RSBAP, primarily through State Revolving Fund loans from the State Water Resources Control Board (SWRCB), and Treatment Plant Capital Fund reserves. Included in the \$127 million was \$100 million for water recycling projects.

On April 8, 2009 the Regional Board approved a new NPDES permit for the Plant and continued the requirement for a South Bay Action Plan to comply with the original 1991 Regional Board Resolution. The Regional Board SBAP requirement states that

the Discharger will continue to implement its water conservation, industrial recycling and reuse, and recycling programs.

The South Bay Water Recycling System was authorized by the City Council in 1993 as a project to divert up to 15 mgd of treated effluent from the bay during the summer by providing nonpotable recycled water to customers in Milpitas, Santa Clara and San Jose. During the five years of this CIP, the Airport Main Extension, the San Jose Schools and Laterals Extension, and Guadalupe Gardens Lateral Extension projects are expected to be completed. In addition, a collaborative effort is underway with the Santa Clara Valley Water District for future expansion, operation and maintenance of the system. This proposed CIP includes \$1.9 million of funding for the Revised South Bay Action Plan – SBWR Extension project.

Plant Infrastructure Needs Improvements

The current five-year CIP has been adapted to the preliminary findings of the Plant Master Plan project to ensure that rehabilitation and replacement needs resulting from the Plant's aging infrastructure are covered, and that long-term expectations for liquids treatment, solids treatment, and energy generation are addressed. A \$44.9 million allocation for Plant Infrastructure Improvements, as well as funding for several independent infrastructure projects is proposed in this CIP.

One of the major preliminary findings of the Plant Master Plan is the need to move ahead with selected piloting and testing of alternative technologies, to ensure that appropriate technologies are selected given the specific characteristics of the Plant service area's wastewater and to ensure an increased

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Program Highlights (Contd.)

Plant Infrastructure Needs Improvements (Cont'd.)

optimization level of future design. The current five-year CIP projects will facilitate piloting and testing of clarifier performance, biosolids processing options, filter underdrain system, and fine bubble membrane diffusers. Several projects included in the CIP, such as the Fine Bubble Membrane Diffuser Conversion project, the Fuel Cell project, and the replacement of existing engine generator as part of the Plant Electrical Reliability Program, are proposed in this CIP to meet the Plant's energy and reliability goals.

Specific elements of the Advanced Process Control and Automation project will improve the Plant's ability to monitor and control Plant treatment processes and increase the reliability of Plant operations.

Other Projects

The 2011-2015 Proposed CIP includes other major projects that will require an investment of capital funds. The following priority projects, whose costs all exceed \$4.0 million, are required to meet regulatory mandates, ensure process reliability, provide for a safe work environment, or provide process efficiencies or cost savings:

- Secondary and Nitrification Clarifier Rehabilitation and Upgrade – \$8.4 million in this CIP;
- Filter Improvements - \$6.6 million in this CIP;

- Headworks Enhancement – \$4.7 million in this CIP;
- Headworks No. 2 Expansion - \$4.0 million in this CIP;

Reserve for Equipment Replacement

As in prior CIP's, the 2011-2015 Proposed CIP includes a minimum \$5.0 million reserve for equipment replacement. This reserve minimum was established to satisfy three contractual requirements:

- The State Water Resources Control Board's (SWRCB) Policy for implementing the State Revolving Fund for Construction of Wastewater Treatment requires that annual revenue requirements include funds for the replacement of major equipment for maintaining the capacity and performance of the treatment plant over its useful life.

Compliance with the SWRCB's policy is a requirement of State Revolving Fund Loan Agreements. Equipment replacement of \$11.2 million and a reserve of \$5.0 million are included in the 2011-2015 Proposed CIP to satisfy this requirement.

- The Clean Water Financing Authority (CWFA) Bond Covenants require that a reserve be maintained at a minimum level of \$5.0 million to help pay the costs of extraordinary repairs and for renewal and replacement of the treatment plant when insurance and other funds budgeted for such purposes are exhausted, or are insufficient to meet the need.

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Program Highlights (Cont'd.)

Reserve for Equipment Replacement (Cont'd.)

- The Master Agreements for Wastewater Treatment between City of San José, City of Santa Clara, and Tributary Agencies established a replacement fund to deposit annual contributions for the replacement of major treatment plant equipment. The Master Agreements also require that each agency pay its proportionate share of the annual replacement contribution.

Major Changes from the 2010-2014 Adopted CIP

Major changes from the 2010-2014 Adopted CIP include the following:

- A decrease of \$34.0 million for Digester Rehabilitation.
- A \$16.4 million decrease in funding for Plant Infrastructure Improvements.
- Additional funding in the amount of \$9.0 million as transfers from the City of Santa Clara and Other Agencies for the Agencies' proportionate costs for CIP projects.

- Additional funding in the amount of \$6.0 million as transfers from the Sewer Service and Use Charge Fund for City of San Jose costs for CIP projects.
- New funding in the amount of \$6.6 million for Filter Improvements.
- Addition of new projects: Advanced Process Control and Automation (\$11.0 million), Inactive Lagoons Bio-solids Removal (\$10.1 million), Fine Bubble Membrane Diffuser Conversion (\$7.8 million), and Iron Salt Feed Station (\$2.3 million).

Operating Budget Impact

None of the proposed projects are projected to negatively impact the operating costs. On the contrary, several projects proposed in this CIP, such as the Fine Bubble Diffuser Conversion, Advanced Process Control, and Meter Validation, are aimed at reducing energy and operations costs, through operational efficiency improvements. As projects are completed and when energy usage data are available, savings will be evaluated for future reductions to the Environmental Services Department's utilities allocation.

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Source of Funds

	Estimated 2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	5-Year Total
<u>SOURCE OF FUNDS</u>							
<u>San José-Santa Clara Treatment Plant Capital Fund</u>							
Beginning Fund Balance	73,589,952	51,639,710	4,872,710	1,196,710	2,160,710	2,239,710	51,639,710 *
Revenue from Other Agencies:							
<u>Federal Government</u>	500,000	500,000					500,000
- U.S. Bureau of Reclamation Grant							
<u>Water Pollution Control Plant User Agencies</u>							
- 2005 Bond Debt Repayment	1,234,000	1,233,000	1,229,000	1,227,000	1,228,000	1,221,000	6,138,000
- Equipment Replacement	591,000	591,000	591,000	591,000	591,000	591,000	2,955,000
- SRF Loan Repayment	1,384,000	1,373,800	1,373,800	1,373,800	1,373,800	1,373,800	6,869,000
- WPCP Projects	11,991,000	10,371,000	18,106,000	16,759,000	17,651,000	16,666,000	79,553,000
Contributions, Loans and Transfers from:							
<u>Special Funds</u>							
- Transfer from the Sewage Treatment Plant Connection Fee Fund (539)	3,080,000	3,090,200	3,090,200	3,090,200	3,090,200	3,090,200	15,451,000
- Transfer from the Sewer Revenue Bond Payment Fund (537)	4,200,000						
- Transfer from the Sewer Service and Use Charge Fund (541)	28,747,000	26,816,000	38,799,000	46,792,000	51,796,000	51,766,000	215,969,000
Interest Income	1,310,000	1,316,000	1,721,000	2,627,000	3,213,000	3,562,000	12,439,000
Miscellaneous Revenue							
- Calpine Metcaif Energy Center Facilities Repayment	389,000	389,000	389,000	389,000	389,000	389,000	1,945,000
Reserve for Encumbrances	28,716,758						
Total San José-Santa Clara Treatment Plant Capital Fund	155,732,710	97,319,710	70,171,710	74,045,710	81,492,710	80,898,710	393,458,710 *

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Source of Funds

SOURCE OF FUNDS (CONT'D.)	Estimated 2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	5-Year Total
TOTAL SOURCE OF FUNDS	155,732,710	97,319,710	70,171,710	74,045,710	81,492,710	80,898,710	393,458,710 *

* The 2011-2012 through 2014-2015 Beginning Balances are excluded from the FIVE-YEAR TOTAL SOURCE OF FUNDS to avoid multiple counting of the same funds.

Water Pollution Control
2011-2015 Proposed Capital Improvement Program

Use of Funds

<u>USE OF FUNDS</u>	Estimated 2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	5-Year Total
<u>Construction Projects</u>							
Public Art							
1. Public Art	645,000	275,000	545,000	504,000	531,000	501,000	2,356,000
Total Public Art	645,000	275,000	545,000	504,000	531,000	501,000	2,356,000
Water Pollution Control Managed Projects							
Alternative Disinfection	6,572,000	60,000					60,000
Dissolved Air Flotation Pressure Retention Tank and Valves	690,000						
Environmental Services Building Repair	2,518,000						
Headworks No. 2 Expansion						4,000,000	4,000,000
Land Management and Improvements	250,000						
M5, Ring Buss, and Cable Replacement	5,522,000						
SBWR Reservoir Facility	6,000,000						
WPCP Reliability Improvements	38,000						
2. Advanced Process Control and Automation		1,940,000	2,440,000	1,440,000	2,590,000	2,590,000	11,000,000
3. Digester Rehabilitation	2,189,000	1,000,000	30,000,000	1,000,000	29,000,000	1,000,000	62,000,000
4. East Primary Concrete Tank Repair and Stainless Steel Conversion		1,684,000	1,821,000	100,000			3,605,000
5. Fine Bubble Membrane Diffuser Conversion		750,000	1,500,000	1,200,000	50,000	4,300,000	7,800,000
6. Fuel Cell		1,326,000	25,000				1,351,000
7. Headworks Enhancement	500,000		518,000	145,000			4,663,000
8. Inactive Lagoons Bio-Solids Removal		875,000	240,000	3,000,000	3,000,000	3,000,000	10,115,000
9. Iron Salt Feed Station		340,000	2,000,000				2,340,000
10. Plant Electrical Reliability	23,015,000	3,400,000	2,200,000	36,000,000	2,300,000	21,000,000	64,900,000

Water Pollution Control
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Use of Funds

USE OF FUNDS (CONT'D.)	Estimated	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	5-Year
	2009-2010						Total
Construction Projects							
Water Pollution Control Managed Projects							
11. Secondary and Nitrification Clarifier Rehabilitation	1,000,000	3,701,000	1,658,000	400,000	2,400,000	220,000	8,379,000
12. Warehousing Facility Additions		300,000	1,500,000				1,800,000
Total Water Pollution Control Managed Projects	48,294,000	19,376,000	43,902,000	43,285,000	39,340,000	36,110,000	182,013,000
Watershed Protection Managed Projects							
ESD MIS Improvements	212,000						1,479,000
Lab Information Management System	61,000						6,555,000
Salt Marsh Restoration	63,000	298,000	1,158,000	23,000			1,479,000
13. Dissolved Air Flotation Dissolution Improvements							
14. Filter Improvements		200,000	2,000,000	2,355,000	1,000,000	1,000,000	6,555,000
15. Revised South Bay Action Plan - SBWR Extension	23,983,000	389,000	389,000	389,000	389,000	389,000	1,945,000
Total Watershed Protection Managed Projects	24,319,000	887,000	3,547,000	2,767,000	1,389,000	1,389,000	9,979,000
Recurring Projects							
16. Equipment Replacement	7,074,000	2,420,000	1,846,000	3,883,000	1,525,000	1,525,000	11,199,000
17. Plant Infrastructure Improvements	7,103,000	8,472,000	7,039,000	4,364,000	12,384,000	12,634,000	44,893,000
18. Unanticipated/Critical Repairs	263,000	250,000	250,000	250,000	250,000	250,000	1,250,000
Total Recurring Projects	14,440,000	11,142,000	9,135,000	8,497,000	14,159,000	14,409,000	57,342,000
Total Construction Projects	87,698,000	31,680,000	57,129,000	55,053,000	55,419,000	52,409,000	251,690,000

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Use of Funds

	Estimated 2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	5-Year Total
USE OF FUNDS (CONT'D.)							
Non-Construction							
General Non-Construction							
19. City-wide and Public Works Capital Support Costs	40,000	397,000	397,000	397,000	397,000	397,000	1,985,000
20. Payment for Clean Water Financing Authority Trustee Plant Master Plan	22,000	5,000	5,000	5,000	5,000	5,000	25,000
21. Plant Master Plan	4,876,000	2,400,000	4,464,000	4,464,000	4,464,000	4,464,000	2,400,000
22. State Revolving Fund Loan Repayment	4,464,000	4,464,000	4,464,000	4,464,000	4,464,000	4,464,000	22,320,000
23. Transfer to Clean Water Financing Authority Debt Service Payment Fund	6,981,000	6,978,000	6,960,000	6,949,000	6,951,000	6,922,000	34,760,000
Total General Non-Construction	16,383,000	14,244,000	11,826,000	11,815,000	11,817,000	11,788,000	61,490,000
Contributions, Loans and Transfers to Special Funds							
Transfer to the City Hall Debt Service Fund	12,000	18,000	20,000	17,000	17,000	18,000	90,000
Total Contributions, Loans and Transfers to Special Funds	12,000	18,000	20,000	17,000	17,000	18,000	90,000
Reserves							
Reserve for Electrical Reliability Improvements		5,305,000					5,305,000
Reserve for Equipment Replacement		5,000,000					5,000,000
Reserve for Plant Capital Replacement		36,000,000		5,000,000	7,000,000	10,000,000	58,000,000
Reserve for Plant Master Plan Improvements					5,000,000	5,000,000	10,000,000
Reserve for Rate Studies		200,000					200,000
Total Reserves		46,505,000		5,000,000	12,000,000	15,000,000	78,505,000
Total Non-Construction	16,395,000	60,767,000	11,846,000	16,832,000	23,834,000	26,806,000	140,085,000

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Use of Funds

	Estimated 2009-2010	2010-2011	2011-2012	2012-2013	2013-2014	2014-2015	5-Year Total
USE OF FUNDS (CONT'D.)							
Ending Fund Balance	51,639,710	4,872,710	1,196,710	2,160,710	2,239,710	1,683,710	1,683,710*
TOTAL USE OF FUNDS	155,732,710	97,319,710	70,171,710	74,045,710	81,492,710	80,898,710	393,458,710*

* The 2010-2011 through 2013-2014 Ending Balances are excluded from the FIVE-YEAR TOTAL USE OF FUNDS to avoid multiple counting of the same funds.

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Detail of Construction Projects

1. Public Art

CSA:	Environmental and Utility Services	Initial Start Date:	Ongoing
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	
Department:	Environmental Services	Initial Completion Date:	Ongoing
Council District:	4	Revised Completion Date:	
Location:	City-wide		

Description: This allocation funds the construction and administration of public art in the Water Pollution Control Capital Program. In compliance with the Council adoption of the revised Public Art Master Plan on March 13, 2007, one percent of all construction project funding is required to be allocated to public art, excluding funding for seismic and ADA retrofits, maintenance and operations, non-construction projects (such as studies), or affordable housing. Projects where public art allocations were previously programmed or appropriated are not subject to the revisions of the Public Art Master Plan. Expenditures in this allocation will be subject to the legal revenue restrictions for the use of this funding on public art.

Justification: This allocation is required to comply with the revisions to the Public Art Master Plan adopted by the City Council on March 13, 2007.

EXPENDITURE SCHEDULE (000'S)

Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Public Art		645	645	275	545	504	531	501	2,356		
TOTAL		645	645	275	545	504	531	501	2,356		

FUNDING SOURCE SCHEDULE (000'S)

San José-Santa Clara Treatment Plant Capital Fund	645	645	275	545	504	531	501	2,356
TOTAL	645	645	275	545	504	531	501	2,356

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

N/A

Notes:

Project schedule dates and selected budget information are not provided due to the ongoing nature of this project.

FY Initiated:	Ongoing	Redevelopment Area:	N/A
Initial Project Budget:		SNI Area:	N/A
Appn. #:	5957	USGBC LEED:	N/A

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Detail of Construction Projects

2. Advanced Process Control and Automation

CSA:	Environmental and Utility Services	Initial Start Date:	3rd Qtr. 2010
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	
Department:	Environmental Services	Initial Completion Date:	2nd Qtr. 2015
Council District:	4	Revised Completion Date:	
Location:	Water Pollution Control Plant		

Description: This project will improve monitoring and control of treatment processes, equipment, and power usage at the Plant. The project includes development of real-time simulation software for optimal energy and plant operating scenarios, and a Meter Validation and Replacement Program to improve the accuracy and reliability of existing meters at the Plant.

Justification: This project is necessary to improve operational and equipment reliability and operational efficiencies, and to provide accurate data for engineering analyses. The meter validation and replacement component of the project is necessary to improve metering accuracies required for reliable operation.

EXPENDITURE SCHEDULE (000'S)

Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Equipment							1,150	1,150	2,300		2,300
Planning and Engineering				1,940	2,440	1,440	1,440	1,440	8,700		8,700
TOTAL				1,940	2,440	1,440	2,590	2,590	11,000		11,000

FUNDING SOURCE SCHEDULE (000'S)

San José-Santa Clara Treatment Plant Capital Fund				1,940	2,440	1,440	2,590	2,590	11,000		11,000
TOTAL				1,940	2,440	1,440	2,590	2,590	11,000		11,000

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

None

Notes:

This project assumes the addition of four temporary positions in 2010-2011, with possible extensions in the following four years.

FY Initiated:	2010-2011	Redevelopment Area:	N/A
Initial Project Budget:	\$11,000,000	SNI Area:	N/A
Appn. #:		USGBC LEED:	N/A

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Detail of Construction Projects

3. Digester Rehabilitation

CSA:	Environmental and Utility Services	Initial Start Date:	3rd Qtr. 2006
CSA Outcome:	Healthy Streams, Rivers, Marsh and Bay	Revised Start Date:	3rd Qtr. 2008
Department:	Environmental Services	Initial Completion Date:	2nd Qtr. 2008
Council District:	4	Revised Completion Date:	2nd Qtr. 2015
Location:	Water Pollution Control Plant		

Description: This project will include structural rehabilitation of four digesters to address cracks in the existing concrete digestion tanks. This project will also include mechanical rehabilitation and/or replacement to restore and enhance digester performance and facilitate the addition of a receiving station for digesting fats, oils, and grease. Additionally, this project will include replacing existing digester gas lines and digested sludge lines. This project will facilitate pilot testing of digestion processes and various equipment to allow the City to make cost effective selections regarding future digestion needs.

Justification: Given current processes, 11 of the 16 digesters at the WPCP must be operational for effective digestion of scum and grease. Currently, five of the digesters are non-operational due to structural damage and lack of adequate mixing capability, leaving only the minimum number in operation. The remaining digesters, while still in operation, are also at risk of failure. Rehabilitating four of the digesters will ensure that scum and grease digestion operations can continue uninterrupted. It is expected that in future years, after piloting of new digestion processes and equipment are complete, additional funding will be requested to rehabilitate additional aging digesters.

EXPENDITURE SCHEDULE (000'S)

Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Design				1,000		1,000			2,000		2,000
Construction		2,189	2,189		30,000		29,000	1,000	60,000		62,189
TOTAL		2,189	2,189	1,000	30,000	1,000	29,000	1,000	62,000		64,189

FUNDING SOURCE SCHEDULE (000'S)

San José-Santa Clara Treatment Plant Capital Fund		2,189	2,189	1,000	30,000	1,000	29,000	1,000	62,000		64,189
TOTAL		2,189	2,189	1,000	30,000	1,000	29,000	1,000	62,000		64,189

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

2008-2012 CIP - increase of \$1.6 million based on revised estimates during initial study.
 2009-2013 CIP - increase of \$84 million to fund construction/rehabilitation costs due to increased project scope.
 2010-2014 CIP - increase of \$11.5 million due to increased project scope.
 2011-2015 CIP - decrease of \$34.0 million due to decrease in project scope.

Notes:

This project replaces the Scum Digestion project. This project assumes the addition of three temporary positions in 2010-2011, with possible extensions for the following four years, dependent on technical services required as the project progresses.

FY Initiated:	2006-2007	Redevelopment Area:	N/A
Initial Project Budget:	\$1,000,000	SNI Area:	N/A
Appn. #:	4127	USGBC LEED:	N/A

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Detail of Construction Projects

4. East Primary Concrete Tank Repair and Stainless Steel Conversion

CSA:	Environmental and Utility Services	Initial Start Date:	3rd Qtr. 2009
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	
Department:	Environmental Services	Initial Completion Date:	4th Qtr. 2012
Council District:	4	Revised Completion Date:	
Location:	Water Pollution Control Plant		

Description: This project will include rehabilitation of existing primary clarifiers, including coating of concrete and replacement of clarifier mechanisms with corrosion resistant materials.

Justification: This project is needed to ensure the structural integrity and reliability of the aging clarifiers.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Construction				1,684	1,821	100			3,605		3,605
TOTAL				1,684	1,821	100			3,605		3,605
FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund				1,684	1,821	100			3,605		3,605
TOTAL				1,684	1,821	100			3,605		3,605
ANNUAL OPERATING BUDGET IMPACT (000'S)											
None											

Major Changes in Project Cost:

None

Notes:

The East Primary Concrete Tank Repair and Stainless Steel Conversion is proposed to become a stand alone project in 2010-2011. Prior to this, funding for these activities was included in the Plant Infrastructure Improvements allocation. The Initial Start Date above refers to the date when these activities were initiated as part of the Plant Infrastructure Improvements allocation.

FY Initiated:	2010-2011	Redevelopment Area:	N/A
Initial Project Budget:	\$3,605,000	SNI Area:	N/A
Appn. #:		USGBC LEED:	N/A

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Detail of Construction Projects

5. Fine Bubble Membrane Diffuser Conversion

CSA:	Environmental and Utility Services	Initial Start Date:	3rd Qtr. 2010
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	
Department:	Environmental Services	Initial Completion Date:	2nd Qtr. 2022
Council District:	4	Revised Completion Date:	
Location:	Water Pollution Control Plant		

Description: This project will convert half of the aeration basins at the WPCP to fine bubble diffusion. The project will begin by piloting the latest fine bubble diffuser technology, and begin converting existing diffusers in 2014-2015.

Justification: The Plant's aeration system, which is used to provide oxygen for the activated sludge process, accounts for a large portion of the plant's overall energy usage, and as such, has been a primary focus of energy-saving efforts. Over the last several years, the existing coarse air piping and diffuser systems at approximately half of the plant's aeration basins have been replaced with fine bubble diffuser systems which require much less energy to operate. After the new technology is installed, it will assist the WPCP in achieving its goal of energy self sufficiency by 2022.

EXPENDITURE SCHEDULE (000'S)

Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Development				750	1,500				2,250		2,250
Design						1,200	50		1,250		1,250
Construction								4,300	4,300	21,500	25,800
TOTAL				750	1,500	1,200	50	4,300	7,800	21,500	29,300

FUNDING SOURCE SCHEDULE (000'S)

San José-Santa Clara Treatment Plant Capital Fund	750	1,500	1,200	50	4,300	7,800	21,500	29,300
TOTAL	750	1,500	1,200	50	4,300	7,800	21,500	29,300

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

None

Notes:

This project assumes the addition of three temporary positions in 2010-2011, with possible extensions for the two following years, dependent on pilot testing staffing needs.

FY Initiated:	2010-2011	Redevelopment Area:	N/A
Initial Project Budget:	\$29,300,000	SNI Area:	N/A
Appn. #:		USGBC LEED:	N/A

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Detail of Construction Projects

6. Fuel Cell

CSA:	Environmental and Utility Services	Initial Start Date:	3rd Qtr 2010
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	
Department:	Environmental Services	Initial Completion Date:	4th Qtr. 2011
Council District:	4	Revised Completion Date:	
Location:	Water Pollution Control Plant		

Description: This project will construct utility connections, including electrical and gas, for a 1.4 MW fuel cell power system to be operated on the Plant's digester gas. The fuel cell itself will be provided as part of a Power Purchase Agreement (PPA) with an energy company to finance, develop, design, construct, own, operate and maintain a fuel cell power system operated on the Plant's digester gas. The electrical output provided by this system will be sold to the City for an agreement term of 20 years.

Justification: The WPCP generates its own electricity with engine generators, using methane gas and natural gas as fuel sources. The WPCP also purchases electricity from PG&E, to meet total power demand. By providing the necessary utility connections for the fuel cell described above, this project will enable the generation of additional renewable energy using available methane gas and result in less dependence by the WPCP on the power grid, reducing the WPCP's demand for electricity purchased from PG&E. Energy savings will be realized once negotiations on the Power Purchase Agreement contract have concluded.

EXPENDITURE SCHEDULE (000'S)

Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Construction				1,326	25				1,351		1,351
TOTAL				1,326	25				1,351		1,351

FUNDING SOURCE SCHEDULE (000'S)

San José-Santa Clara Treatment Plant Capital Fund	1,326	25	1,351	1,351
TOTAL	1,326	25	1,351	1,351

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

None

Notes:

The Fuel Cell project became a stand-alone project in 2010-2011. Prior to this, it was part of the Plant Infrastructure Improvements allocation.

FY Initiated:	2010-2011	Redevelopment Area:	N/A
Initial Project Budget:	\$1,351,000	SNI Area:	N/A
Appn. #:		USGBC LEED:	N/A

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Detail of Construction Projects

7. Headworks Enhancement

CSA:	Environmental and Utility Services	Initial Start Date:	3rd Qtr. 2009
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	
Department:	Environmental Services	Initial Completion Date:	4th Qtr. 2011
Council District:	4	Revised Completion Date:	3rd Qtr. 2012
Location:	Water Pollution Control Plant		

Description: The new headworks were designed to operate in parallel with the old headworks to handle supplementary flows during wet weather. This project will include modifications to the Plant's headworks to allow the new headworks to handle all flows to the Plant when the old headworks are out of service. Modifications would include adding gates and piping connections between existing junction structures to reroute flows, and constructing a new septage receiving station.

Justification: This project will allow for the old headworks, which was built in the mid 1950s and early 1960s, to be shutdown for maintenance and rehabilitation.

EXPENDITURE SCHEDULE (000'S)

Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Design		500	500								500
Construction				4,000	518	145			4,663		4,663
TOTAL		500	500	4,000	518	145			4,663		5,163

FUNDING SOURCE SCHEDULE (000'S)

San José-Santa Clara Treatment Plant Capital Fund	500	500	4,000	518	145				4,663		5,163
TOTAL	500	500	4,000	518	145				4,663		5,163

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

2011-2015 CIP - increase of \$1.2 million due to increased project scope.

Notes:

FY Initiated:	2009-2010	Redevelopment Area:	N/A
Initial Project Budget:	\$4,000,000	SNI Area:	N/A
Appn. #:	7073	USGBC LEED:	N/A

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Detail of Construction Projects

8. Inactive Lagoons Bio-Solids Removal

CSA:	Environmental and Utility Services	Initial Start Date:	3rd Qtr. 2002
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	3rd Qtr. 2010
Department:	Environmental Services	Initial Completion Date:	2nd Qtr. 2008
Council District:	4	Revised Completion Date:	2nd Qtr. 2022
Location:	Water Pollution Control Plant		

Description: The Residual Sludge Management facility has inactive lagoons containing about 320,000 dry tons of toxic bio-solids stockpiles, accumulated between 1960 and 1967, before vigorous and effective source control and pretreatment programs were implemented. These stockpiles contain contaminant levels that could require disposal at a landfill at a significant cost. This project will further study and characterize the materials, assess disposal options based on that study, and dispose of the bio-solids. This project was put on hold a number of times, most recently in 2007 when it was deferred so that possible solutions could be explored in the context of the Plant Master Plan. Based on early Master Planning recommendations, this project is being re-activated to dispose of these bio-solids.

Justification: It is recommended that this project be reactivated in order to avoid higher disposal costs in the future, when environmental regulations may become more cumbersome. This project will also allow for this land to eventually be used for alternative purposes.

EXPENDITURE SCHEDULE (000'S)

Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Development				875	240				1,115		1,115
Construction						3,000	3,000	3,000	9,000		9,000
TOTAL				875	240	3,000	3,000	3,000	10,115		10,115

FUNDING SOURCE SCHEDULE (000'S)

San José-Santa Clara Treatment Plant Capital Fund	875	240	3,000	3,000	3,000	10,115	10,115
TOTAL	875	240	3,000	3,000	3,000	10,115	10,115

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

2005-2009 CIP - decrease of \$2.5 million to reflect re-scoping of this project to cover the reevaluation of alternatives for the proper disposal of toxic bio-solids.
 2007-2011 CIP - decrease of \$1.8 million to shift funding for Bio-Solids removal to the Reserve for Bio-Solids Plans.
 2011-2015 CIP - Increase of \$9.9 million to reflect the latest cost estimate for reactivating the program.

Notes:

This project was previously part of an ongoing allocation titled "Residual Sludge Facilities," and has also previously been titled "Inactive Lagoons Bio-Solids Removal Study." The project was initiated in 2003-2004, but was deferred a number of times and funding was decreased over the years. This project assumes the addition of one temporary position in 2010-2011, with possible extensions in the following five years, dependent on technical services required as the project progresses. Funding for the disposal contracts will be encumbered within the five years of the CIP, however, depending on the method of disposal that is selected, operations may continue until the 2nd Quarter of 2022. The completion date may be further revised, as options for disposal are evaluated.

FY Initiated:	2003-2004	Redevelopment Area:	N/A
Initial Project Budget:	\$4,500,000	SNI Area:	N/A
Appn. #:	4931	USGBC LEED:	N/A

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Detail of Construction Projects

9. Iron Salt Feed Station

CSA:	Environmental and Utility Services	Initial Start Date:	3rd Qtr. 2010
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	
Department:	Environmental Services	Initial Completion Date:	2nd Qtr. 2012
Council District:	4	Revised Completion Date:	
Location:	Water Pollution Control Plant		

Description: This project will include a chemical storage tank, a concrete containment structure as well as pumps, piping and instrumentation to dose and deliver chemical solution to incoming wastewater.

Justification: The addition of iron salt to incoming wastewater will improve Plant operation by enhancing the settling of sludge in the primary clarifiers, and reducing corrosion and odor.

EXPENDITURE SCHEDULE (000'S)

Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Design				340					340		340
Construction					2,000				2,000		2,000
TOTAL				340	2,000				2,340		2,340

FUNDING SOURCE SCHEDULE (000'S)

San José-Santa Clara Treatment Plant Capital Fund	340	2,000							2,340		2,340
TOTAL	340	2,000							2,340		2,340

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

None

Notes:

FY Initiated:	2010-2011	Redevelopment Area:	N/A
Initial Project Budget:	\$2,340,000	SNI Area:	N/A
Appn. #:		USGBC LEED:	N/A

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Detail of Construction Projects

10. Plant Electrical Reliability

CSA:	Environmental and Utility Services	Initial Start Date:	3rd Qtr. 2003
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	
Department:	Environmental Services	Initial Completion Date:	2nd Qtr. 2015
Council District:	4	Revised Completion Date:	4th Qtr. 2015
Location:	Water Pollution Control Plant		

Description: This project will include a multi-phase construction schedule based upon a study completed in 2004. The project will replace substations and switches, modify power distribution buses and cabling, and provide backup systems to enhance the overall safety and reliability of the Plant electrical systems.

Justification: The current power distribution network has grown in a patched manner over the years, and many electrical system components have reached the end of their service life. This project will address immediate safety needs, as well as provide for future reliability needs.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Design	3,555			3,000	2,200	2,000	2,300	1,000	10,500		14,055
Construction		23,015	23,015	400		34,000		20,000	54,400	205	77,620
TOTAL	3,555	23,015	23,015	3,400	2,200	36,000	2,300	21,000	64,900	205	91,675

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund	3,555	23,015	23,015	3,400	2,200	36,000	2,300	21,000	64,900	205	91,675
TOTAL	3,555	23,015	23,015	3,400	2,200	36,000	2,300	21,000	64,900	205	91,675

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

2005-2009 CIP - increase of \$33.5 million to fund construction/rehabilitation costs due to increased project scope.
 2007-2011 CIP - increase of \$15.6 million to fund construction/rehabilitation costs due to increased project scope.
 2008-2012 CIP - increase of \$26.5 million to fund construction/rehabilitation costs due to increased project scope.
 2009-2013 CIP - decrease of \$3 million to reflect a project scope change.
 2011-2015 CIP - increase of \$11.4 million due to increased project scope.

Notes:

Replaces a formerly ongoing allocation titled "Electrical System Improvements".

FY Initiated:	2003-2004	Redevelopment Area:	N/A
Initial Project Budget:	\$7,671,000	SNI Area:	N/A
Appn. #:	4341	USGBC LEED:	N/A

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Detail of Construction Projects

11. Secondary and Nitrification Clarifier Rehabilitation

CSA:	Environmental and Utility Services	Initial Start Date:	Ongoing
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	
Department:	Environmental Services	Initial Completion Date:	Ongoing
Council District:	4	Revised Completion Date:	
Location:	Water Pollution Control Plant		

Description: This project will include systematic rehabilitation of existing secondary and nitrification clarifiers, including coating of concrete and rehabilitation of clarifier mechanisms. The clarifiers are large concrete tanks that serve to treat the wastewater by allowing for solids to settle out to the bottom of the tanks. The treated wastewater flows to the next treatment phase and the solids are removed from the bottom of the clarifiers for further treatment.

Justification: This project is needed to ensure the structural integrity and reliability of the aging clarifiers.

EXPENDITURE SCHEDULE (000'S)

Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Development				1,501	1,658				3,159		
Design						400			400		
Construction		1,000	1,000	2,200			2,400	220	4,820		
TOTAL		1,000	1,000	3,701	1,658	400	2,400	220	8,379		

FUNDING SOURCE SCHEDULE (000'S)

San José-Santa Clara Treatment Plant Capital Fund	1,000	1,000	3,701	1,658	400	2,400	220	8,379
TOTAL	1,000	1,000	3,701	1,658	400	2,400	220	8,379

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

N/A

Notes:

Project schedule dates and selected budget information are not provided due to the ongoing nature of this project. This project assumes the addition of one temporary position in 2010-2011, with possible extensions in the following four years, dependent on development needs for clarifier designs.

FY Initiated:	Ongoing	Redevelopment Area:	N/A
Initial Project Budget:		SNI Area:	N/A
Appn. #:	7074	USGBC LEED:	N/A

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Detail of Construction Projects

12. Warehousing Facility Additions

CSA:	Environmental and Utility Services	Initial Start Date:	3rd Qtr. 2010
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	
Department:	Environmental Services	Initial Completion Date:	2nd Qtr. 2012
Council District:	4	Revised Completion Date:	
Location:	Water Pollution Control Plant		

Description: This project will include an assessment of inventory storage needs and provide for covered storage facilities for spare equipment, parts, and materials used in wastewater treatment.

Justification: This project will allow for equipment, parts, and materials that are currently stored in the open to be stored in a centralized covered area.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Design				300					300		300
Construction					1,500				1,500		1,500
TOTAL				300	1,500				1,800		1,800

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund				300	1,500				1,800		1,800
TOTAL				300	1,500				1,800		1,800

ANNUAL OPERATING BUDGET IMPACT (000'S)											
None											

Major Changes in Project Cost:

None

Notes:

FY Initiated:	2010-2011	Redevelopment Area:	N/A
Initial Project Budget:	\$1,800,000	SNI Area:	N/A
Appn. #:		USGBC LEED:	N/A

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Detail of Construction Projects

13. Dissolved Air Flotation Dissolution Improvements

CSA:	Environmental and Utility Services	Initial Start Date:	4th Qtr. 2010
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	
Department:	Environmental Services	Initial Completion Date:	1st Qtr. 2012
Council District:	4	Revised Completion Date:	
Location:	Water Pollution Control Plant		

Description: This project will replace existing pressure flow discharge valves and pipe manifold at the Dissolved Air Flotation Facility. This project will also include evaluation and testing of an alternative technology to the existing pressure retention tanks.

Justification: This project will improve reliability, address safety issues, and maintain the integrity of existing infrastructure. This project will also evaluate less costly alternatives to replacing the existing pressure retention tanks.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Design			298						298		298
Construction				1,158	23				1,181		1,181
TOTAL			298	1,158	23				1,479		1,479

FUNDING SOURCE SCHEDULE (000'S)											
Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
San José-Santa Clara Treatment Plant Capital Fund			298	1,158	23				1,479		1,479
TOTAL			298	1,158	23				1,479		1,479

ANNUAL OPERATING BUDGET IMPACT (000'S)										
None										

Major Changes in Project Cost:

None

Notes:

FY Initiated:	2010-2011	Redevelopment Area:	N/A
Initial Project Budget:	\$1,479,000	SNI Area:	N/A
Appn. #:		USGBC LEED:	N/A

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Detail of Construction Projects

14. Filter Improvements

CSA:	Environmental and Utility Services	Initial Start Date:	Ongoing
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	
Department:	Environmental Services	Initial Completion Date:	Ongoing
Council District:	4	Revised Completion Date:	
Location:	Water Pollution Control Plant		

Description: This project will include replacement of existing filter underdrain system with a new type of underdrain technology, and the existing dual-media and with a single media type (monomedia). Initially, one of the 16 filter bays will be operated as a full-scale demonstration project. This project will allow the City to evaluate whether it is more economical to upgrade the existing filters or install a new technology.

Justification: The existing filters at the Water Pollution Control Plant were constructed in the 1970s. Due to structural and mechanical deterioration at the filter facility, as well as outdated electrical and instrumentation equipment, a significant investment will be required at the filter facility over the next 10 years to ensure the long-term reliability of the treatment process.

EXPENDITURE SCHEDULE (000'S)

Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Design				200					200		
Construction					2,000	2,355	1,000	1,000	6,355		
TOTAL				200	2,000	2,355	1,000	1,000	6,555		

FUNDING SOURCE SCHEDULE (000'S)

San José-Santa Clara Treatment Plant Capital Fund	200	2,000	2,355	1,000	1,000	6,555
TOTAL	200	2,000	2,355	1,000	1,000	6,555

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

N/A

Notes:

Project schedule dates and selected budget information are not provided due to the ongoing nature of this project. This project is proposed to become a stand alone project in 2010-2011. Previously, it was part of the Plant Infrastructure Improvements allocation.

FY Initiated:	Ongoing	Redevelopment Area:	N/A
Initial Project Budget:		SNI Area:	N/A
Appn. #:		USGBC LEED:	N/A

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Detail of Construction Projects

15. Revised South Bay Action Plan - SBWR Extension

CSA:	Environmental and Utility Services	Initial Start Date:	Ongoing
CSA Outcome:	Healthy Streams, Rivers, Marsh and Bay	Revised Start Date:	
Department:	Environmental Services	Initial Completion Date:	Ongoing
Council District:	4	Revised Completion Date:	
Location:	Water Pollution Control Plant		

Description: The National Pollutant Discharge Elimination System (NPDES) permit requires continued development of the South Bay Water Recycling (SBWR) system to increase use of recycled water and further reduce Plant discharge to the bay. This allocation will fund the development and future construction of an advanced water treatment facility in partnership with the Santa Clara Valley Water District. In addition, this allocation funds future recycled water projects not yet identified.

Justification: The Revised South Bay Action Plan, adopted by the City Council in June 2001, provides for an integrated, cost-effective combination of water conservation, industrial reuse and water recycling projects. The SBWR Extension project includes construction of extensions to the existing recycled water distribution system that will provide additional capacity and ensure diversification of a beneficial resource while reducing flow to the Bay.

EXPENDITURE SCHEDULE (000'S)

Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Development											
Design											
Construction		23,983	23,983	389	389	389	389	389	1,945		
TOTAL		23,983	23,983	389	389	389	389	389	1,945		

FUNDING SOURCE SCHEDULE (000'S)

San José-Santa Clara Treatment Plant Capital Fund	23,983	23,983	389	389	389	389	389	389	1,945		
TOTAL	23,983	23,983	389	389	389	389	389	389	1,945		

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

N/A

Notes:

Project schedule dates and selected budget information are not provided due to the ongoing nature of this project. A \$389,000 annual allocation beginning in 2005-2006 represents recycled water pipeline funding from Calpine for their share of the pipeline to the Metcalf Energy Center. This allocation is anticipated to fund future recycled water projects.

FY Initiated:	Ongoing	Redevelopment Area:	N/A
Initial Project Budget:		SNI Area:	N/A
Appn. #:	6589	USGBC LEED:	N/A

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Detail of Construction Projects

16. Equipment Replacement

CSA:	Environmental and Utility Services	Initial Start Date:	Ongoing
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	
Department:	Environmental Services	Initial Completion Date:	Ongoing
Council District:	4	Revised Completion Date:	
Location:	Water Pollution Control Plant		

Description: This allocation provides for the replacement and rehabilitation of equipment at the Plant. Equipment anticipated to be replaced or rehabilitated includes air compressors, tanks, pumps, motors, control systems, valves, heat exchangers, engine auxiliaries, lab instruments and other equipment as required. Existing engine-generators and engine-blowers will be retrofitted to meet Air Quality Board emission requirements.

Justification: Replacement and rehabilitation of WPCP equipment is necessary as a result of wear, obsolescence or regulatory requirements. Replacement and rehabilitation will ensure continued efficient operation of the Plant facilities.

EXPENDITURE SCHEDULE (000'S)

Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Equipment		7,074	7,074	2,420	1,846	3,883	1,525	1,525	11,199		
TOTAL		7,074	7,074	2,420	1,846	3,883	1,525	1,525	11,199		

FUNDING SOURCE SCHEDULE (000'S)

San José-Santa Clara Treatment Plant Capital Fund	7,074	7,074	2,420	1,846	3,883	1,525	1,525	11,199
TOTAL	7,074	7,074	2,420	1,846	3,883	1,525	1,525	11,199

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

N/A

Notes:

Project schedule dates and selected budget information are not provided due to the ongoing nature of this project.

FY Initiated:	Ongoing	Redevelopment Area:	N/A
Initial Project Budget:		SNI Area:	N/A
Appn. #:	4332	USGBC LEED:	N/A

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Detail of Construction Projects

17. Plant Infrastructure Improvements

CSA:	Environmental and Utility Services	Initial Start Date:	Ongoing
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	
Department:	Environmental Services	Initial Completion Date:	Ongoing
Council District:	4	Revised Completion Date:	
Location:	Water Pollution Control Plant		

Description: This allocation provides for improvements, rehabilitation, or replacement of existing Plant infrastructure and fixed works; process facilities; buildings, structures and supporting facilities; piping and auxiliaries; instrumentation; and electrical generation, distribution and control systems.

Justification: Rehabilitation, improvements, and replacement of capital infrastructure are necessary to maintain process viability and to ensure regulatory compliance, structural integrity, reliability, functionality, and safety of Plant buildings and process facilities for intended uses.

EXPENDITURE SCHEDULE (000'S)

Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Construction		8,204	7,103	8,472	7,039	4,364	12,384	12,634	44,893		
TOTAL		8,204	7,103	8,472	7,039	4,364	12,384	12,634	44,893		

FUNDING SOURCE SCHEDULE (000'S)

San José-Santa Clara Treatment Plant Capital Fund	8,204	7,103	8,472	7,039	4,364	12,384	12,634	44,893
TOTAL	8,204	7,103	8,472	7,039	4,364	12,384	12,634	44,893

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

N/A

Notes:

Project schedule dates and selected budget information are not provided due to the ongoing nature of this project.

Prior to 2010-2011, the Fuel Cell project accounted for \$1.24 million of the Plant Infrastructure Improvements project. In the 2011-2015 CIP, the Fuel Cell project was broken out into a stand alone project.

FY Initiated:	Ongoing	Redevelopment Area:	N/A
Initial Project Budget:		SNI Area:	N/A
Appn. #:	5690	USGBC LEED:	N/A

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Detail of Construction Projects

18. Unanticipated/Critical Repairs

CSA:	Environmental and Utility Services	Initial Start Date:	Ongoing
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	
Department:	Environmental Services	Initial Completion Date:	Ongoing
Council District:	4	Revised Completion Date:	
Location:	Water Pollution Control Plant		

Description: This allocation provides funding for any unanticipated and/or critical repairs.

Justification: It is necessary to have funds available to facilitate a rapid response in the event that critical repairs are required to plant infrastructure, or an unforeseen situation arises during project construction.

EXPENDITURE SCHEDULE (000'S)

Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Construction		263	263	250	250	250	250	250	1,250		
TOTAL		263	263	250	250	250	250	250	1,250		

FUNDING SOURCE SCHEDULE (000'S)

San José-Santa Clara Treatment Plant Capital Fund	263	263	250	250	250	250	250	250	1,250		
TOTAL	263	263	250	250	250	250	250	250	1,250		

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

N/A

Notes:

Project schedule dates and selected budget information are not provided due to the ongoing nature of this project.

FY Initiated:	Ongoing	Redevelopment Area:	N/A
Initial Project Budget:		SNI Area:	N/A
Appn. #:	5691	USGBC LEED:	N/A

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Detail of Non-Construction Projects

19. City-wide and Public Works Capital Support Costs

CSA: Environmental and Utility Services
CSA Outcome: Reliable Utility Infrastructure
Department: Public Works
Description: This allocation funds city-wide capital program support costs which include support for the Capital Project Management System, labor compliance review, performance measurement reporting, and updates of policies and specifications; and, Public Works Department capital project delivery costs which include management, staff and technical support, fiscal services, and procurement services.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Program Management		5	40	397	397	397	397	397	1,985		
TOTAL		5	40	397	397	397	397	397	1,985		

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund		5	40	397	397	397	397	397	1,985		
TOTAL		5	40	397	397	397	397	397	1,985		

Notes:
 Selected budget information is not provided due to the ongoing nature of this project.
Appn. #: 6000

20. Payment for Clean Water Financing Authority Trustee

CSA: Environmental and Utility Services
CSA Outcome: Reliable Utility Infrastructure
Department: Environmental Services
Description: This allocation provides for administrative costs of the San José/Santa Clara Clean Water Financing Authority related to bond issues, including necessary audits, transfers, registration, investment, and disbursement fees.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Program Management		22	22	5	5	5	5	5	25		
TOTAL		22	22	5	5	5	5	5	25		

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund		22	22	5	5	5	5	5	25		
TOTAL		22	22	5	5	5	5	5	25		

Notes:
 Selected budget information is not provided due to the ongoing nature of this project.
Appn. #: 6584

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Detail of Non-Construction Projects

21. Plant Master Plan

CSA: Environmental and Utility Services
CSA Outcome: Healthy Streams, Rivers, Marsh and Bay
Department: Environmental Services
Description: The Plant Master Plan (PMP) will provide San José/Santa Clara Water Pollution Control Plant with a phased program of recommended wastewater treatment facilities and management programs to accommodate planned growth and to meet existing and anticipated regulatory requirements through the year 2040. The PMP will need to address both public health and environmental protection issues while ensuring reliable service at affordable rates for area customers.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Master Plan/Study	572	4,876	4,876	2,400					2,400		7,848
TOTAL	572	4,876	4,876	2,400					2,400		7,848

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund	572	4,876	4,876	2,400					2,400		7,848
TOTAL	572	4,876	4,876	2,400					2,400		7,848

Notes:
This project was formerly titled "Bio-solids Master Plan."
Appn. #: 4120

22. State Revolving Fund Loan Repayment

CSA: Environmental and Utility Services
CSA Outcome: Healthy Streams, Rivers, Marsh and Bay
Department: Environmental Services
Description: This allocation provides for the repayment of low interest State loans awarded for South Bay Water Recycling projects.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Debt Service	41,348	4,464	4,464	4,464	4,464	4,464	4,464	4,464	22,320	22,320	90,452
TOTAL	41,348	4,464	4,464	4,464	4,464	4,464	4,464	4,464	22,320	22,320	90,452

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund	41,348	4,464	4,464	4,464	4,464	4,464	4,464	4,464	22,320	22,320	90,452
TOTAL	41,348	4,464	4,464	4,464	4,464	4,464	4,464	4,464	22,320	22,320	90,452

Appn. #: 6590

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Detail of Non-Construction Projects

23. Transfer to Clean Water Financing Authority Debt Service Payment Fund

CSA: Environmental and Utility Services
CSA Outcome: Healthy Streams, Rivers, Marsh and Bay
Department: Environmental Services
Description: This funding provides for the payment of the 1995 Series A and B Revenue Bonds. The moneys are transferred to the Clean Water Financing Authority Debt Service Payment Fund.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2009-10 Appn.	2009-10 Estimate	2010-11	2011-12	2012-13	2013-14	2014-15	5-Year Total	Beyond 5-Year	Project Total
Debt Service	14,881	6,981	6,981	6,978	6,960	6,949	6,951	6,922	34,760	31,724	88,346
TOTAL	14,881	6,981	6,981	6,978	6,960	6,949	6,951	6,922	34,760	31,724	88,346

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund	14,881	6,981	6,981	6,978	6,960	6,949	6,951	6,922	34,760	31,724	88,346
TOTAL	14,881	6,981	6,981	6,978	6,960	6,949	6,951	6,922	34,760	31,724	88,346

Appn. #: 0005

Water Pollution Control

2011-2015 Proposed Capital Improvement Program

Summary of Projects that Start after 2010-2011

Project Name:	Headworks No. 2 Expansion	Initial Start Date:	3rd Qtr. 2014
5-Year CIP Budget:	\$4,000,000	Revised Start Date:	
Total Budget:	\$133,600,000	Initial End Date:	1st Qtr. 2022
Council District:	4	Revised End Date:	
USGBC LEED:	N/A		

Description: The Plant has two headworks facilities: Headworks No. 1 (HW1), which was built in the mid-1950s and early 1960s, and Headworks No. 2 (HW2), which was built in 2008. These two headworks, operating in parallel, currently provide a peak wet weather flow capacity of 400 million gallons per day (mgd). This project will expand the peak wet weather capacity of HW2 alone to 400 mgd and allow HW2 to function as the sole headworks facility and HW1 to be decommissioned.

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Summary of Reserves

Project Name:	Reserve for Electrical Reliability Improvements	Initial Start Date:	N/A
5-Year CIP Budget:	\$5,305,000	Revised Start Date:	
Total Budget:	\$5,305,000	Initial End Date:	N/A
Council District:	4	Revised End Date:	
USGBC LEED:	N/A		

Description: This reserve sets aside funding for contingencies related to the WPCP electrical systems, as well as for activities to be added to the Plant's Electrical Reliability Improvements project in the future, once plans for these improvements are more fully developed.

Project Name:	Reserve for Equipment Replacement	Initial Start Date:	N/A
5-Year CIP Budget:	\$5,000,000	Revised Start Date:	
Total Budget:	\$5,000,000	Initial End Date:	N/A
Council District:	4	Revised End Date:	
USGBC LEED:	N/A		

Description: This reserve provides for the replacement and rehabilitation of equipment which, due to age, wear, or obsolescence, must be replaced for the efficient operation of the WPCP. Reserved funds are available to pay for unforeseen extraordinary costs to the extent that there are no other funds budgeted for such purposes.

Project Name:	Reserve for Plant Capital Replacement	Initial Start Date:	N/A
5-Year CIP Budget:	\$58,000,000	Revised Start Date:	
Total Budget:	\$58,000,000	Initial End Date:	N/A
Council District:	4	Revised End Date:	
USGBC LEED:	N/A		

Description: This reserve sets aside funding for future WPCP projects.

Project Name:	Reserve for Plant Master Plan Improvements	Initial Start Date:	N/A
5-Year CIP Budget:	\$10,000,000	Revised Start Date:	
Total Budget:	\$10,000,000	Initial End Date:	N/A
Council District:	4	Revised End Date:	
USGBC LEED:	N/A		

Description: This reserve sets funds aside for projects arising out of the Plant Master Plan.

Water Pollution Control
2011-2015 Proposed Capital Improvement Program
Summary of Reserves

Project Name:	Reserve for Rate Studies	Initial Start Date:	N/A
5-Year CIP Budget:	\$200,000	Revised Start Date:	
Total Budget:	\$200,000	Initial End Date:	N/A
Council District:	4	Revised End Date:	
USGBC LEED:	N/A		

Description: This funding provides a reserve for the study and review of rate structures within the industry.

PROPOSED

SAN JOSE / SANTA CLARA

WATER POLLUTION CONTROL PLANT

700 Los Esteros Road
San Jose, California 95134

2010 – 2011

Operating & Maintenance Budget

Submitted by
John Stufflebean, Director
Environmental Services Department
City of San Jose

TO
Treatment Plant Advisory Committee

Chuck Reed	(Chairperson)	Mayor, City of San Jose
Nora Campos		Councilmember, City of San Jose
John Gatto		Boardmember, Cupertino Sanitary District
Bob Livengood		Mayor, City of Milpitas
Patricia Mahan		Mayor, City of Santa Clara
Kevin Moore		Councilmember, City of Santa Clara
Madison, Nguyen		Councilmember, City of San Jose
Kenneth Yeager		Boardmember, West Valley Sanitation District
Ed Shikada		Deputy City Manager, City of San Jose



Memorandum

**TO: TREATMENT PLANT ADVISORY
COMMITTEE**

FROM: John Stufflebean

**SUBJECT: 2010-2011 PROPOSED
TREATMENT PLANT BUDGET**

DATE: May 5, 2010

This memorandum serves to transmit the 2010-11 Proposed Operating and Capital Budgets for the Environmental Services Department and the Treatment Plant.

We hope you find this report informative and if you should have any further questions, please contact Dale Ihrke 408-945-5198.

JOHN STUFFLEBEAN
Director, Environmental Services Department

**SAN JOSE / SANTA CLARA
WATER POLLUTION CONTROL PLANT**

700 Los Esteros Road
San Jose, California 95134

2010-2011

P R O P O S E D

Operating & Maintenance Budget

Environmental Services Department
City of San Jose

**San Jose/Santa Clara Water Pollution Control Plant
Environmental Services Department**

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San Jose/Santa Clara Water Pollution Control Plant
Environmental Services Department

BUDGET SUMMARY

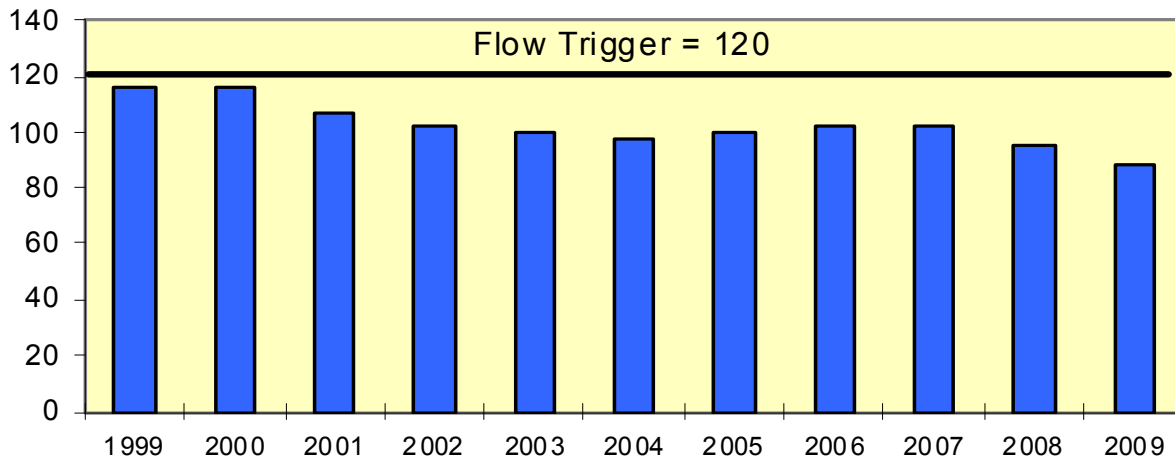
	Adopted 09-10	Proposed 10-11	Change
Treatment Plant Operating Fund Budget	79,940,062	78,425,212	(1.9%)
ESD Authorized Positions	363.27	352.75	(2.9%)

BUDGET HIGHLIGHTS 2010-2011

- Additional resources to address succession planning and comprehensive staff training programs are recommended for 2010-2011.
- The addition of a temporary air regulations specialist is recommended to resolve air quality regulation compliance issues.
- Continued funding for the final year of Plant Master Plan support is included for 2010-2011.
- Program efficiencies and city-wide changes to business strategies have allowed for a net reduction of 10.52 employees within this fund.



**10 year History of Average Dry Weather Flow
(in millions of gallons per day)**



San Jose/Santa Clara Water Pollution Control Plant
Environmental Services Department

**TREATMENT PLANT OPERATING FUND
 BUDGET SUMMARY**

Fund Budget Summary	2008-09 Actual Expenses	2009-10 Adopted Budget	2010-11 Forecast Budget	2010-11 Proposed Budget
Operating Expenses				
Personal Services	37,965,975	41,279,415	43,049,423	43,325,189
Non-personal Expenses	23,948,598	27,395,304	24,061,354	24,177,618
Inventory	348,669	400,000	400,000	400,000
Overhead	4,122,965	7,116,770	7,101,135	7,407,609
NCH Debt Service	722,932	625,450	625,450	886,403
GASB (43/45)	95,271	117,345	0	0
Workers' Compensation	183,147	696,150	696,150	700,000
City Services	648,859	524,628	475,419	685,393
Total Operating Expenses	68,036,416	78,155,062	76,408,931	77,582,212
Other Expenses				
Equipment	1,120,271	1,785,000	825,000	843,000
Contingency	0	0	1,700,000	0
TOTAL EXPENSES	\$69,156,687	\$79,940,062	\$78,933,931	\$78,425,212

ESTIMATED COST DISTRIBUTION

2010-11 Estimated Total Gallons Treated (MG)	(1) Percent of Total Sewage Treated	City / District	2010-11 Projected
25,045.866	64.729	City of San Jose (3)	\$50,763,855
4,799.911	13.483	City of Santa Clara	10,574,071
29,845.777	78.212	Sub-Total	\$61,337,926
3,420.133	9.015	West Valley Sanitation District	7,070,033
1,898.666	4.857	Cupertino Sanitary District	3,809,113
2,409.963	6.223	City of Milpitas	4,880,401
512.663	1.395	Sanitation District # 2 - 3	1,094,032
109.932	0.298	Burbank Sanitary District	233,707
8,351.357	21.788	Sub-Total	\$17,087,286
38,197.134	100.0	TOTAL	\$78,425,212

(1) Composite of four parameters (flow, BOD, SS, ammonia). Source 2010-11 Revenue Program.

San Jose/Santa Clara Water Pollution Control Plant
Environmental Services Department

OVERVIEW

This year's TPAC Budget continues to reflect the funding allocations by core service, in accordance with the City's Investing in Results Program. As previously reported, the Environmental Services Department has six core services:

- | | |
|--|--|
| <input type="checkbox"/> Wastewater Management | <input type="checkbox"/> Potable Water Delivery |
| <input type="checkbox"/> Recycled Water Management | <input type="checkbox"/> Natural & Energy Resources |
| <input type="checkbox"/> Stormwater Management | <input type="checkbox"/> Protection |
| <input type="checkbox"/> Recycling and Garbage Services | |

The three core services that receive funding from the Treatment Plant Operating Fund are Wastewater Management, Recycled Water Management, and Natural & Energy Resources Protection. Through the Natural & Energy Resources Protection core service, the Department's water conservation programs assist and conduct outreach to businesses and residents in an effort to promote water conservation and thereby reduce the flow of wastewater to the Water Pollution Control Plant. The Recycled Water Management core service diverts treated Plant effluent from the Bay to agricultural, landscaping, and other uses. The Wastewater Management core service funds all maintenance and operations functions of the Plant, as well as the Laboratory, Source Control Program, and permit development and compliance.

In addition to these three core services, the Treatment Plant Operating Fund also funds a portion of Strategic Support services which provide administrative services to all core service programs within the Department. These services include public education, long range planning, financial management, computer services, clerical support, employee services, and legislative research and advocacy.

The 2010-2011 Proposed Treatment Plant Operating Fund Budget recommends a decrease of 1.9% over the 2009-2010 Adopted Budget. This decrease reflects both the greater than usual one-time funding from 2009-2010 and the re-budgeting of funds from 2008-2009. Also included in the proposed budget are the non-personal budget decreases related to energy as natural-gas prices remain low compared to previous year averages; and recently completed energy projects continue to reduce consumption.

Offsetting these decreases are proposed additions which include funding for: increased chemical costs in response to the conversion to liquid chlorine disinfection, succession planning and expanded training programs, an air regulations specialist to address increasingly stringent emissions regulations, and continuation of support for the Plant Master Plan.

The following sections provide a breakdown by core service of all associated costs and budget proposals.

San Jose/Santa Clara Water Pollution Control Plant
Environmental Services Department

OVERVIEW CONTINUED

BUDGET SUMMARY

Department Budget Summary	2008-09 Actual 1	2009-10 Adopted 2	2010-11 Forecast 3	2010-11 Proposed 4	% Change (2 to 4)
Dollars by Core Services					
Manage Wastewater	\$ 55,167,913	\$ 60,546,289	\$ 57,889,141	\$ 58,512,918	(3.4%)
Manage Recycled Water	\$ 3,100,079	\$ 4,243,853	\$ 4,195,263	\$ 4,140,527	(2.4%)
Protect Natural & Energy Resources	\$ 637,653	\$ 1,739,661	\$ 1,184,222	\$ 1,184,222	(31.9%)
Strategic Support	\$ 4,129,199	\$ 3,929,916	\$ 4,667,151	\$ 4,508,140	14.7%
Total	\$ 63,034,844	\$ 70,459,719	\$ 67,935,777	\$ 68,345,807	(3.0%)
Dollars by Category					
Personal Services					
Salaries/Benefits	\$ 36,710,033	\$ 40,627,749	\$ 42,397,757	\$ 42,673,523	5.0%
Overtime	\$ 1,255,942	\$ 651,666	\$ 651,666	\$ 651,666	0.0%
Subtotal	\$ 37,965,975	\$ 41,279,415	\$ 43,049,423	\$ 43,325,189	5.0%
Non-personal/Equipment	\$ 25,068,869	\$ 29,180,304	\$ 24,886,354	\$ 25,020,618	(14.3%)
Total	\$ 63,034,844	\$ 70,459,719	\$ 67,935,777	\$ 68,345,807	(3.0%)
Authorized Positions	359.82	363.27	358.82	352.75	(2.9%)

San Jose/Santa Clara Water Pollution Control Plant

Environmental Services Department

Core Service: Wastewater Management

Core Service Purpose

Manage wastewater for suitable discharge into the South San Francisco Bay and for beneficial reuse to protect the environment and public health.

Key Operational Services:

- | | |
|---|---|
| <input type="checkbox"/> Source Management and Control | <input type="checkbox"/> Regulatory Development and Technical Guidance |
| <input type="checkbox"/> Operation of Treatment System and Processes | <input type="checkbox"/> Process Control Monitoring |
| <input type="checkbox"/> Maintain Equipment and Facilities | <input type="checkbox"/> System Improvements |
| <input type="checkbox"/> Regulatory Compliance | |

Performance and Resource Overview

This core service's activities are primarily focused on providing wastewater treatment services to eight jurisdictions and 1.4 million residents in the South Bay, conducting industrial facility inspections, and meeting discharge requirements to ensure compliance with the City's National Pollution Discharge Elimination System (NPDES) Wastewater permit. This permit is a federally mandated document, as described under the Clean Water Act, establishing maximum pollution limits that the Plant's effluent must meet prior to its discharge to the bay. For the eighth consecutive year, ending December 31, 2009, the San José/Santa Clara Water Pollution Control Plant (Plant) has achieved 100% compliance with its permit discharge requirements. This accomplishment has earned the Plant its fourth Platinum Peak Performance Award given by the National Association of Clean Water Agencies for 100% permit compliance for five or more consecutive years. This core service was previously titled "Manage Wastewater".

Increasingly stringent air quality permit regulations resulted in one Notice of Violation (NOV) received in 2009-2010 and two more that are pending. Additional resources are recommended as part of this proposed budget to address the problematic areas of, and ensure compliance with, the air permit. New performance measures have been added for 2010-2011 to track air emissions and pollutant discharge violations.

For the past several years, the performance issue of greatest concern for this core service has been "Cost per million gallons treated." For 2009-2010, this measure is expected to drop below the 2009-2010 target after rising for several years. The lower than expected cost is due to reduced energy expenditures, which are the result of the sharp decline in natural gas prices during 2009-2010 as well as savings generated by recent energy-saving projects implemented at the Plant. Combined, these factors have led to projected energy savings of approximately \$2.5 million for 2009-2010. The lower than average natural gas prices are anticipated to continue through 2010-2011, therefore the target rate in 2010-2011 for this performance measure is lower than the 2009-2010 target price. However, annual increases in categories that include personnel costs, chemicals and supplies are expected to

San Jose/Santa Clara Water Pollution Control Plant

Environmental Services Department

Core Service: Wastewater Management

Performance and Resource Overview (Cont'd.)

partially offset the energy savings. The Plant has continued its aggressive program aimed at reducing energy costs and increasing in-house energy production. Several projects were completed in 2009-2010 including pulsed aeration, pump station optimization, and Dissolved Air Flotation (DAF) system optimization. Several other projects are in progress and are due to be completed during the next two years, including the installation of a high efficiency fuel cell, a solar energy system, and aeration improvements.







The continued decline in influent, due in large part to the economic slowdown, as well as the increasing maintenance costs associated with the aging infrastructure at the Plant are still significant factors impacting the cost of treating wastewater. Two programs have been established during the past few years to address the rapidly rising maintenance costs at the Plant. The first was the development of an asset management program to implement a comprehensive data-driven strategy to address long-term capital needs as well as daily maintenance within the Plant. The initial phase of this project, a Computerized Maintenance Management System, was implemented in July 2009 and is improving the overall maintenance effort through the change to a more comprehensive work-order system. This initial accomplishment marks the continuous development of a comprehensive and automated system that tracks and records all maintenance activities and costs associated with each area of the treatment process. Future phases, planned for the next three years, will include the stocking of expanded inventory to increase productivity by minimizing acquisition times, expanded planning and scheduling so that maintenance resources are better coordinated, and the review and analysis of all the new data collected during the work-order process to allow for the empirical analysis of asset repair and replacement policies.

The second program aimed at controlling annual maintenance costs is the Enhanced Preventive Maintenance Program, currently in the third year of a five year strategy. The Program's objective is to develop a systematic approach to ensure all assets are sufficiently maintained to meet or exceed expected life cycles. As part of this effort, dedicated personnel were added in recent years to ensure a more thorough and timely maintenance cycle for all major assets. To date, this team has completed an exhaustive inventory and begun a more aggressive preventative maintenance schedule. As this effort is incorporated with the Asset Management Program, data will become available to better quantify the benefits and provide future direction to this program.

The Plant is projected to meet or exceed the majority of its performance targets in this core service in 2009-2010. The performance measure "Millions of gallons per day discharged to the Bay during average dry weather season" is slightly below the targeted level due to an overall decline of flows to the Plant and continued recycled water usage. This measure continues to meet the Regional Water Quality Control Board's permit requirements and flow trigger of 120 million gallons per day (mgd). This is of critical importance because if average discharges from the Plant were to exceed this level during the May through October dry-weather season, the Regional Board has the authority to order a number of more stringent measures, such as a building moratorium, that could threaten the area's long-term economic growth.

San Jose/Santa Clara Water Pollution Control Plant
Environmental Services Department
Core Service: Wastewater Management

Performance and Resource Overview (Cont'd.)

Manage Wastewater Performance Summary	2008-2009 Actual	2009-2010 Target	2009-2010 Estimated	2010-2011 Target
 Millions of gallons per day discharged to the Bay during average dry weather season State order: 120 mgd or less*	91	105	88	90
 % of time pollutant discharge requirements are met or surpassed	100%	100%	100%	100%
 Number of requirement violations				
-Pollutant discharge	NEW	NEW	NEW	0
-Air emissions	NEW	NEW	NEW	0
 % of scheduled industrial inspections completed on time	99%	95%	95%	95%
 Cost per million gallons treated	\$996	\$1,020	\$975	\$999
 % of customers (permitted dischargers) satisfied or very satisfied with service, based on reliability and pre-treatment services	N/A**	90%	N/A**	90%

Changes to Performance Measures from 2009-2010 Adopted Budget: Yes¹

* Average dry weather season is defined as the lowest three month continuous average between May and October, which during the fiscal year reporting period is July-September.

** No survey took place during the specified year. The last survey was conducted in June 2008 for 2007-2008. The next survey will be conducted in June 2010, with results available in 2010-2011.

¹ Changes to Performance Measures from 2009-2010 Adopted Budget:

- ✘ “% of suspended solids removed” measure was deleted because the performance measure was too technical for interpretation by the public.
- + “Number of requirement violations” measure was added because each violation could result in over \$32,000 in fines per day.

Activity & Workload Highlights	2008-2009 Actual	2009-2010 Forecast	2009-2010 Estimated	2010-2011 Forecast
Average millions of gallons per day treated	109	120	108	110
Total population in service area	1,393,538	1,406,000	1,396,803	1,399,000

Changes to Activity & Workload Highlights from 2009-2010 Adopted Budget: Yes¹

¹ Changes to Activity & Workload Highlights from 2009-2010 Adopted Budget:

- ✘ “Total pounds of suspended solids removed” was deleted because the performance measure was too technical for interpretation by the public.

San Jose/Santa Clara Water Pollution Control Plant

Environmental Services Department

Core Service: Wastewater Management

Performance and Resource Overview (Cont'd.)

Manage Wastewater Resource Summary	2008-2009 Actual 1	2009-2010 Adopted 2	2010-2011 Forecast 3	2010-2011 Proposed 4	% Change (2 to 4)
Core Service Budget *					
Personal Services	\$ 32,135,980	\$ 35,307,927	\$ 36,093,515	\$ 36,582,216	3.6%
Non-Personal/Equipment	23,031,933	25,238,362	21,795,626	21,930,702	(13.1%)
Total	\$ 55,167,913	\$ 60,546,289	\$ 57,889,141	\$ 58,512,918	(3.4%)
Authorized Positions	311.53	313.53	301.36	298.36	(4.8%)

* The Resource Summary includes all operating allocations within the Department that contribute to the performance of this Core Service. Note that additional resources from City-Wide, Special Funds and/or Capital Funds may also contribute to Core Service performance, yet are displayed elsewhere in other City budgets.

Budget Changes By Core Service

Proposed Core Service Changes	Positions	Treatment Plant Appropriations
1. Environmental Services Custodial Services	(4.00)	(128,010)
<p>This proposal would eliminate 4.0 filled Custodian positions at the Water Pollution Control Plant, and increase the contractual services budget in the San José/Santa Clara Treatment Plant Capital Fund Non-Personal/Equipment allocation by \$147,000, for a net savings of \$128,000. In accordance with Council Policy 0-41, Service Delivery Evaluation, staff undertook a business case analysis. Based on the analysis, the outsourcing of this service is recommended. Additionally, this proposal includes a recommendation that the Mayor and City Council not choose to implement the Public Private Competition Policy (Council Policy 0-29) based on the documented cost savings. To implement this proposal, staff will submit for Council consideration an amendment to the existing contract in June 2010 to allow for the transition of the service to the existing contract effective August 1. To ensure the best pricing and service possible, the Environmental Services Department will work with the Finance Department to issue a Request for Proposal for the entire service contract with a new contract submitted for City Council consideration by January 2011. The remaining Senior Custodian position will monitor the performance of the contractual staff. (Ongoing savings: \$153,875)</p> <p>Performance Results: Cost, Quality This action reduces budgeted costs with no anticipated impact to current service levels.</p>		
2. Vehicle Maintenance Staffing and Contractual Services		(34,188)
<p>This proposal generates city-wide vehicle maintenance and operations cost savings by reducing personnel and contractual services. In terms of the Environmental Services Department's, San José/Santa Clara Treatment Plant Operating Fund, the annual savings expected is \$34,188 in the Wastewater Management Core Service, and \$812 in the Recycled Water Management Core Service.</p>		

San Jose/Santa Clara Water Pollution Control Plant

Environmental Services Department

Core Service: Wastewater Management

Budget Changes By Core Service (cont'd)

Proposed Core Service Changes	Positions	Treatment Plant Appropriations
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Performance Results:

Quality, Customer Satisfaction This proposal would reduce the percentage of vehicles that are available for use by departments when needed. Customer satisfaction with the timeliness of work order completion may also decrease.

3. Water Pollution Control Plant Training Program **649,832**

This proposal would provide funding in the San José/Santa Clara Treatment Plant Operating Fund for three temporary Plant Mechanics and three temporary Plant Operators for one year (with the possibility of a one-year extension), one temporary Plant Shift Supervisor for one year, and one-time funding for associated equipment. Approximately 50% of the Plant's mechanical maintenance staff and 40% of staff in operator classifications will be eligible to retire in the next five years. Funding for these temporary positions would allow the Water Pollution Control Plant to establish a training program for anticipated hires, when existing staff retires. The Plant Operator and Plant Mechanic classifications are difficult to fill because only a small number of schools provide the appropriate training and there is a lack of experienced candidates who possess the required skill sets. State requirements prohibit Plant Operators from standing shift alone for their first year of training. In the past, Plant Mechanic candidates possessed journey level expertise in a variety of specialized equipment in order to be hired at the Water Pollution Control Plant, and could stand shift alone during the first year of employment. Recently, candidates with the necessary level of experience have been difficult to find. Therefore, the Plant is starting a training and apprenticeship program. The temporary Plant Shift Supervisor is needed to establish a curriculum for the program and create training materials. (Ongoing costs: \$0)

Performance Results:

Cost This action would help to avoid future increases in the cost-per-million-gallons treated by ensuring a sufficiently trained work force that can respond to all of the operations and maintenance needs, minimizing the need for additional contractual maintenance, overtime, and deferred preventative maintenance, which are more costly.

4.Plant Air Regulations Compliance **137,051**

This proposal would provide funding in the San José/Santa Clara Treatment Plant Operating Fund for a temporary position for one year, with the possibility of a one-year extension, to assist the Water Pollution Control Plant in complying with increasingly complex air quality regulations, which have made managing with existing resources more time consuming and difficult. The Water Pollution Control Plant operates numerous air emissions sources, such as engine blowers and generators, off-road equipment, and boilers that are regulated by the Bay Area Air Quality Management District. Expert assistance is needed to assess new regulations and plan strategies for the Plant to comply with them, perform gas emission measurements, prepare annual and semi-annual reports requiring significant engineering calculations and analysis, and perform other related tasks. (Ongoing costs: \$0)

Performance Results:

Cost This action would help to avoid the cost of penalties associated with air-permit violations and ensure complete compliance with all State and Federal regulations.

San Jose/Santa Clara Water Pollution Control Plant

Environmental Services Department

Core Service: Wastewater Management

Budget Changes By Core Service (cont'd)

Proposed Core Service Changes	Positions	Treatment Plant Appropriations
5. Plant Master Plan Support		115,129
<p>This proposal would continue temporary staffing in the San José/Santa Clara Treatment Plant Operating Fund for the “Wonders of our Water Works” public tour program. This program is a key strategy for educating and engaging the community regarding the \$1.5 billion of infrastructure improvements being charted by the Plant Master Plan. Since the tours were reinstated in 2008, almost 6,500 people have attended. This funding would allow an additional 2,500 to 3,000 people to attend Plant Tours. (Ongoing costs: \$0)</p> <p>Performance Results: Quality This action would build community support for necessary infrastructure improvements to ensure reliability of the wastewater treatment system. Greater public awareness of the Plant may also contribute to increased water conservation and pollution prevention efforts from residents.</p>		
6. Plant Capital Staffing	(1.0)	(116,037)
<p>This proposal would adjust staffing at the San José/Santa Clara Water Pollution Control Plant by deleting 2.0 vacant Electrician positions and adding 1.0 Environmental Services Program Manager and 1.0 Plant Mechanical Supervisor. These staffing adjustments would allow the Plant to undertake pilot and construction projects as part of the Plant Master Plan implementation. The Environmental Services Program Manager would provide safety and operability review during design and construction of CIP projects, assess operational issues during pilot studies, and manage the environmental considerations of CIP and pilot projects. Currently there is no position responsible for the environmental management of CIP projects, and insufficient resources to provide operability review of CIP and pilot projects. The Plant Mechanical Supervisor would provide safety and maintainability review during design and construction of CIP projects, assess long-term maintenance needs of equipment and technologies being tested, and provide historical information on the condition and maintainability of existing Plant facilities and equipment. With the ramp-up in the capital program for construction of Master Plan projects, a dedicated position is needed to perform these tasks. The two Electrician positions are no longer needed because organizational changes in two workgroups have led to less need for electrician support. (Ongoing costs: \$21,000)</p> <p>Performance Results: Cost, Quality: This action would help avoid the additional costs associated with both the delay of projects and the continued cost of maintaining aging infrastructure. The assistance of these specialized and experienced engineering professionals will enable the Plant to generate higher quality designs for capital projects more quickly, which would lead to higher quality wastewater treatment.</p>		
2010-2011 Proposed Core Service Changes Total	(5.00)	623,777

San Jose/Santa Clara Water Pollution Control Plant

Environmental Services Department

Core Service: Recycled Water Management

Core Service Purpose

Develop, operate, and maintain a recycled water system that reduces effluent to the Bay and provides a reliable and high quality alternative water supply.

Key Operational Services:

- | | |
|--|---|
| <input type="checkbox"/> System Operations and Maintenance | <input type="checkbox"/> Education and Marketing |
| <input type="checkbox"/> Regulatory Compliance | <input type="checkbox"/> System Expansion and Development |
| <input type="checkbox"/> Customer Connection Services | |

Performance and Resource Overview

The City's investment in South Bay Water Recycling (SBWR) supports the City's economic development goals by keeping the San José/Santa Clara Water Pollution Control Plant's discharges to South San Francisco Bay below the Regional Water Quality Control Board's discharge flow trigger of 120 million gallons per day (mgd). By providing infrastructure for, and promoting recycled water use by businesses and institutions in San José and its tributary partners, the City helps protect endangered species habitat in the South Bay and provides an alternate supply of high-quality water for a variety of uses, thereby preserving our limited drinking water supplies. SBWR strives to achieve the City's Green Vision Goal #6: *Recycle or beneficially reuse 100% of wastewater (100 mgd)*. Prior to 2010-2011, this core service was titled "Manage Recycled Water".

Performance objectives for recycled water focus on both program effectiveness (mgd, % effluent used) and program cost. In 2008-2009, SBWR delivered an average of 9 million gallons per day (mgd) to over 600 recycled water customers, reducing summer discharges to the Bay by over 14 mgd. SBWR program activities focus on two main areas: 1) increasing the total amount of recycled water used; and 2) increasing revenues and reducing program costs. The primary plan for accomplishing these goals is focused on connecting the nearly forty facilities adjacent to the existing SBWR pipeline, increasing potential demand by an additional 2 mgd, and increasing revenues. A supporting strategy involves the possibility of passing a City of San José ordinance to require new developments near the pipeline to be constructed with dual plumbing systems suitable to allow recycled water to be used indoors for flushing toilets as well as for cooling tower use. The concept of the ordinance was proposed to the Transportation and Environment Committee in September 2008 and has been presented to the development community and other stakeholders at a number of workshops and presentations in the area. Stakeholders have provided feedback on the proposed ordinance, and a revised ordinance is being prepared for a fall 2010 presentation to the City Council.

San Jose/Santa Clara Water Pollution Control Plant

Environmental Services Department

Core Service: **Recycled Water Management**

Performance and Resource Overview (Cont'd.)







In addition, SBWR plans to add nine miles of recycled water pipeline in 2010-2011 to reach new industrial and irrigation customers. This \$15 million construction program is supported by a \$6.46 million grant from the US Bureau of Reclamation through appropriations from the American Recovery and Reinvestment Act of 2009 (ARRA). The program includes four pipeline extensions in Santa Clara and four in San José, including a retrofit of the main campus of San José State University.

In a related strategy, the City and the Santa Clara Valley Water District recently executed the 40-year Recycled Water Facilities and Programs Integration Agreement to develop the use of recycled water, including joint development of an advanced water treatment facility that will reduce the salinity of recycled water. As approved by the City Council on March 2, 2010, the City expects to contribute up to \$11 million to the construction of the \$50 million facility that will reduce the salinity of recycled water by 30% or more, making the water easier to use for both irrigation and industrial applications. The City-District agreement also includes provisions for sharing operational costs and collaborating on future public education and outreach activities.

The performance measure “millions of gallons per day (mgd) diverted from flow to the bay for beneficial purposes during the dry weather period” is anticipated to fall below the targeted level in 2009-2010. The original target amount of 15 mgd was based on the anticipated addition of several large industrial users of recycled water that are now scheduled to occur in 2010-2011. This lower flow also impacted the targets for “% of wastewater diverted during dry weather period” and “millions of gallons per day delivered annually.” In all cases, significant improvement is expected during 2010-2011. Such improvement is also expected to lead to an increase in revenues and a corresponding reduction in net operating costs, resulting in a lower “cost per million gallons of recycled water delivered.” Revenues are also expected to increase in 2010-2011 due to an increase in the wholesale cost of recycled water for irrigation. This last of three scheduled \$20 per acre-foot (AF) rate increases for irrigation customers will increase the cost to \$415 per AF. In June 2010, SBWR will also seek authorization from the City Council for a \$20 per AF increase in the cost of recycled water for industrial recycled water users. Higher rates and additional demand should add another \$200,000 to \$300,000 per year to SBWR revenues, bringing the program closer to cost-recovery. Finally, in 2009-2010, the City updated its Groundwater Management and Monitoring Plan and formed an ongoing Operations Committee to ensure continued compliance with all Regional Board requirements. This will ensure that the program can achieve 100% compliance with standards (“% of time recycled water quality standards are met or surpassed”). The performance measure for customer satisfaction (“% of recycled water customers rating service as good or excellent”) will be measured during a survey scheduled for 2010-2011 and updated in future reports.

San Jose/Santa Clara Water Pollution Control Plant
Environmental Services Department

Performance and Resource Overview (Cont'd.)

Recycled Water Management Performance Summary	2008-2009 Actual	2009-2010 Target	2009-2010 Estimated	2010-2011 Target
 Millions of gallons per day diverted from flow to the Bay for beneficial purposes during the dry weather period*	14.7	15	14.3	16
 Millions of gallons of recycled water delivered annually	3,160	3,450	3,300	3,500
 % of time recycled water quality standards are met or surpassed	100%	100%	99.9%	100%
 % of wastewater influent recycled for beneficial purposes during the dry weather period*	14%	15%	14%	15%
 Cost per million gallons of recycled water delivered	\$1,480	\$1,075	\$1,622	\$1,529
 % of recycled water customers rating service as good or excellent, based on reliability, water quality, and responsiveness	81%**	85%**	NA**	85%**

Changes to Performance Measures from 2009-2010 Adopted Budget: No

* Dry weather period is defined as the lowest three months continuous average between May and October, which during the fiscal year reporting period is July-September.

** Data for this measure comes from the "Overall Satisfaction" parameter as reported in the 2007-2008 Recycled Water Customer Satisfaction Survey in September 2008. The next scheduled survey will cover 2009-2010 and will be reported in fall 2010.

Activity & Workload Highlights	2008-2009 Actual	2009-2010 Forecast	2009-2010 Estimated	2010-2011 Forecast
Total number of South Bay Water Recycling customers	584	630	601	625

Changes to Activity & Workload Highlights from 2009-2010 Adopted Budget: No

San Jose/Santa Clara Water Pollution Control Plant

Environmental Services Department

Core Service: Recycled Water Management

Performance and Resource Overview (Cont'd.)

Manage Recycled Water Resource Summary	2008-2009 Actual 1	2009-2010 Adopted 2	2009-2010 Forecast 3	2010-2011 Proposed 4	% Change (2 to 4)
Core Service Budget *					
Personal Services	\$ 1,851,082	\$ 2,178,721	\$ 2,389,127	\$ 2,335,203	7.2%
Non-Personal/Equipment	1,248,996	2,065,132	1,806,136	1,805,324	(12.6%)
Total	\$ 3,100,078	\$ 4,243,853	\$ 4,195,263	\$ 4,140,527	(2.4%)
Authorized Positions	16.59	17.59	18.03	17.63	0.2%

Budget Changes By Core Service

Proposed Core Service Changes	Positions	Treatment Plant Appropriations
1. Water Utility Staffing	(0.40)	(53,924)
<p>This proposal would eliminate one vacant Associate Engineer position in the Water Resources Division. This position is one of three Associate Engineer positions in the Water Supply & Engineering Section in this Division. Due to lower water system capital development resulting from the current economic slowdown and reduced growth in the water system service area forecasted for the next few years, the remaining two Associate Engineers, along with two Engineer II positions in the section can absorb the responsibilities of the position with no service level impact. (Ongoing savings: \$136,195)</p>		
Performance Results:		
Cost, Quality This action reduces budgeted costs with no anticipated impact to current service levels.		
2. Vehicle Maintenance Staffing and Contractual Services		(812)
<p>This proposal generates city-wide vehicle maintenance and operations cost savings by reducing personnel and contractual services. In terms of the Environmental Services Department's, San José/Santa Clara Treatment Plant Operating Fund, the annual savings expected is \$34,188 in the Wastewater Management Core Service, and \$812 in the Recycled Water Management Core Service.</p>		
Performance Results:		
Quality, Customer Satisfaction This proposal would reduce the percentage of vehicles that are available for use by departments when needed. Customer satisfaction with the timeliness of work order completion may also decrease.		
2009-2010 Proposed Core Service Changes Total	(0.40)	(54,736)

San Jose/Santa Clara Water Pollution Control Plant

Environmental Services Department

Core Service: Natural and Energy Resources Protection

Core Service Purpose

Promote enhanced air quality, environmentally responsible land use, and conservation of water and energy resources.

Key Operational Services:

- Protect and Monitor Groundwater Quality
- NPDES Permits Development
- Habitat Protection
- Water Conservation

Performance and Resource Overview

This core service focuses on the City's efforts to conserve and protect the quality of air, land, water, energy, and other natural resources. The Environmental Services Department coordinates and collaborates with other departments to implement key initiatives through program and policy development, outreach and education, legislative advocacy, and by identifying and securing supporting grants. The work of this core service is guided by the City's Green Vision. In conjunction with the City's ten Green Vision goals, the City of San José has committed to additional environmental initiatives, including the Urban Environmental Accords, the Bay Area Climate Change Compact, the U.S. Mayors' Climate Protection Agreement, the Greenhouse Gas Emissions Reduction Plan, and statewide legislation such as the Global Warming Solutions Act of 2006 (AB32). Through these initiatives, directly supported by the Natural and Energy Resources Protection Core Service, the City demonstrates national leadership in environmental sustainability, growth of the green economy, and an improved quality of life for its residents. This core service was previously titled "Protect Natural and Energy Resources."






Water Conservation - The City is in its second year of implementing the citywide Water Conservation Plan. This plan includes the continuance of a cost-sharing agreement with the Santa Clara Valley Water District for indoor water conservation programs such as incentives for water-efficient toilets and clothes washers. The cost-sharing agreement also funds water conservation technologies, and water use surveys for residents and businesses. The City is maintaining its contribution to these cost-shared programs over the next year. In 2008-2009, water conservation efforts achieved approximately 303,000 gallons per day of water savings, or 151% of the water conservation goal, in the Plant service area. The City is expected to achieve 75% of this goal for 2009-2010 because there was a delay in negotiating and signing the agreement, shortening the span of time when funding was available for water conservation programs. In 2008-2009, the City adopted an updated water waste ordinance to prevent and reduce practices that waste water. Upcoming efforts include an update of graywater reuse, rainwater/stormwater capture, or indoor water efficiency standards.

San Jose/Santa Clara Water Pollution Control Plant

Environmental Services Department

Core Service: Natural and Energy Resources Protection

Performance and Resource Overview (Cont'd.)

Natural and Energy Resources Protection Performance Summary	2008-2009 Actual	2009-2010 Target	2009-2010 Estimated	2010-2011 Target
 (Energy) % change in energy usage in all City Accounts from 2007 baseline	NEW	NEW	NEW	-10.0%
 (Energy) % of energy used at the Water Pollution Control Plant that is renewable	NEW	NEW	NEW	60%
 (Water) % of annual goal for gallons of water conserved tributary area-wide	151%	100%	75%	100%
 (Water) Net cost per gallon per day of water conserved through City programs	\$1.39	\$1.79	\$1.58	\$1.66
 (Water) % of residents demonstrating water conservation knowledge	56%*	62%	N/A*	68%

Changes to Performance Measures from 2009-2010 Adopted Budget: Yes¹

* Data for this measure is from the 2008 Water Focus Survey, which was conducted in summer 2008. The next scheduled survey is scheduled for summer 2010 with results available by January 2011.

¹ Changes to Performance Measures from 2009-2010 Adopted Budget:

⊖ “% of energy conserved in City facilities” was revised to “% change in energy usage in all City accounts from 2007 baseline” to better measure appropriate progress towards Green Vision Goal #2 and to include energy usage from all City accounts and to establish a baseline year for comparison.

+ “% of energy used at the Water Pollution Control Plant that is renewable” was added to demonstrate how much of the Plant’s energy usage, which accounts for more than 50% of all City facilities, comes from renewable resources.

✗ “% of Notice of Violations (NOVs) resolved to the satisfaction of the regional body” was deleted because performance progress could not be demonstrated. If any NOVs are issued, it is mandated that violations are resolved, so the percentage reported will always be 100%.

Activity & Workload Highlights	2008-2009 Actual	2009-2010 Forecast	2009-2010 Estimated	2010-2011 Forecast
Millions of gallons per day conserved (tributary area-wide)	0.303	0.200	0.15	0.28
Cumulative millions of gallons per day conserved since July 1992 (tributary area-wide)	8.57	8.50	8.72	9.00
Number of UN Accords Implemented (of 21 total Actions)	12	16	13	13

Changes to Activity & Workload Highlights from 2009-2010 Adopted Budget: No

San Jose/Santa Clara Water Pollution Control Plant
Environmental Services Department
Core Service: Natural and Energy Resources Protection

Performance and Resource Overview (Cont'd.)

Protect Natural and Energy Resources Resource Summary	2008-2009 Actual 1	2009-2010 Adopted 2	2010-2011 Forecast 3	2010-2011 Proposed 4	% Change (2 to 4)
Core Service Budget *					
Personal Services	\$ 179,393	\$ 196,844	\$ 241,405	\$ 241,405	22.6%
Non-Personal/Equipment	458,260	1,542,817	942,817	942,817	(38.9%)
Total	\$ 637,653	\$ 1,739,661	\$ 1,184,222	\$ 1,184,222	(31.9%)
 Authorized Positions	 1.22	 1.22	 1.58	 1.58	 29.5%

* The Resource Summary includes all operating allocations within the Department that contribute to the performance of this Core Service. Note that additional resources from City-Wide, Special Funds and/or Capital Funds may also contribute to Core Service performance, yet are displayed elsewhere in a separate City budget.

Budget Changes By Core Service

Proposed Core Service Changes	Positions	Treatment Plant Appropriations
None		
2010-2011 Proposed Core Service Changes Total	0	0

San Jose/Santa Clara Water Pollution Control Plant

Environmental Services Department

Strategic Support

Strategic Support represents services provided within departments that support and guide the provision of the core services. Strategic Support within the Environmental Services Department includes:

Key Operational Services:

- Public Education
- Long Range Planning
- Financial Management
- Information Technology Services
- Employee Services
- Facility Management
- Clerical Support
- Materials Management

Performance and Resource Overview

Key initiatives in this area include annual reporting on the Environmental Services Department's special funds and rates, legislative research and advocacy.

Costs for these programs are allocated to the Treatment Plant Operating Fund based on a measure of the units of service provided. The following table shows the percentage of support program resources allocated to the Treatment Plant Operating Fund for FY 2009-2010 and FY 2010-2011.

Allocated Support from the Treatment Plant Operating Fund

Program	FY 2009-10	FY 2010-2011
Communications	45%	49%
Environmental Compliance	43%	43%
Safety	54%	55%
Environmental Mgmt Systems	79%	72%
Office of Sustainability	46%	46%
Management & Support Services	71%	67%
ESD-Management Information Systems	65%	65%
Warehouse ¹		82%

Strategic Support

¹ Previously part of Support Services

San Jose/Santa Clara Water Pollution Control Plant
Environmental Services Department

Performance and Resource Overview (Cont'd.)

Strategic Support Resource Summary	2008-2009 Actual 1	2009-2010 Adopted 2	2010-2011 Forecast 3	2010-2011 Proposed 4	% Change (2 to 4)
Core Service Budget *					
Personal Services	\$ 3,799,519	\$ 3,595,923	\$ 4,325,376	\$ 4,166,365	15.9%
Non-Personal/Equipment	329,680	333,993	341,775	241,775	(27.6%)
Total	\$ 4,129,199	\$ 3,929,916	\$ 4,667,151	\$ 4,408,140	12.2%
Authorized Positions	30.48	30.93	35.85	35.18	13.7%

Strategic Support Budget Changes

Proposed Changes	Positions	Treatment Plant Appropriations
1. Administrative Staffing	(0.67)	(46,899)
<p>This proposal would delete a vacant Office Specialist II position in the Environmental Services Department's Administrative Division. This position, which had provided general administrative support to the department, has been vacant since May 2009. The four remaining administrative positions in this work group have absorbed the workload, and the deletion is expected to have no impact on operations. (Ongoing savings: \$48,000)</p>		
Performance Results:		
No changes to current service levels are anticipated as a result of this action.		
2. Management Compensation Reduction		(112,112)
<p>This action is a reduction in personnel costs equivalent to 5% of total compensation for Executive Management and Professional Employees (Unit 99). The savings generated from these actions helps address the General Fund shortfall, thereby retaining City services which may otherwise have been eliminated. In the Environmental Services Department, Treatment Plant Operating Fund, savings total \$112,112. (Ongoing savings: \$112,112)</p>		
Performance Results:		
No changes to current service levels are anticipated as a result of this action.		
2010-2011 Proposed Strategic Support Changes Total		(0.67) (159,011)