

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

700 Los Esteros Road  
San Jose, California 95134

**Five-Year 2010-2014**  
**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
Ken Yeager	Boardmember, West Valley Sanitation District
Kevin Moore	Councilmember, City of Santa Clara
Madison Nguyen	Councilmember, City of San Jose
Ed Shikada	Deputy City Manager, City of San Jose

# Water Pollution Control Capital Program

## 2010-2014 Proposed Capital Improvement Program

### Overview

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#### Introduction

The San José/Santa Clara Water Pollution Control Plant (Plant) is a regional wastewater treatment facility serving seven 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, 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 evaluated 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 2010-2014 Proposed CIP provides funding of \$355.1 million, of which \$87.7 million is allocated in 2009-2010.

Revenues for the Five-Year CIP are derived from several sources: Contributions from the City of Santa Clara and Other Agencies (\$86.6 million); transfers from the City of San José Sewer Service and Use Charge Fund

# Water Pollution Control Capital Program

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## 2010-2014 Proposed Capital Improvement Program

### Overview

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#### Sources of Funding (Cont'd.)

(\$210.0 million) and the Sewage Treatment Plant Connection Fee Fund (\$15.4 million); Interest Earnings (\$6.3 million); Calpine Metcalf Energy Center Facilities Repayments (\$1.9 million); and federal grants from the US Bureau of Reclamation (\$0.5 million). In addition, \$34.4 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 to the treatment plant. These contributions reimburse the City for actual project expenditures. In this Proposed CIP, these contributions from the City of Santa Clara and the other agencies total \$86.6 million, which represents a \$17.1 million (24.6%) increase compared to the 2009-2013 Adopted CIP. This increase results from the revised capital investment plan proposed, including additional funding for the Plant Electrical Reliability project, the Plant Infrastructure Improvements project, and the Equipment Replacement Program.

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 reflect a \$55.8 million (36.2%) increase compared to the 2009-2013 Adopted CIP. The increased transfer assumes a 15% rate increase in Sewer Service and Use Charge fees in 2009-2010, as

noticed to the public in May 2007. For the average household, this amounts to an increase of \$48.76 a year, from \$325.08 to \$373.84

An annual transfer of \$3.08 million is anticipated from San José's Sewage Treatment Plant Connection Fee Fund and is programmed as part of the 2010-2014 Proposed CIP.

#### Program Highlights

##### Plant Electrical Reliability Project

This is an \$80 million, multi-phase construction project to enhance the overall safety and reliability of the Plant electrical systems. Several elements of this project have been implemented and construction is underway to add a new switchgear and new cables to create an interim ring buss distribution system. Design is in progress to prepare several more projects for construction to start in late 2009 to replace additional switchgears and motor control centers.

##### Plant Master Plan Project

The Plant recently initiated a Plant Master Planning project and hired a consultant to develop the Plan in 2007. 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 items. Once the future needs have been identified in the Master Plan, City staff will work with the consultant to develop a financing plan.

Four key conditions drive the need for the

# Water Pollution Control Capital Program

## 2010-2014 Proposed Capital Improvement Program

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#### Program Highlights (Cont'd.)

##### Plant Master Plan Project (Cont'd.)

Master Plan: new regulations, community growth, community values, and infrastructure rehabilitation. The goals for the Plant Master Plan to address these conditions will include working to benefit the environment and the economy, while providing for the technical needs of the Plant.

In addition to the existing budget to develop the Master Plan, an additional \$4.2 million has been budgeted over the course of the project to cover public outreach activities and the environmental clearance process (meeting the requirements of the National Environmental Policy Act and the California Environmental Quality Act). The Master Plan is projected to be completed by 2011 with environmental clearance completed in 2012.

The Master Plan will coordinate 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. Public outreach and stakeholder involvement will be a major component of this process.

##### 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 reduce average dry weather effluent flow from the Plant to below the 120 million gallons per day (mgd) flow trigger, or to levels that protect salt marsh habitat for endangered species in the South Bay. The

requirements have been modified with each successive permit, with the most recent permit update scheduled for adoption in 2009. A major component of the SBAP is the South Bay Water Recycling System, which accounts for a significant portion of the effluent diverted from discharge into the Bay. For 2009-2010 and the 2010-2014 CIP, the focus will be on increasing the number of industrial customers by connecting facilities that are adjacent to or near the existing recycled water pipeline. In addition, the collaborative effort with the Santa Clara Valley Water District for future expansion, operation, and maintenance of the system is continuing.

##### Plant Infrastructure Needs Improvements

Approximately \$249 million in capital improvement projects were identified in a 2007 consultant study, as high-priority projects that should be implemented over the subsequent five years to address aging infrastructure. Some of these high priority projects have been included in the 2010-2014 proposed CIP, including the Plant Electrical Reliability project (\$80.3 million), Digester Rehabilitation (\$98.1 million), and Digester Gas Line Replacement project (\$10.3 million). All of these projects are being closely coordinated with the Plant Master Plan project to ensure that they are integrated with other high-priority and long term facility needs.

##### Other Projects

The 2010-2014 Proposed Capital Improvement Program includes other major projects. The following priority projects are required to meet regulatory mandates, ensure process reliability, provide for a safe work environment, or provide process efficiencies or cost savings:

# Water Pollution Control Capital Program

## 2010-2014 Proposed Capital Improvement Program

### Overview

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#### Program Highlights (Cont'd.)

##### Other Projects (Cont'd.)

- Dissolved Air Flotation Pressure Retention Tank and Valves Replacement – \$1.1 million in this CIP;
- Secondary and Nitrification Clarifier Rehabilitation and Upgrade – \$15 million in this CIP, \$35 million total project costs;
- Filtration Action Plan – Valve Replacement - \$7.0 million in this CIP, \$11.0 million total project costs;
- Fire Line Replacement – \$800,000 in this CIP, \$1.2 million total costs;
- Warehousing Facility Additions – \$1.2 million total project costs in this CIP; and
- Headworks Enhancement - \$4.0 million total project costs in this CIP.

##### Reserve for Equipment Replacement

As in prior CIPs, the 2010-2014 Proposed CIP includes a reserve for equipment replacement. The minimum reserve requirement is \$5.0 million. This reserve minimum was established to satisfy three contractual requirements and a Master Agreement guideline:

- 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 needed to maintain 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 \$9.6 million and a reserve of \$5.0 million are included in the 2010-2014 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.

- The Master Agreements for Wastewater Treatment between City of San José, the City of Santa Clara, and Tributary Agencies established a replacement fund for the deposit of 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.

**Water Pollution Control Capital Program**  
**2010-2014 Proposed Capital Improvement Program**

**Overview**

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**Major Changes from the 2009-2013 Adopted CIP**

Major changes from the 2009-2013 Adopted CIP include the following:

- Additional revenue in the amount of \$17.1 million from transfers from City of Santa Clara and Other Agencies for those Agencies' proportionate costs for CIP projects.
- Additional revenue in the amount of \$55.8 million transferred from the Sewer Service and Use Charge Fund for City of San José's CIP project costs.
- New funding for a Headworks Enhancement Project (\$4.0 million), scheduled to begin in 2009-2010, and to be completed in 2010-2011.
- Additional funding of \$12.0 million for Plant Infrastructure Improvements. The 2010-2014 CIP includes funding of \$60.3 million, compared to \$48.3 million in the 2009-2013 CIP. This is an ongoing project.
- Additional funding of \$11.5 million for Digester Rehabilitation. The 2010-2014 CIP includes funding of \$98.1 million, compared to \$86.6 million in the 2009-2013 CIP. Project construction has been deferred from 2008-2009 to 2010-2011

**Operating Budget Impact**

There are no additional maintenance and operating costs associated with the projects in the 2010-2014 Proposed CIP.

SOURCE AND USE OF FUNDS SUMMARY

	Estimate						5-YEAR TOTAL
	2008-2009	Re-Budget	2009-20010	2010-11	2011-12	2012-13	
<b>SOURCE OF FUNDS</b>							
S/SC TREATMENT PLANT CAPITAL FUND(512)							
Beginning Fund Balance	60,058,826		34,434,907	24,143,907	7,339,907	19,607,907	34,434,907
Reserve for Encumbrances	37,371,081						
Interest Income	4,126,000		1,310,000	1,092,000	1,061,000	1,145,000	6,285,000
Contribution from City of Santa Clara & Agencies							
Equipment Replacement	591,000		591,000	591,000	591,000	591,000	2,955,000
WPCP Projects	8,775,000		11,991,000	18,114,000	12,401,000	14,060,000	70,548,000
SRF Loan repayment	1,384,000		1,384,000	1,384,000	1,384,000	1,384,000	6,920,000
2005 Bond Debt Service Repayment	1,215,000		1,234,000	1,233,000	1,229,000	1,227,000	6,151,000
2009 Bond Repayment Contributions	0		0	0	0	0	0
Inter-Fund Transfers:							
SJ-Equip. Replacement from Fd 541	1,072,000		1,072,000	1,072,000	1,072,000	1,072,000	5,360,000
Capital Project Cost from Fund (541)	12,928,000		18,928,000	23,000,000	37,000,000	45,000,000	168,928,000
2009 Bond Deposit from Fund 541	0		7,000,000	0	0	0	7,000,000
Debt Service Payment from Fund (541)	5,161,000		5,747,000	5,744,000	5,727,000	5,720,000	28,662,000
2009 Bond Payment from Fund 541	0		0	0	0	0	0
SRF Loan Repayment from Fund (539)	3,080,000		3,080,000	3,080,000	3,080,000	3,080,000	15,400,000
Miscellaneous Revenue	0		0	0	0	0	0
Gain/Loss on Investments	0		0	0	0	0	0
2006 Bond Sale Proceeds	0		0	0	0	0	0
Calpine MEC Facilities Repayment	389,000		389,000	389,000	389,000	389,000	1,945,000
USBR Grant (SBWRP)	500,000		500,000	0	0	0	500,000
<b>TOTAL SOURCE OF FUNDS</b>	<b>136,650,907</b>	<b>0</b>	<b>87,660,907</b>	<b>79,842,907</b>	<b>71,273,907</b>	<b>93,275,907</b>	<b>355,088,907</b>
<b>USE OF FUNDS</b>							
<b>Water Pollution Control Managed Projects</b>							
Computer & Inst. Improvements	0						
Headworks Redundancy Modifications	0						
Land Acquisition & Improvements	0		250,000	0	0	0	250,000
Technical Services Building	2,000						
Public Art Reserve	521,000		138,000	557,000	377,000	425,000	1,920,000
Headworks Enhancement	0		500,000	3,500,000	0	0	4,000,000
Alternative Disinfection	10,185,000		0	0	0	0	0
Digester Gas Line Replacement	0		0	10,120,000	180,000	0	10,300,000
DAF Pressure Retention Tank & Valves	650,000		0	0	0	1,100,000	1,100,000
ESB Building Rehabilitation	6,000,000		0	0	0	0	0
Filtration Action Plan	0		0	1,000,000	1,000,000	2,500,000	7,000,000
Fire Line Replacement	0		0	200,000	200,000	400,000	800,000
Inactive Lagoons Bio-Solids Removal	0		0	0	0	0	0
M5, Ring Buss & Cable replacement	9,796,000		0	0	0	0	0
Plant Electrical Reliability	5,186,000		20,500,000	20,000,000	9,000,000	6,000,000	60,100,000
SBWR Reservoir Facility	0		6,000,000	0	0	0	6,000,000

SOURCE AND USE OF FUNDS SUMMARY

	Estimate						5-YEAR TOTAL	
	2008-2009	ReBudget	2009-2010	2010-2011	2011-2012	2012-2013		2013-2014
<b>USE OF FUNDS (Cont'd)</b>								
<b>Water Pollution Control Managed Projects (Cont'd)</b>								
Digester Rehabilitation	700,000	0	2,000,000	9,500,000	10,000,000	10,000,000	10,000,000	41,500,000
Sec. & Nitritf. Clarifier Upgrade Project	0	0	1,000,000	2,000,000	4,000,000	4,000,000	4,000,000	15,000,000
Warehousing Facility Additions	0	0	0	130,000	1,100,000	0	0	1,230,000
WPCP Reliability Improvements	1,476,000	0	0	0	0	0	0	0
Plant Reliability Improvements Phase 2	0	0	0	0	0	5,000,000	0	5,000,000
<b>WSP Managed Projects</b>								
ESD MIS Improvements	247,000	0	0	0	0	0	0	0
Lab Information Management System Replaceme	88,000	0	0	0	0	0	0	0
Salt Marsh Restoration	63,000	0	0	0	0	0	0	0
South Bay Water Recycling Program	0	0	0	0	0	0	0	0
Revised SBAP - SBWR Extension	20,783,000	0	389,000	389,000	389,000	389,000	389,000	1,945,000
<b>Recurring Projects</b>	<b>55,697,000</b>	<b>0</b>	<b>30,777,000</b>	<b>47,306,000</b>	<b>26,246,000</b>	<b>29,814,000</b>	<b>21,912,000</b>	<b>156,145,000</b>
<b>Construction Projects Total</b>								
Equipment Replacement	7,031,000	0	2,380,000	2,150,000	1,925,000	1,660,000	1,525,000	9,640,000
Plant Infrastructure Improvements	11,927,000	0	5,738,000	8,840,000	11,800,000	13,110,000	20,770,000	60,258,000
Unanticipated/Critical Repairs	352,000	0	250,000	250,000	250,000	250,000	250,000	1,250,000
<b>Total Construction</b>	<b>74,987,000</b>	<b>0</b>	<b>39,145,000</b>	<b>58,636,000</b>	<b>40,221,000</b>	<b>44,834,000</b>	<b>44,457,000</b>	<b>227,293,000</b>
<b>Non-Construction</b>								
2009 Bond Deposit	7,102,000	0	0	0	0	0	0	25,000
Payment for CWFA Trustee	82,000	0	5,000	5,000	5,000	5,000	5,000	4,800,000
Plant Master Plan (see Reserve Below)	4,828,000	0	2,400,000	2,400,000	0	0	0	4,800,000
SRF Loan Repayment (Aprpn 6590)	4,464,000	0	4,464,000	4,464,000	4,464,000	4,464,000	4,464,000	22,330,000
Transfer to CWFA Debt Service Fund	10,723,000	0	6,981,000	6,977,000	6,956,000	6,947,000	6,952,000	34,813,000
Transfer to CWFA Debt Service Fund	0	0	0	0	0	0	0	0
City Hall Debt Service	18,000	0	12,000	13,000	14,000	11,000	12,000	62,000
PW Capital Management Costs	12,000	0	5,000	8,000	6,000	6,000	6,000	31,000
Reserve for Plant Master Plan	0	0	0	0	0	5,000,000	5,000,000	10,000,000
Reserve for Equipment Replacement	0	0	5,000,000	0	0	0	0	5,000,000
Reserve for Electrical Reliability	0	0	5,305,000	0	0	0	0	5,305,000
Reserve for Rate Studies	0	0	200,000	0	0	0	0	200,000
<b>Total Non-Construction</b>	<b>27,229,000</b>	<b>0</b>	<b>24,372,000</b>	<b>13,867,000</b>	<b>11,445,000</b>	<b>16,453,000</b>	<b>16,439,000</b>	<b>82,556,000</b>
<b>Total Expenditures</b>	<b>102,216,000</b>	<b>0</b>	<b>63,517,000</b>	<b>72,503,000</b>	<b>51,666,000</b>	<b>61,267,000</b>	<b>60,896,000</b>	<b>309,849,000</b>
Ending Fund Balance	34,434,907	0	24,143,907	7,339,907	19,607,907	32,008,907	45,239,907	45,239,907
<b>TOTAL USE OF FUNDS</b>	<b>136,650,907</b>	<b>0</b>	<b>87,660,907</b>	<b>79,842,907</b>	<b>71,273,907</b>	<b>93,275,907</b>	<b>106,135,907</b>	<b>355,088,907</b>



**Water Pollution Control**  
**2010-2014 Proposed Capital Improvement Program**  
**Detail of Capital Projects**

**1. Public Art**

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

**Description:** This allocation funds the construction and administration of public art in the Water Pollution Control Plant 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	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Public Art		521	521	138	557	377	425	423	1,920		
<b>TOTAL</b>		<b>521</b>	<b>521</b>	<b>138</b>	<b>557</b>	<b>377</b>	<b>425</b>	<b>423</b>	<b>1,920</b>		

**FUNDING SOURCE SCHEDULE (000'S)**

San José-Santa Clara Treatment Plant Capital Fund	521	521	138	557	377	425	423	1,920
<b>TOTAL</b>	<b>521</b>	<b>521</b>	<b>138</b>	<b>557</b>	<b>377</b>	<b>425</b>	<b>423</b>	<b>1,920</b>

**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.

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

**Water Pollution Control**  
**2010-2014 Proposed Capital Improvement Program**  
**Detail of Capital Projects**

**2. 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:** 4th Qtr. 2018  
**Location:** Water Pollution Control Plant

**Description:** This project will include structural rehabilitation to address cracks in the existing concrete digestion tanks. This project will also include mechanical rehabilitation and/ or replacement to restore digester performance and facilitate the addition of a fats, oils, and grease receiving station for digesting grease.

**Justification:** Five out of 16 concrete digesters are currently non-operational due to structural damage and lack of adequate mixing capability. This project will maintain the integrity of the digesters, ensure reliability of the digestion facility, and allow for the digestion of scum and grease.

**EXPENDITURE SCHEDULE (000'S)**

Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Design				2,000					2,000		2,000
Construction					9,500	10,000	10,000	10,000	39,500	55,900	95,400
Master Plan/Study		700	700								700
<b>TOTAL</b>		<b>700</b>	<b>700</b>	<b>2,000</b>	<b>9,500</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>	<b>41,500</b>	<b>55,900</b>	<b>98,100</b>

**FUNDING SOURCE SCHEDULE (000'S)**

San José-Santa Clara Treatment Plant Capital Fund	700	700	2,000	9,500	10,000	10,000	10,000	41,500	55,900	98,100
<b>TOTAL</b>	<b>700</b>	<b>700</b>	<b>2,000</b>	<b>9,500</b>	<b>10,000</b>	<b>10,000</b>	<b>10,000</b>	<b>41,500</b>	<b>55,900</b>	<b>98,100</b>

**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.

**Notes:**

Replaces a formerly ongoing allocation titled "Scum Digestion".

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

**Water Pollution Control**  
**2010-2014 Proposed Capital Improvement Program**  
**Detail of Capital Projects**

**3. Headworks Enhancement**

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

**Description:** The new headworks was 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 with the old headworks 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	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Design				330					330		330
Bid & Award				10					10		10
Construction				160	3,500				3,660		3,660
<b>TOTAL</b>				<b>500</b>	<b>3,500</b>				<b>4,000</b>		<b>4,000</b>

FUNDING SOURCE SCHEDULE (000'S)											
Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
San José-Santa Clara Treatment Plant Capital Fund				500	3,500				4,000		4,000
<b>TOTAL</b>				<b>500</b>	<b>3,500</b>				<b>4,000</b>		<b>4,000</b>

ANNUAL OPERATING BUDGET IMPACT (000'S)										
None										

**Major Changes in Project Cost:**

None

**Notes:**

Funding for this project has been front-loaded; unused funding will be rebudgeted until the project is completed.

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

**Water Pollution Control**  
**2010-2014 Proposed Capital Improvement Program**  
**Detail of Capital Projects**

**4. Land Management & Improvements**

**CSA:** Environmental and Utility Services **Initial Start Date:** 2nd Qtr. 1997  
**CSA Outcome:** Healthy Streams, Rivers, Marsh and Bay **Revised Start Date:**  
**Department:** Environmental Services **Initial Completion Date:** 1st Qtr. 2007  
**Council District:** 4 **Revised Completion Date:** 2nd Qtr. 2010  
**Location:** Water Pollution Control Plant

**Description:** This project provides resources for the environmental planning and review of technical issues related to the development and evaluation of possible alternative uses of salt pond A-18 and the San José/Santa Clara Water Pollution Control Plant buffer lands.

**Justification:** The department purchased salt pond A-18 in 2003. As the owner of pond A-18, the City will be required to plan for future uses of A-18. In addition, the City is also in negotiations with the State Water Resources Control Board for the management and restoration of the Moseley tract.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Property & Land	20,318			250					250		20,568
<b>TOTAL</b>	<b>20,318</b>			<b>250</b>					<b>250</b>		<b>20,568</b>

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund	20,318			250					250		20,568
<b>TOTAL</b>	<b>20,318</b>			<b>250</b>					<b>250</b>		<b>20,568</b>

**ANNUAL OPERATING BUDGET IMPACT (000'S)**

None

**Major Changes in Project Cost:**

1999-2003 CIP - increase of \$15 million to address scope changes.  
 2005-2009 CIP - increase of \$500,000 for alternative use analysis, property management, and development of salt pond A18.  
 2007-2011 CIP - decrease of \$5 million to address scope changes.

**Notes:**

Funding for the restoration of the Moseley land tract, formerly funded in the Salt Marsh Restoration appropriation, is now programmed in this Land Management and Improvements category. This project was previously titled "Land Acquisitions and Improvements."

<b>FY Initiated:</b>	1996-1997	<b>Redevelopment Area:</b>	N/A
<b>Initial Project Budget:</b>	\$10,100,000	<b>SNI Area:</b>	N/A
<b>Appn. #:</b>	6147	<b>USGBC LEED:</b>	N/A

**Water Pollution Control**  
**2010-2014 Proposed Capital Improvement Program**  
**Detail of Capital Projects**

**5. Plant Electrical Reliability**

**CSA:** Environmental and Utility Services **Initial Start Date:** 3rd Qtr. 2003  
**CSA Outcome:** Reliable Utility Infrastructure **Revised Start Date:** 3rd Qtr. 2008  
**Department:** Environmental Services **Initial Completion Date:** 2nd Qtr. 2015  
**Council District:** 4 **Revised Completion Date:**  
**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.

<b>EXPENDITURE SCHEDULE (000'S)</b>											
Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Design	9	5,186	5,186								5,195
Construction				20,500	20,000	9,000	6,000	4,600	60,100	15,000	75,100
<b>TOTAL</b>	<b>9</b>	<b>5,186</b>	<b>5,186</b>	<b>20,500</b>	<b>20,000</b>	<b>9,000</b>	<b>6,000</b>	<b>4,600</b>	<b>60,100</b>	<b>15,000</b>	<b>80,295</b>
<b>FUNDING SOURCE SCHEDULE (000'S)</b>											
San José-Santa Clara Treatment Plant Capital Fund	9	5,186	5,186	20,500	20,000	9,000	6,000	4,600	60,100	15,000	80,295
<b>TOTAL</b>	<b>9</b>	<b>5,186</b>	<b>5,186</b>	<b>20,500</b>	<b>20,000</b>	<b>9,000</b>	<b>6,000</b>	<b>4,600</b>	<b>60,100</b>	<b>15,000</b>	<b>80,295</b>
<b>ANNUAL OPERATING BUDGET IMPACT (000'S)</b>											
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.

**Notes:**

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

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

**Water Pollution Control**  
**2010-2014 Proposed Capital Improvement Program**  
**Detail of Capital Projects**

**6. SBWR Reservoir Facility**

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b>	3rd Qtr. 2008
<b>CSA Outcome:</b>	Reliable Utility Infrastructure	<b>Revised Start Date:</b>	3rd Qtr. 2009
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b>	2nd Qtr. 2010
<b>Council District:</b>	4	<b>Revised Completion Date:</b>	
<b>Location:</b>	Water Pollution Control Plant		

**Description:** The South Bay Advanced Recycled Water Treatment facility project is a jointly funded project with the Santa Clara Valley Water District (SCVWD) and includes construction of all facilities necessary to produce 8 million gallons of high-purity, recycled water that will be blended with the existing recycled water supply. The project includes 10 million gallons per day (MGD) of microfiltration (MF) capacity, 8 MGD of Reverse Osmosis (RO) capacity, and 10 MGD of Ultra Violet (UV) disinfection capacity. The project will also include all site work, structural, architectural, geotechnical, building mechanical, pumping, piping, controls and instrumentation, chemical storage and delivery systems, product storage tanks, and electrical improvements necessary to provide a fully functioning system.

**Justification:** Construction of the facility will improve the reliability for the production of recycled water, and improve the recycled water quality to the level established by the SCVWD.

**EXPENDITURE SCHEDULE (000'S)**

Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Construction		6,000		6,000					6,000		6,000
<b>TOTAL</b>		<b>6,000</b>		<b>6,000</b>					<b>6,000</b>		<b>6,000</b>

**FUNDING SOURCE SCHEDULE (000'S)**

San José-Santa Clara Treatment Plant Capital Fund	6,000	6,000	6,000	6,000
<b>TOTAL</b>	<b>6,000</b>	<b>6,000</b>	<b>6,000</b>	<b>6,000</b>

**ANNUAL OPERATING BUDGET IMPACT (000'S)**

None

**Major Changes In Project Cost:**

None

**Notes:**

This project is also referred to as "South Bay Water Recycling Water Storage Facility". Funding for this project has been front-loaded; unused funding will be rebudgeted until this project is completed.

<b>FY Initiated:</b>	2007-2008	<b>Redevelopment Area:</b>	N/A
<b>Initial Project Budget:</b>	\$6,000,000	<b>SNI Area:</b>	N/A
<b>Appn. #:</b>	6508	<b>USGBC LEED:</b>	N/A

**Water Pollution Control**  
**2010-2014 Proposed Capital Improvement Program**  
**Detail of Capital Projects**

**7. Secondary and Nitrification Clarifier Rehabilitation**

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. 2018  
 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 over weirs 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.

<b>EXPENDITURE SCHEDULE (000'S)</b>											
Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Design				1,000					1,000		1,000
Construction					2,000	4,000	4,000	4,000	14,000	20,000	34,000
<b>TOTAL</b>				<b>1,000</b>	<b>2,000</b>	<b>4,000</b>	<b>4,000</b>	<b>4,000</b>	<b>15,000</b>	<b>20,000</b>	<b>35,000</b>

<b>FUNDING SOURCE SCHEDULE (000'S)</b>											
San José-Santa Clara Treatment Plant Capital Fund				1,000	2,000	4,000	4,000	4,000	15,000	20,000	35,000
<b>TOTAL</b>				<b>1,000</b>	<b>2,000</b>	<b>4,000</b>	<b>4,000</b>	<b>4,000</b>	<b>15,000</b>	<b>20,000</b>	<b>35,000</b>

<b>ANNUAL OPERATING BUDGET IMPACT (000'S)</b>										
None										

**Major Changes in Project Cost:**

None

**Notes:**

FY Initiated: 2009-2010 Redevelopment Area: N/A  
 Initial Project Budget: \$35,000,000 SNI Area: N/A  
 Appn. #: USGBC LEED: N/A

**Water Pollution Control**  
**2010-2014 Proposed Capital Improvement Program**  
**Detail of Capital Projects**

**8. Revised South Bay Action Plan - SBWR Extension**

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b>	Ongoing
<b>CSA Outcome:</b>	Healthy Streams, Rivers, Marsh and Bay	<b>Revised Start Date:</b>	
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b>	Ongoing
<b>Council District:</b>	4	<b>Revised Completion Date:</b>	
<b>Location:</b>	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. 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	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Development Property & Land Design Construction		20,783	20,783	389	389	389	389	389	1,945		
<b>TOTAL</b>		<b>20,783</b>	<b>20,783</b>	<b>389</b>	<b>389</b>	<b>389</b>	<b>389</b>	<b>389</b>	<b>1,945</b>		

**FUNDING SOURCE SCHEDULE (000'S)**

San José-Santa Clara Treatment Plant Capital Fund	20,783	20,783	389	389	389	389	389	1,945
<b>TOTAL</b>	<b>20,783</b>	<b>20,783</b>	<b>389</b>	<b>389</b>	<b>389</b>	<b>389</b>	<b>389</b>	<b>1,945</b>

**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.

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



**Water Pollution Control**  
**2010-2014 Proposed Capital Improvement Program**  
**Detail of Capital Projects**

**9. Equipment Replacement**

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

**Description:** This allocation provides for the replacement and rehabilitation of Water Pollution Control Plant (WPCP) equipment. Equipment anticipated to be replaced or rehabilitated within the five-year horizon 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	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Equipment		7,031	7,031	2,380	2,150	1,925	1,660	1,525	9,640		
<b>TOTAL</b>		<b>7,031</b>	<b>7,031</b>	<b>2,380</b>	<b>2,150</b>	<b>1,925</b>	<b>1,660</b>	<b>1,525</b>	<b>9,640</b>		

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund		7,031	7,031	2,380	2,150	1,925	1,660	1,525	9,640		
<b>TOTAL</b>		<b>7,031</b>	<b>7,031</b>	<b>2,380</b>	<b>2,150</b>	<b>1,925</b>	<b>1,660</b>	<b>1,525</b>	<b>9,640</b>		

**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.

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

**Water Pollution Control**  
**2010-2014 Proposed Capital Improvement Program**  
**Detail of Capital Projects**

**10. 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	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Construction		11,927	11,927	5,738	8,840	11,800	13,110	20,770	60,258		
<b>TOTAL</b>		<b>11,927</b>	<b>11,927</b>	<b>5,738</b>	<b>8,840</b>	<b>11,800</b>	<b>13,110</b>	<b>20,770</b>	<b>60,258</b>		

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund		11,927	11,927	5,738	8,840	11,800	13,110	20,770	60,258		
<b>TOTAL</b>		<b>11,927</b>	<b>11,927</b>	<b>5,738</b>	<b>8,840</b>	<b>11,800</b>	<b>13,110</b>	<b>20,770</b>	<b>60,258</b>		

**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.

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

**Water Pollution Control**  
**2010-2014 Proposed Capital Improvement Program**  
**Detail of Capital Projects**

**11. 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	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Construction		332	332	250	250	250	250	250	1,250		
<b>TOTAL</b>		<b>332</b>	<b>332</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>1,250</b>		
FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund		332	332	250	250	250	250	250	1,250		
<b>TOTAL</b>		<b>332</b>	<b>332</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>1,250</b>		
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**  
**2010-2014 Proposed Capital Improvement Program**  
**Detail of Capital Projects**

**12. Payment for Clean Water Financing Authority Trustee**

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 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.

Justification: Services from the Clean Water Financing Authority are necessary to administer financing issued for the Plant.

**EXPENDITURE SCHEDULE (000'S)**

Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Program Management		82	82	5	5	5	5	5	25		
<b>TOTAL</b>		<b>82</b>	<b>82</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>25</b>		

**FUNDING SOURCE SCHEDULE (000'S)**

San José-Santa Clara Treatment Plant Capital Fund		82	82	5	5	5	5	5	25		
<b>TOTAL</b>		<b>82</b>	<b>82</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>5</b>	<b>25</b>		

**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. #: 6584 USGBC LEED: N/A

**Water Pollution Control**  
**2010-2014 Proposed Capital Improvement Program**  
**Detail of Capital Projects**

**13. Plant Master Plan**

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b>	3rd Qtr. 2006
<b>CSA Outcome:</b>	Healthy Streams, Rivers, Marsh and Bay	<b>Revised Start Date:</b>	3rd Qtr. 2007
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b>	2nd Qtr. 2008
<b>Council District:</b>	4	<b>Revised Completion Date:</b>	1st Qtr. 2011
<b>Location:</b>	Water Pollution Control Plant		

**Description:** This Plant Master Plan (PMP) would 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.

**Justification:** Since the Plant is over 50 years old, major infrastructure upgrades are needed in the short- and long-term. A single Plant Master Plan will ensure the continuity and integration of major Plant facilities planning, construction, and operation for the next 30 years with a common set of goals and objectives to meet public health, regulatory, and community objectives.

**EXPENDITURE SCHEDULE (000'S)**

Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Master Plan/Study	572	4,828	4,828	2,400	2,400				4,800		10,200
<b>TOTAL</b>	<b>572</b>	<b>4,828</b>	<b>4,828</b>	<b>2,400</b>	<b>2,400</b>				<b>4,800</b>		<b>10,200</b>

**FUNDING SOURCE SCHEDULE (000'S)**

San José-Santa Clara Treatment Plant Capital Fund	572	4,828	4,828	2,400	2,400				4,800		10,200
<b>TOTAL</b>	<b>572</b>	<b>4,828</b>	<b>4,828</b>	<b>2,400</b>	<b>2,400</b>				<b>4,800</b>		<b>10,200</b>

**ANNUAL OPERATING BUDGET IMPACT (000'S)**

None

**Major Changes in Project Cost:**

2008-2012 CIP - increase of \$5 million due to the changed project scope to cover all of the Plant's process, operations, and land uses.

2009-2013 CIP - increase of \$4.2 million due to the changed project scope to cover outreach and environmental regulation clearance.

**Notes:**

Replaces the formerly titled "Bio-solids Master Plan".

<b>FY Initiated:</b>	2006-2007	<b>Redevelopment Area:</b>	N/A
<b>Initial Project Budget:</b>	\$1,000,000	<b>SNI Area:</b>	N/A
<b>Appn. #:</b>	4120	<b>USGBC LEED:</b>	N/A

**Water Pollution Control**  
**2010-2014 Proposed Capital Improvement Program**  
**Detail of Capital Projects**

**14. Public Works Capital Management Costs**

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b>	Ongoing
<b>CSA Outcome:</b>	Reliable Utility Infrastructure	<b>Revised Start Date:</b>	
<b>Department:</b>	Public Works	<b>Initial Completion Date:</b>	Ongoing
<b>Council District:</b>	4	<b>Revised Completion Date:</b>	
<b>Location:</b>	N/A		

**Description:** This allocation funds the fair share of Public Works Department administrative and management costs necessary to ensure the delivery of capital projects.

**Justification:** This allocation is required to recover the actual administrative and management costs incurred when delivering capital projects.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Program Management		12	12	5	8	6	6	6	31		
TOTAL		12	12	5	8	6	6	6	31		
FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund		12	12	5	8	6	6	6	31		
TOTAL		12	12	5	8	6	6	6	31		
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.

<b>FY Initiated:</b>	Ongoing	<b>Redevelopment Area:</b>	N/A
<b>Initial Project Budget:</b>		<b>SNI Area:</b>	N/A
<b>Appn. #:</b>	6000	<b>USGBC LEED:</b>	N/A

**Water Pollution Control**  
**2010-2014 Proposed Capital Improvement Program**  
**Detail of Capital Projects**

**15. State Revolving Fund Loan Repayment**

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b> 3rd Qtr. 1998
<b>CSA Outcome:</b>	Healthy Streams, Rivers, Marsh and Bay	<b>Revised Start Date:</b>
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b> 2nd Qtr. 2019
<b>Council District:</b>	4	<b>Revised Completion Date:</b>
<b>Location:</b>	N/A	

**Description:** This allocation provides for the repayment of low interest State loans awarded for South Bay Water Recycling projects.

**Justification:** This is a contractual obligation. The loans will be repaid over a 20-year period.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	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
<b>TOTAL</b>	<b>41,348</b>	<b>4,464</b>	<b>4,464</b>	<b>4,464</b>	<b>4,464</b>	<b>4,464</b>	<b>4,464</b>	<b>4,464</b>	<b>22,320</b>	<b>22,320</b>	<b>90,452</b>
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
<b>TOTAL</b>	<b>41,348</b>	<b>4,464</b>	<b>4,464</b>	<b>4,464</b>	<b>4,464</b>	<b>4,464</b>	<b>4,464</b>	<b>4,464</b>	<b>22,320</b>	<b>22,320</b>	<b>90,452</b>
ANNUAL OPERATING BUDGET IMPACT (000'S)											
None											

**Major Changes in Project Cost:**

None

**Notes:**

<b>FY Initiated:</b>	1998-1999	<b>Redevelopment Area:</b>	N/A
<b>Initial Project Budget:</b>	\$87,533,000	<b>SNI Area:</b>	N/A
<b>Appn. #:</b>	6590	<b>USGBC LEED:</b>	N/A

**Water Pollution Control**  
**2010-2014 Proposed Capital Improvement Program**  
**Detail of Capital Projects**

**16. Transfer to Clean Water Financing Authority Debt Service Payment Fund**

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b> 2nd Qtr. 1996
<b>CSA Outcome:</b>	Healthy Streams, Rivers, Marsh and Bay	<b>Revised Start Date:</b>
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b> 4th Qtr. 2020
<b>Council District:</b>	4	<b>Revised Completion Date:</b>
<b>Location:</b>	N/A	

**Description:** This funding provides for the transfer of funds for the payment of the 1995 Series A and B Revenue Bonds to the Clean Water Financing Authority Debt Service Payment Funds.

**Justification:** Repayment of bonds is a requirement of the bonding agreement.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Debt Service	14,881	10,723	10,723	6,981	6,977	6,956	6,947	6,952	34,813	37,131	97,548
<b>TOTAL</b>	<b>14,881</b>	<b>10,723</b>	<b>10,723</b>	<b>6,981</b>	<b>6,977</b>	<b>6,956</b>	<b>6,947</b>	<b>6,952</b>	<b>34,813</b>	<b>37,131</b>	<b>97,548</b>

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund	14,881	10,723	10,723	6,981	6,977	6,956	6,947	6,952	34,813	37,131	97,548
<b>TOTAL</b>	<b>14,881</b>	<b>10,723</b>	<b>10,723</b>	<b>6,981</b>	<b>6,977</b>	<b>6,956</b>	<b>6,947</b>	<b>6,952</b>	<b>34,813</b>	<b>37,131</b>	<b>97,548</b>

**ANNUAL OPERATING BUDGET IMPACT (000'S)**

None

**Major Changes In Project Cost:**

2007-2011 CIP - Increase of \$73 million. This reflects a number of actions: 1) Beginning 2006-2007, the San José portion of the debt service payment of \$5.5 million annually will be included in this fund. This was previously reflected in the Sewer and Service Use Charge Fund. 2) Bond A was refinanced on 11/15/2005 and Bond B was refinanced on 12/07/2005. These refinancings resulted in a savings of \$24,325,971. 3) Beginning in 2008-2009, the amount includes a forecast of additional bond debt of \$50 million for the Electrical Reliability Project.

2008-2012 CIP - Decrease of \$25 million to reflect the dropping of the \$50 million bond for the Plant Electrical Reliability Project.

2010-2014 CIP - Increase of \$12.6 million due to an inadvertent error in prior budgets, which omitted the portion of the Debt Service paid for by the Tributary Agencies from the totals displayed in the CIP.

**Notes:**

<b>FY Initiated:</b>	2001-2002	<b>Redevelopment Area:</b>	N/A
<b>Initial Project Budget:</b>	\$34,851,000	<b>SNI Area:</b>	N/A
<b>Appn. #:</b>	0005	<b>USGBC LEED:</b>	N/A



**Water Pollution Control**  
**2010-2014 Proposed Capital Improvement Program**  
**Detail of Capital Projects**

**17. Reserve for Electrical Reliability Improvements Project**

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b>	N/A
<b>CSA Outcome:</b>	Reliable Utility Infrastructure	<b>Revised Start Date:</b>	
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b>	N/A
<b>Council District:</b>	4	<b>Revised Completion Date:</b>	
<b>Location:</b>	Water Pollution Control Plant		

**Description:** This reserve will set aside funding for the Plant's Electrical Reliability Improvements project.

**Justification:** To ensure the timely delivery of funding at the lowest possible cost, ending fund balance needs to be reserved for this priority project.

**EXPENDITURE SCHEDULE (000'S)**

Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Reserve		5,305		5,305					5,305		5,305
<b>TOTAL</b>		<b>5,305</b>		<b>5,305</b>					<b>5,305</b>		<b>5,305</b>

**FUNDING SOURCE SCHEDULE (000'S)**

San José-Santa Clara Treatment Plant Capital Fund		5,305		5,305					5,305		5,305
<b>TOTAL</b>		<b>5,305</b>		<b>5,305</b>					<b>5,305</b>		<b>5,305</b>

**ANNUAL OPERATING BUDGET IMPACT (000'S)**

None

**Major Changes in Project Cost:**

None

**Notes:**

<b>FY Initiated:</b>	2008-2009	<b>Redevelopment Area:</b>	N/A
<b>Initial Project Budget:</b>		<b>SNI Area:</b>	N/A
<b>Appn. #:</b>	8226	<b>USGBC LEED:</b>	N/A

**Water Pollution Control**  
**2010-2014 Proposed Capital Improvement Program**  
**Detail of Capital Projects**

**18. Reserve for Equipment Replacement**

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b>	N/A
<b>CSA Outcome:</b>	Reliable Utility Infrastructure	<b>Revised Start Date:</b>	
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b>	N/A
<b>Council District:</b>	4	<b>Revised Completion Date:</b>	
<b>Location:</b>	Water Pollution Control Plant		

**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 Plant. Reserved funds are available to pay for unforeseen extraordinary costs to the extent that there are no other funds budgeted for such purposes.

**Justification:** Provisions of the Improvement Agreement between the San José/Santa Clara Clean Water Financing Authority and bondholders, as well as the adopted Master Agreements for Wastewater Treatment with the various tributary agencies, require that replacement funds be segregated.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Reserve		5,000		5,000					5,000		5,000
<b>TOTAL</b>		<b>5,000</b>		<b>5,000</b>					<b>5,000</b>		<b>5,000</b>

FUNDING SOURCE SCHEDULE (000'S)										
Funding Source	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
San José-Santa Clara Treatment Plant Capital Fund	5,000		5,000					5,000		5,000
<b>TOTAL</b>	<b>5,000</b>		<b>5,000</b>					<b>5,000</b>		<b>5,000</b>

**ANNUAL OPERATING BUDGET IMPACT (000'S)**

None

**Major Changes in Project Cost:**

None

**Notes:**

Unexpended funds are rebudgeted each year.

<b>FY Initiated:</b>	1982-1983	<b>Redevelopment Area:</b>	N/A
<b>Initial Project Budget:</b>		<b>SNI Area:</b>	N/A
<b>Appn. #:</b>	8908	<b>USGBC LEED:</b>	N/A

**Water Pollution Control**  
**2010-2014 Proposed Capital Improvement Program**  
**Detail of Capital Projects**

**19. Reserve for Rate Studies**

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b>	N/A
<b>CSA Outcome:</b>	Reliable Utility Infrastructure	<b>Revised Start Date:</b>	
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b>	N/A
<b>Council District:</b>	4	<b>Revised Completion Date:</b>	
<b>Location:</b>	Water Pollution Control Plant		

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

**Justification:** Future uncertainty requires that provisions be made to ensure the continual operation of the facility. As a result, future costs and revenues must be controlled and managed. Rate studies are needed periodically to assess the industry norms and anticipate future changes whenever possible.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Reserve		200		200					200		200
<b>TOTAL</b>		<b>200</b>		<b>200</b>					<b>200</b>		<b>200</b>

FUNDING SOURCE SCHEDULE (000'S)						
Funding Source	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	5-Year Total	Project Total
San José-Santa Clara Treatment Plant Capital Fund	200		200		200	200
<b>TOTAL</b>	<b>200</b>		<b>200</b>		<b>200</b>	<b>200</b>

ANNUAL OPERATING BUDGET IMPACT (000'S)	
None	

**Major Changes in Project Cost:**

None

**Notes:**

<b>FY Initiated:</b>	2003-2004	<b>Redevelopment Area:</b>	N/A
<b>Initial Project Budget:</b>		<b>SNI Area:</b>	N/A
<b>Appn. #:</b>	4674	<b>USGBC LEED:</b>	N/A

# Water Pollution Control

## 2010-2014 Proposed Capital Improvement Program

### Summary of Projects that Start after 2009-2010

---

**Project Name:** Digester Gas Line Replacement  
**5-Year CIP Budget:** \$10,300,000  
**Total Budget:** \$10,300,000  
**USGBC LEED** N/A

**Council District:** 4  
**Estimated Start Date:** 3rd Qtr. 2009  
**Estimated End Date:** 4th Qtr. 2011

**Description:** This project adds digester gas lines to replace the existing main digester gas lines that are leaking at the pipe joints. This project was originally scheduled to begin in 2007-2008, but has been delayed in order to allow time for a pre-design study to explore the suitability of digesting alternate feedstock, including fats, oil and grease, and organic wastes.

---

**Project Name:** Dissolved Air Flotation Pressure Retention Tank & Valves  
**5-Year CIP Budget:** \$1,100,000  
**Total Budget:** \$2,716,866  
**USGBC LEED** N/A

**Council District:** 4  
**Estimated Start Date:** 2nd Qtr. 2005  
**Estimated End Date:** 4th Qtr. 2016

**Description:** This project will replace 15 of the 16 pressurized tanks and their valves located in the sludge processing area. Four tanks will be replaced every two years.

---

**Project Name:** Filtration Action Plan - Valve Replacement  
**5-Year CIP Budget:** \$7,000,000  
**Total Budget:** \$11,000,000  
**USGBC LEED** N/A

**Council District:** 4  
**Estimated Start Date:** 3rd Qtr. 2010  
**Estimated End Date:** 4th Qtr. 2013

**Description:** This project will involve replacing leaking valves in the filtration building. There are a total of 108 valves, including backwash, isolation, drain, influent, and surface wash valves.

---

**Project Name:** Fire Line Replacement  
**5-Year CIP Budget:** \$800,000  
**Total Budget:** \$1,150,000  
**USGBC LEED** N/A

**Council District:** 4  
**Estimated Start Date:** 3rd Qtr. 2007  
**Estimated End Date:** 2nd Qtr. 2012

**Description:** This project will replace a total of 14,400 ft. of ductile iron pipe, 34 fire hydrants, 34 gate valves, and will add additional isolation valves that are not currently in the system.

---

**Project Name:** Reserve for Plant Master Plan Improvements  
**5-Year CIP Budget:** \$10,000,000  
**Total Budget:** \$90,000,000  
**USGBC LEED** N/A

**Council District:** 4  
**Estimated Start Date:** N/A  
**Estimated End Date:** N/A

**Description:** This reserve sets aside future funding for the Plant Master Plan and Improvements project.

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## Water Pollution Control

### 2010-2014 Proposed Capital Improvement Program

#### **Summary of Projects that Start after 2009-2010**

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<b>Project Name:</b> WPCP Reliability Improvements Phase II	<b>Council District:</b> 4
<b>5-Year CIP Budget:</b> \$5,000,000	<b>Estimated Start Date:</b> 3rd Qtr. 2012
<b>Total Budget:</b> \$35,000,000	<b>Estimated End Date:</b> 4th Qtr. 2017
<b>USGBC LEED:</b> N/A	

**Description:** This project will include the rehabilitation of the existing older headworks, including coating of concrete, and rehabilitation or replacement of existing pre-treatment equipment. This project will maintain the integrity and ensure the reliability of the existing system.

---

<b>Project Name:</b> Warehousing Facility Additions	<b>Council District:</b> 4
<b>5-Year CIP Budget:</b> \$1,230,000	<b>Estimated Start Date:</b> 3rd Qtr. 2010
<b>Total Budget:</b> \$1,230,000	<b>Estimated End Date:</b> 2nd Qtr. 2012
<b>USGBC LEED:</b> N/A	

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

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**PROPOSED**

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

700 Los Esteros Road  
San Jose, California 95134

**2009 – 2010**

**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

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**TO: TREATMENT PLANT ADVISORY  
COMMITTEE**

**FROM: John Stufflebean**

**SUBJECT: 2009-2010 PROPOSED  
OPERATING BUDGET**

**DATE: May 6, 2009**

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This memorandum serves to transmit the 2008-09 Proposed Budget for the Environmental Services Department and the Treatment Plant Operating Fund.

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

**2009-2010**

**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 08-09	Proposed 09-10	Change
Treatment Plant Operating Fund Budget	76,606,895	78,240,062	2.1%
ESD Authorized Positions	354.02	363.27	2.6%

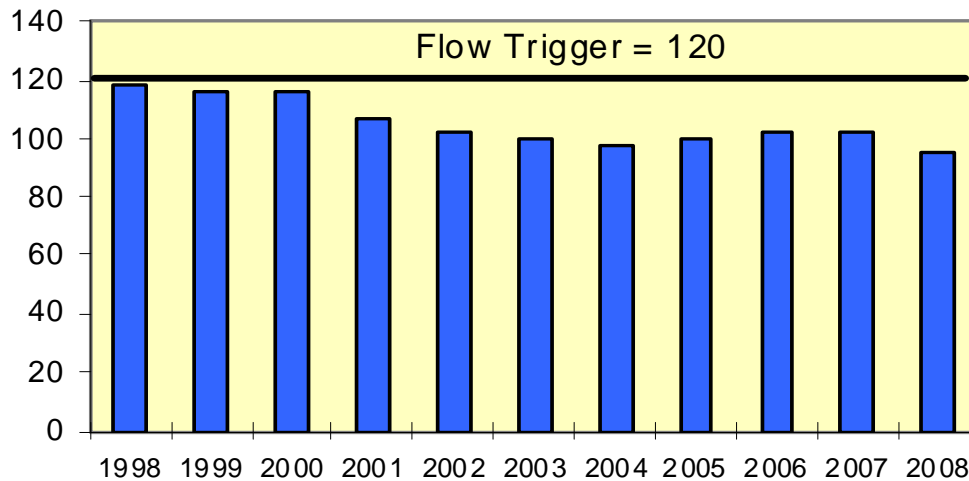
**BUDGET HIGHLIGHTS 2009-2010**

A rate increase of 15% to San Jose's Sewer Service and Use Charge Fund is proposed in order to adequately fund maintenance and rehabilitation of the sanitary sewer system, Water Pollution Control Plant, and the South Bay Water Recycling program.

A total of 2.45 additional positions are proposed to address: additional laboratory staff, recycled water personnel, and staffing adjustments within the MIS group.



**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**

<b>Fund Budget Summary</b>	2007-08 Actual Expenses	2008-09 Adopted Budget	2009-10 Forecast Budget	2009-10 Proposed Budget
<b>Operating Expenses</b>				
Personal Services	35,198,495	40,336,080	40,947,090	41,279,415
Non-personal Expenses	25,371,177	26,484,898	23,980,844	26,395,304
Inventory	330,338	400,000	400,000	400,000
Overhead	5,796,917	4,112,675	4,236,055	7,116,770
NCH Debt Service	768,768	793,067	625,450	625,450
GASB (43/45)	99,998	95,271	0	0
Workers' Compensation	774,131	682,500	696,150	696,150
City Services	702,883	709,938	641,973	641,973
<b>Total Operating Expenses</b>	<b>69,042,707</b>	<b>73,614,429</b>	<b>71,527,562</b>	<b>77,155,062</b>
<b>Other Expenses</b>				
Equipment	1,337,703	1,303,000	825,000	1,085,000
Contingency	0	1,700,000	1,700,000	0
<b>TOTAL EXPENSES</b>	<b>\$70,380,410</b>	<b>\$76,617,429</b>	<b>\$74,052,562</b>	<b>\$78,240,062</b>

**ESTIMATED COST DISTRIBUTION**

2009-10 Estimated Total Gallons Treated (MG)	(1) Percent of Total Sewage Treated	City / District	2009-10 Projected
25,636.450	64.854	City of San Jose (3)	\$50,741,809
5,533.263	13.111	City of Santa Clara	10,258,055
<b>31,169.713</b>	<b>77.965</b>	<b>Sub-Total</b>	<b>\$60,999,864</b>
3,380.276	8.628	West Valley Sanitation District	6,750,553
1,982.380	5.199	Cupertino Sanitary District	4,067,701
2,590.814	6.460	City of Milpitas	5,054,308
524.287	1.386	Sanitation District # 2 - 3	1,084,407
114.057	0.295	Burbank Sanitary District	230,808
26.158	0.067	Sunol Sanitary District (2)	52,421
<b>8,617.972</b>	<b>22.035</b>	<b>Sub-Total</b>	<b>\$17,240,198</b>
<b>39,787.685</b>	<b>100.0</b>	<b>TOTAL</b>	<b>\$78,240,062</b>

(1) Composite of four parameters (flow, BOD, SS, ammonia). Source 2009-109 Revenue Program.

(2) Based on estimated discharges until Sunol's final annexation in November 2009.

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

**OVERVIEW**

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**T**his 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"/> <b>Manage Wastewater</b>           | <input type="checkbox"/> <b>Manage Recycling and Garbage Services</b>  |
| <input type="checkbox"/> <b>Manage Recycled Water</b>       | <input type="checkbox"/> <b>Manage Potable Water</b>                   |
| <input type="checkbox"/> <b>Manage Urban Runoff Quality</b> | <input type="checkbox"/> <b>Protect Natural &amp; Energy Resources</b> |

The three core services that receive funding from the Treatment Plant Operating Fund are Manage Wastewater, Manage Recycled Water, and Protect Natural & Energy Resources. Through the Protect Natural & Energy Resources 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 Manage Recycled Water core service diverts treated Plant effluent from the Bay to agricultural, landscaping, and other uses. The Manage Wastewater 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, materials management, and facility management.

The 2009-2010 Proposed Treatment Plant Operating Fund Budget recommends an increase of 2.1% over the 2008-09 Adopted Budget. This increase represents standard cost increases within the various categories such as supplies and materials, as well as additional costs for overhead, equipment; and \$3 million in budget proposals for chemicals, equipment, and several one-time maintenance related projects.

The base-budget figure for equipment includes the continued replacement of diesel equipment in order to meet impending Bay Area Air Quality Management District rules, which will require the Plant to meet an increasingly more stringent fleet-average emissions standard beginning in 2010. The proposed budget reflects this requirement with nearly \$1 million dedicated to the replacement of specific equipment that will not meet the new standards in the coming months.

Of note in this years' proposed budget is the lack of significant inflation in the personal services sections where both the benefits and retirements categories were less than anticipated. Early estimates for FY2010-2011, however, indicate significant increases for the retirement costs due to the lack of a significant financial market recovery.

# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

## **OVERVIEW (Cont'd.)**

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Also of note is the fact that the non-personal budget has decreased as compared to the prior year. This is due primarily to the elimination of the in-lieu fees previously charged solely to the City of San Jose, and the decrease in energy related figures as prices have eased in response to the economic environment; and energy-conservation projects have reduced overall energy consumption, for a total budget reduction of about \$3 million.

Offsetting these decreases are the proposals which include increased chemical costs in response to the conversion to liquid chlorine disinfection with an expected ongoing increase of nearly \$1 million annually once the project is fully completed.

The largest increase to the proposed budget is the overhead contribution which is 68% more than anticipated. This increase is due primarily to an under calculation for the current fiscal year. The proposed number is within the inflation adjusted average of the previous several years.

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

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

**OVERVIEW CONTINUED**

**BUDGET SUMMARY**

<b>Department Budget Summary</b>	2007-08 Actual 1	2008-09 Adopted 2	2009-10 Forecast 3	2009-10 Proposed 4	% Change (2 to 4)
<b>Dollars by Core Services</b>					
Manage Wastewater	\$ 52,633,096	\$ 57,346,903	\$ 56,793,889	\$ 59,446,289	3.7%
Manage Recycled Water	\$ 2,812,904	\$ 4,083,157	\$ 3,868,523	\$ 4,243,853	3.9%
Protect Natural & Energy Resources	\$ 775,407	\$ 1,906,978	\$ 1,139,661	\$ 1,139,661	(40.2%)
Strategic Support	\$ 5,685,969	\$ 4,786,940	\$ 3,875,861	\$ 3,929,916	(17.9%)
<b>Total</b>	<b>\$ 61,907,376</b>	<b>\$ 68,123,978</b>	<b>\$ 65,677,934</b>	<b>\$ 68,759,719</b>	<b>0.9%</b>
<b>Dollars by Category</b>					
Personal Services					
Salaries/Benefits	\$ 34,030,526	\$ 39,694,045	\$ 40,295,424	\$ 40,627,749	2.4%
Overtime	\$ 1,167,969	\$ 642,035	\$ 651,666	\$ 651,666	1.5%
Subtotal	\$ 35,198,495	\$ 40,336,080	\$ 40,947,090	\$ 41,279,415	2.3%
Non-personal/Equipment	\$ 26,708,881	\$ 27,787,898	\$ 24,730,844	\$ 27,480,304	(1.1%)
<b>Total</b>	<b>\$ 61,907,376</b>	<b>\$ 68,123,978</b>	<b>\$ 65,677,934</b>	<b>\$ 68,759,719</b>	<b>0.9%</b>
<b>Authorized Positions</b>	<b>343.57</b>	<b>354.02</b>	<b>360.82</b>	<b>363.27</b>	<b>2.6%</b>

# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

## Core Service: Manage Wastewater

### Core Service Purpose

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

### Performance and Resource Overview

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**T**his 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 activities to ensure compliance with the City's National Pollution Discharge Elimination System (NPDES) Wastewater permit. For the seventh consecutive year ending December 31, 2008, 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 third Platinum Peak Performance Award given by the National Association of Clean Water Agencies for 100% permit compliance for five or more consecutive years.

For the past several years, the performance issue of greatest concern for this core service has been the performance measure "Cost per million gallons treated." Although the significant decline in influent over the past several years is a contributing factor towards the rising measure, the increasing maintenance costs associated with the aging infrastructure at the Plant continue to significantly impact these costs. In response to this trend, two programs were established during recent budget cycles. The first was the development of an asset management program in order 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 Comprehensive Maintenance Management System, will commence at the beginning of 2009-2010. This initial accomplishment marks the establishment of a comprehensive and automated system that tracks and records all maintenance activities and costs associated within each area of the treatment process. In future years, this data will allow staff to budget for maintenance and rehabilitation in a more cost-effective manner, and produce long-term savings through better planning and coordination of the rehabilitation and replacement of assets.

# San Jose/Santa Clara Water Pollution Control Plant







*Environmental Services Department*

## Core Service: Manage Wastewater

### Performance and Resource Overview (Cont'd.)

The second program recently undertaken is the Enhanced Preventive Maintenance Program. The Program's objective is to develop a systematic approach that ensures 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, and early indications demonstrate declines in emergency repair of critical assets. As this effort is incorporated with the Asset Management Program, the future data will better quantify the benefits and give future direction to this program.

For the remainder of the measures in this core service, the Department is projected to meet or exceed the majority of its performance targets in 2008-2009. The performance measure "Million 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 flows to customers. This measure continues to sufficiently 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 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 environment.

<b>Manage Wastewater Performance Summary</b>	<b>2007-2008 Actual</b>	<b>2008-2009 Target</b>	<b>2008-2009 Estimated</b>	<b>2009-2010 Target</b>
 Millions of gallons per day discharged to the Bay during average dry weather season State order: 120 mgd or less*	95	105	94	95
 % of time pollutant discharge requirements are met or surpassed	100%	100%	100%	100%
 % of suspended solids removed	99%	99%	99%	99%
 % of scheduled industrial inspections completed on time	99%	95%	95%	95%
 Cost per million gallons treated	\$969	\$985	\$999	\$1020
 % of customers (permitted dischargers) satisfied or very satisfied with service, based on reliability and pre-treatment services	86%	N/A**	N/A**	90%

*Changes to Performance Measures from 2008-2009 Adopted Budget: No*

\* Average dry weather season is defined as the lowest three month continuous average between May and October.

\*\* 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.



# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

## Core Service: Manage Wastewater

### Performance and Resource Overview (Cont'd.)

Activity & Workload Highlights	2007-2008 Actual	2008-2009 Target	2008-2009 Estimated	2009-2010 Target
Average millions of gallons per day treated	116	120	114	120
Total population in service area	1,364,700	1,406,000	1,382,960	1,406,000
Total pounds of suspended solids removed (in millions)	97	100	100	100

*Changes to Activity & Workload Highlights from 2008-2009 Adopted Budget: None*

Manage Wastewater Resource Summary	2007-2008 Actual 1	2008-2009 Adopted 2	2009-2010 Forecast 3	2009-2010 Proposed 4	% Change (2 to 4)
<b>Core Service Budget *</b>					
Personal Services	\$ 27,879,590	\$ 33,763,905	\$ 35,111,071	\$ 35,307,927	4.6%
Non-Personal/Equipment	24,753,506	23,582,998	21,682,818	24,138,362	2.4%
<b>Total</b>	<b>\$ 52,633,096</b>	<b>\$ 57,346,903</b>	<b>\$ 56,793,889</b>	<b>\$ 59,446,289</b>	<b>3.7%</b>
<b>Authorized Positions</b>	<b>287.43</b>	<b>297.43</b>	<b>312.53</b>	<b>313.53</b>	<b>5.4%</b>

\* 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.

# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

**Core Service: Manage Wastewater**

## Budget Changes By Core Service

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<b>Proposed Core Service Changes</b>	<b>Positions</b>	<b>Treatment Plant Appropriations</b>
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**1. Treatment Plant Bufferland Structure Demolition** **600,000**

This proposal provides one-time funding for the demolition and removal of dilapidated structures within two sections of the Plant's buffer lands commonly referred to as the Arzino Ranch and McCarthy Ranch. During 2008, the Arzino Ranch was found to be below City standards. A subsequent review of the McCarthy Ranch area found numerous code violations. All of the structures in both areas were determined to have no further beneficial use, and some actually pose a threat to human and animal safety. In order to ensure full compliance and maintain the areas for maximum potential benefit, all structures need to be removed and the areas cleaned of any hazardous materials, which include lead and asbestos. (Ongoing costs: \$0)

**Performance Results:**

**Cost, Quality** This proposal would remove potential hazards, avoid possible future costs associated with the areas, and ensure the quality and cleanliness of the areas for future use.

**2. Alternative Wastewater Disinfection Chemicals Costs** **500,000**

This proposal would increase annual funding for chemicals used in the sewage disinfection process by \$500,000 in 2009-2010 and \$1.0 million on an ongoing basis. In order to eliminate the risk of using gaseous chlorine and gaseous sulfur dioxide for disinfection, the Water Pollution Control Plant initiated the Capital Improvement Program project entitled Alternative Disinfection. This project converts the Plant's existing disinfection system from gaseous chlorine and sulfur dioxide to the less hazardous sodium-hypochlorite and sodium bisulfite liquid. The delivery method for these chemicals will also change, from railroad containers to truck tankers. The new chemicals and delivery method cost approximately \$1 million more annually than those currently used. Because the Alternative Disinfection project is not expected to be in beneficial use until the middle of 2009-2010, next year's funding only needs to be augmented for half a year. (Ongoing costs: \$1,000,000)

**Performance Results:**

**Quality** By converting from gaseous to liquid chlorine, the Plant eliminates a significant health and safety risk.

**3. Treatment Plant Building Exterior Maintenance** **500,000**

This proposal will provide one-time funding for painting and maintenance of the Water Pollution Control Plant's Filter Building, and Pump and Engine Building. These buildings have not been fully re-coated in over 20 years, and are showing visible signs of distress. Decorative plaster coatings have deteriorated and fallen, and water has intruded where the outer coatings of paint have cracked, causing damage to the exterior of these buildings. Waiting to perform maintenance will likely lead to greater costs in the future, since the existing cracks allow water to penetrate deeper into the surface of the buildings, causing extensive damage. (Ongoing costs: \$0)

**Performance Results:**

**Cost, Quality** This proposal would maintain the quality of sewage treatment efforts through proper care of related assets, and would avoid increased maintenance costs in the future.

# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

**Core Service: Manage Wastewater**

## Budget Changes By Core Service

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<b>Proposed Core Service Changes</b>	<b>Positions</b>	<b>Treatment Plant Appropriations</b>
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<b>4. Environmental Enforcement Data System Upgrade</b>		<b>200,000</b>
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This proposal provides funding to upgrade the Environmental Enforcement Data Management System (EEDMS), and for portable computers used by Environmental Inspectors. The National Pollutant Discharge Elimination System (NPDES) permit, which staff anticipates will be adopted in early summer 2009, requires that new categories of businesses be monitored for their pollutant risk, adding to a list that is already 13,000 long. Environmental Inspectors who monitor these businesses use handheld computers to collect data in the field. Upgrading their outdated software and replacing some of the portable computers will improve the inspectors' efficiency, give staff much greater capability to customize reports, and simplify future system maintenance. (Ongoing costs: \$50,000)

**Performance Results:**

**Quality** This proposal would enable staff to customize their own reports to meet changing permit requirements, and improve inspectors' ability to quickly collect relevant data.

<b>5. Watershed Division Office Space</b>		<b>247,500</b>
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This proposal provides funding for the Watershed Division to lease new office space. The Watershed Division currently has 76 employees housed in the Old Dr. Martin Luther King, Jr. Library building (Old MLK). Due to the proposed Convention Center expansion, the Division will be displaced from the Old MLK building, and will need to lease new office space beginning approximately in September 2009. (Ongoing costs: \$247,500)

**Performance Results:**

No impacts to current performance levels are anticipated as a result of this proposal.

<b>6. Biosolids Program GPS Equipment</b>		<b>260,000</b>
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This proposal provides one-time funding for the installation of global positioning system (GPS) equipment on two pieces of heavy machinery used during the biosolids solar drying process at the

Water Pollution Control Plant. This equipment would help cut the Plant's disposal costs. Biosolids at the plant are dried in large beds, then hauled out to the Newby Island Landfill. Approximately 45,000 to 65,000 dry tons are hauled to the landfill every year, costing the Environmental Services Department \$14 per ton in disposal fees. The method used to mix the material in the beds mixes a significant amount of dirt in with the biosolids, increasing the tonnage that is hauled away to the landfill by approximately 30%. This GPS equipment would allow the tractor-like machines used to mix the beds to more precisely measure the depth at which the dirt layer in the beds begins, and thereby avoid disturbing this layer, minimizing the amount of dirt that gets mixed into the biosolids. This will decrease the tonnage that is hauled to the landfill, translating into disposal cost savings. (Ongoing costs: \$0)

**Performance Results:**

**Cost** Reduces the "Cost Per Million Gallons Treated" performance measure by reducing the hauling costs.

# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

## Core Service: Manage Wastewater

### Budget Changes By Core Service (Cont'd.)

Proposed Core Service Changes	Positions	Treatment Plant Appropriations
<b>7. Treatment Plant Diffuser Replacement</b>		<b>150,000</b>
<p>This proposal provides funding for the replacement of fine bubble diffusers within the Plant's aeration tanks, as recommended by the manufacturer's replacement schedule. In the wastewater treatment process, aeration introduces air into the liquid that is being treated to support the organisms that metabolize organic waste matter. Pumping air into the tanks uses a significant amount of energy. In order to cut down on energy consumption, the Water Pollution Control Plant converted half of its aeration tanks from coarse bubble aeration to fine bubble diffusers. The expected useful life of the diffusers is three years. These funds would allow ESD to replace five of the Plant's 15 fine bubble diffusers each year on an ongoing basis, at a cost of \$30,000 for the materials and installation of each diffuser. (Ongoing costs: \$150,000)</p>		
<b>Performance Results:</b>		
<b>Cost</b> This proposal would reduce the "Cost Per Million Gallons Treated" performance measure by reducing total energy costs.		
<b>8. Wastewater Treatment Laboratory Staffing</b>	<b>1.00</b>	<b>117,363</b>
<p>This proposal would fund 1.0 Microbiologist position to address the increased demands for laboratory analyses in the wastewater and watershed programs. The workload at the laboratory serving the Water Pollution Control Plant has steadily risen from approximately 53,000 analyses in 2006 to 60,000 in 2008. This increased workload is largely driven by collaborative efforts between Plant Engineers and laboratory staff, aimed at troubleshooting and optimizing treatment processes. In addition to this, recent expansion of surveillance and enforcement activities by the Watershed Protection Inspection staff has significantly increased the workload of the laboratory. (Ongoing costs: \$126,535)</p>		
<b>Performance Results:</b>		
<b>Cycle Time</b> This proposal would improve the timeliness of laboratory tests that support expanded surveillance and enforcement activities.		
<b>9. Plant Master Plan Support</b>		<b>103,037</b>
<p>This proposal provides one-time temporary staffing support for community outreach efforts for the Plant Master Plan. Changes to the Water Pollution Control Plant's land use, as well as possible rate implications of major infrastructure changes that are part of the Plant Master Plan, require the support of the neighboring communities, and the public at large. This funding would support outreach to neighboring communities, especially with regard to public safety and the Plant's environmental functions; public education about the importance of a healthy watershed; and the Plant Tour Program, which is seen as a crucial outreach and education tool. The funding may also be used to support outreach to stakeholder groups such as environmental organizations, business groups, and developers. (Ongoing costs: \$0)</p>		

# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

## Budget Changes By Core Service (Cont'd.)

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<b>Proposed Core Service Changes</b>	<b>Positions</b>	<b>Treatment Plant Appropriations</b>
<b>10. Vehicle Maintenance Staffing</b>		<b>(25,237)</b>
<p>This proposal generates city-wide vehicle maintenance and operations cost savings totaling \$373,687 (\$312,687 in the General Fund), resulting from the elimination of 3.5 positions (0.50 Assistant to the Director, 1.0 Mechanic, 1.0 Senior Office Specialist, and 1.0 Equipment Maintenance Supervisor) in the General Services Department. The cost savings in the Environmental Services Department's Treatment Plant Operating Fund is \$25,237. The elimination of these positions will reduce administrative and management oversight, as well as preventative maintenance activities performed by the Fleet and Equipment Services Division. Every effort would be made to minimize service level impacts, and priority would be given to the public safety fleet. (Ongoing savings: \$25,237)</p>		
<b>Performance Results:</b>		
<b>Quality, Customer Service</b> 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. It should be noted that public safety fleet will be given priority.		
<b>2009-2010 Proposed Core Service Changes Total</b>	<b>1.00</b>	<b>2,652,663</b>

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# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

## Core Service: Manage Recycled Water

### Core Service Purpose

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**D**evelop, 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:

- System Operations and Maintenance
- Regulatory Compliance
- Customer Connection Services
- Education and Marketing
- System Expansion and Development

### Performance and Resource Overview

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**T**he 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 discharge flow trigger of 120 million gallons per day (mgd) set by the Regional Water Quality Control Board. By further developing 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. South Bay Water Recycling strives to achieve the City's Green Vision, which calls for 100% beneficial reuse of water, and also supports the Santa Clara Valley Water District's recent call for a mandatory 15% reduction in drinking water use.

Performance objectives for recycled water focus on both program effectiveness (mgd, % effluent used) and program cost. Of the nearly 600 South Bay Water Recycling customers, more than 95% use recycled water to irrigate parks, schools, golf courses, and commercial landscape, while the remaining customers use recycled water for manufacturing and cooling. However, at present, industrial use of recycled water amounts for more than a third of total water use. The reason for this disproportionate demand is that industrial customers generally use more water per customer than irrigation customers, especially for cooling. In order to increase the total amount of recycled water used in the most cost-effective manner, during the past fiscal year SBWR has focused on increasing the number of industrial customers by connecting facilities that are adjacent to or near the existing recycled water pipeline. This strategy poses both short-term and long-term challenges. In the near-term, more staff time is required to connect cooling tower customers due to the need to provide more technical and cost information, such that the effectiveness of the SBWR marketing program has been limited by resources. On a longer term basis, increased discharge of cooling tower blowdown to the treatment plant will over time gradually increase the salinity of recycled water, which will eventually require additional treatment to ensure that recycled water remains suitable for irrigation. To address the latter issue, the City and the Santa Clara Valley Water District continue to discuss joint development of an Advanced Water Treatment pilot program capable of reducing the salinity of recycled water. With respect to the overall goal of effluent diversion, due to the combined efforts in the areas of water conservation and water recycling the San José/Santa Clara Water Pollution Control Plant continues to discharge below 120 million gallons per day to the Bay.







# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

## Core Service: Manage Recycled Water

### Performance and Resource Overview (Cont'd.)

The performance measure “millions of gallons per day (mgd) diverted from flow to the bay for beneficial purposes” will end the year below the targeted level. The original target amount of 16 mgd was based on the anticipated addition of several large industrial users of recycled water, such as server farms, however, due to the slowdown in the economy, these new facilities have not come online yet. With respect to program cost, while the relatively young age of the system has kept maintenance requirements to a minimum, operational costs reflected increases in the cost of power during the past fiscal year. To mitigate potential increases in distribution pumping costs, the recently constructed Zone 3 Reservoir was integrated into operations. By providing additional storage at the most remote point in the distribution system, the reservoir allows for greater flexibility in pumping strategies to minimize energy use during peak periods. During the past fiscal year the program also implemented the first of three scheduled \$20 per acre-foot (AF) rate increases for irrigation customers. The 2008-2009 wholesale cost of recycled water for irrigation was \$375 per AF, while the retail cost of water from the four recycled water retailers ranged from \$631 to \$1,354 per AF. Additional revenues should bring the program closer to recovering 100% of operating costs.

<b>Manage Recycled Water Performance Summary</b>	<b>2007-2008 Actual</b>	<b>2008-2009 Target</b>	<b>2008-2009 Estimated</b>	<b>2009-2010 Target</b>
 Millions of gallons per day diverted from flow to the Bay for beneficial purposes during the dry weather period*	14.4	16	14.7	15
 Millions of gallons of recycled water delivered annually	3,384	3,500	3,400	3,450
 % of time recycled water quality standards are met or surpassed	100%	100%	100%	100%
 % of wastewater influent recycled for beneficial purposes during the dry weather period*	13%	14%	14%	15%
 Cost per million gallons of recycled water delivered	\$952	\$1,100	\$1,100	\$1,075
 % of recycled water customers rating service as good or excellent, based on reliability, water quality, and responsiveness	81%**	75%**	81%**	85%**

*Changes to Performance Measures from 2008-2009 Adopted Budget: No*

\* Dry weather period defined as 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.

<b>Activity &amp; Workload Highlights</b>	<b>2007-2008 Actual</b>	<b>2008-2009 Forecast</b>	<b>2008-2009 Estimated</b>	<b>2009-2010 Forecast</b>
Total number of South Bay Water Recycling customers	556	600	600	630

*Changes to Activity & Workload Highlights from 2008-2009 Adopted Budget: No*

# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

## Core Service: Manage Recycled Water

### Performance and Resource Overview (Cont'd.)

Manage Recycled Water Resource Summary	2007-2008 Actual 1	2008-2009 Adopted 2	2009-2010 Forecast 3	2009-2010 Proposed 4	% Change (2 to 4)
<b>Core Service Budget *</b>					
Personal Services	\$ 1,825,826	\$ 2,068,546	\$ 2,075,733	\$ 2,178,721	5.3%
Non-Personal/Equipment	987,078	2,014,611	1,792,790	2,065,132	2.5%
<b>Total</b>	<b>\$ 2,812,904</b>	<b>\$ 4,083,157</b>	<b>\$ 3,868,523</b>	<b>\$ 4,243,853</b>	<b>3.9%</b>
<b>Authorized Positions</b>	<b>16.63</b>	<b>16.70</b>	<b>16.59</b>	<b>17.59</b>	<b>5.3%</b>

### Budget Changes By Core Service

Proposed Core Service Changes	Positions	Treatment Plant Appropriations
<b>1. Recycled Water Salinity Management</b>		<b>250,000</b>
<p>This proposal provides one-time funding for a consultant to perform a salinity characterization assessment of the San José/Santa Clara Water Pollution Control Plant tributary areas and implement the most cost-effective strategies to control salinity. Without proper controls, the concentration of salt in recycled water distributed by South Bay Water Recycling (SBWR) could increase to a point that it becomes less suitable for landscape and industrial agricultural irrigation, as well as industrial use. Industrial processes and residential and commercial water softening all add dissolved solids to recycled water, as do water conservation measures implemented to mitigate the effect of the recent drought. Managing salinity levels in recycled water is necessary to ensure the water distributed by SBWR remains acceptable for all its intended uses. Because ESD lacks expertise in salinity management, these funds would allow the Department to utilize the services of a consultant for this purpose. (Ongoing costs: \$0)</p> <p><b>Performance Results:</b>  <b>Quality</b> This proposal would ensure that the quality of recycled water remains acceptable for all its intended uses. The availability of a reliable supply of high quality recycled water provides an alternative to the increasingly limited potable water supply, supporting the City's Green Vision Goal #6.</p>		
<b>2. Recycled Water Customer Expansion Program</b>	<b>1.00</b>	<b>125,330</b>
<p>This proposal provides ongoing funding for the addition of 1.0 Environmental Services Specialist position to support the goal of connecting approximately 200-300 new recycled water customers over the next five years. Connecting this many customers is expected to generate approximately \$1 million a year in additional revenue from the sale of recycled water to landscape and industrial customers. In order to increase South Bay Water Recycling revenues enough to cover operating costs and meet the Green Vision goal of "20 million gallons per day by 2022", anywhere from 20 large to 50 smaller customers must be added to the system each year. Experience has shown that</p>		



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

**Core Service: Manage Recycled Water**

Performance and Resource Overview (Cont'd.)

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customers requiring simple retrofits use at least 80 hours of staff time and resources before they can be connected to the South Bay Water Recycling system. Customers with more complex connections may require more time. This means that two full-time staff people need to be dedicated to this task in order to meet current goals. ESD currently has one staff member dedicated to the task of connecting customers, and requires one more if it is to meet its Green Vision goal and revenue targets. (Ongoing costs: \$138,427)

**Performance Results:**

**Cost, Quality** Additional customers using recycled water would reduce the cost per million gallons of recycled water delivered by approximately 5 to 10 percent (depending on volume increased). With this additional staff, as many as 100-150 new customers may be connected to the recycled water system over the next five years, increasing the millions of gallons of recycled water delivered annually by as much as 0.25 mgd/per year.

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<b>2009-2010 Proposed Core Service Changes Total</b>	<b>1.00</b>	<b>375,330</b>
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# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

## Core Service: Protect Natural and Energy Resources

### Core Service Purpose

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**P**romote 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

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**T**his core service focuses on the City's contributions to protecting and conserving air, land, water, and energy. In its other five core services, the Environmental Services Department accomplishes its mission and practices environmental leadership through the services it provides. In this core service, direct services are more limited and the focus is on practicing leadership through policy development, education, influence, finding supporting grants, and coordination.




The Water Efficiency Program is continuing to reduce wastewater flows to the Treatment Plant by managing programs that reduce water demand. The city-wide Water Conservation Plan was approved by the City Council in September 2008 and is being implemented through a combination of existing programs and new efforts. The City is continuing a cost-sharing partnership with the Santa Clara Valley Water District, which leverages funds for indoor water conservation programs, such as rebates for high efficiency toilets and clothes washers, rebates for retrofits of facilities with water efficient technologies, and water use surveys to improve water efficiency for residents and businesses. The cost sharing partnership also helps fund the Neighborhood Preservation Water Conservation Program, which provides financial assistance for drought-resistant garden plants to low-income San José residents (identified under the City's Neighborhood Preservation Ordinance).

The water conservation programs are contributing to the goal of managing wastewater flows to the Treatment Plant. Flows to the Plant remain below the trigger of 120 million gallons per day, and in 2007-2008, water conservation achieved approximately 226,986 gallons of water savings per day in the Plant service area. The performance measure "% of annual goal achieved for gallons of water conserved tributary area-wide" and the Activity and Workload Highlight "Millions of gallons per day conserved (tributary area-wide)" are estimated to end the year above the target levels.

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

**Core Service: Protect Natural and Energy Resources**

**Performance and Resource Overview (Cont'd.)**

<b>Protect Natural and Energy Resources Performance Summary</b>	<b>2007-2008 Actual</b>	<b>2008-2009 Target</b>	<b>2008-2009 Estimated</b>	<b>2009-2010 Target</b>
 (Water) % of annual goal for gallons of water conserved tributary-wide	88%	100%	127%	100%
 (Water) Net cost per gallon per day of water conserved through City programs	\$1.57	\$2.10	\$1.79	\$1.79
 (Water) % of residents demonstrating water conservation knowledge	56%*	35%	56%*	62%

*Changes to Performance Measures from 2008-2009 Adopted Budget: No*

\* Data for this measure is from the 2008 Water Focus Survey, which was conducted in summer 2008. The next scheduled survey will cover 2009-2010 and will be reported in fall 2010.

<b>Activity &amp; Workload Highlights</b>	<b>2007-2008 Actual</b>	<b>2008-2009 Forecast</b>	<b>2008-2009 Estimated</b>	<b>2009-2010 Forecast</b>
Millions of gallons per day conserved (tributary area-wide)	0.227	0.200	0.259	0.200
Cumulative millions of gallons per day conserved since July 1992 (tributary area-wide)	8.04	8.50	8.30	8.50
Number of UN Accords Implemented (of 21 total actions)	11	2	12	16

*Changes to Activity & Workload Highlights from 2008-2009 Adopted Budget: No*

<b>Protect Natural and Energy Resources Resource Summary</b>	<b>2007-2008 Actual 1</b>	<b>2008-2009 Adopted 2</b>	<b>2009-2010 Forecast 3</b>	<b>2009-2010 Proposed 4</b>	<b>% Change (2 to 4)</b>
<b>Core Service Budget *</b>					
Personal Services	\$ 239,762	\$ 224,691	\$ 196,844	\$ 196,844	(12.4%)
Non-Personal/Equipment	535,645	1,682,287	942,817	942,817	(44.0%)
<b>Total</b>	<b>\$ 775,407</b>	<b>\$ 1,906,978</b>	<b>\$ 1,139,661</b>	<b>\$ 1,139,661</b>	<b>(40.2%)</b>
<b>Authorized Positions</b>	<b>1.25</b>	<b>1.63</b>	<b>1.22</b>	<b>1.22</b>	<b>(25.2%)</b>

\* 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.

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

**Core Service: Protect Natural and Energy Resources**  
**Budget Changes By Core Service**

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<b>Proposed Core Service Changes</b>	<b>Positions</b>	<b>Treatment Plant Appropriations</b>
<b>None</b>		
<b>2009-2010 Proposed Core Service Changes Total</b>	<b>0</b>	<b>0</b>

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

**S**trategic 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:**

- |   |  |
|---|--|
| <input type="checkbox"/> <b>Public Education</b>                | <input type="checkbox"/> <b>Employee Services</b>    |
| <input type="checkbox"/> <b>Long Range Planning</b>             | <input type="checkbox"/> <b>Facility Management</b>  |
| <input type="checkbox"/> <b>Financial Management</b>            | <input type="checkbox"/> <b>Clerical Support</b>     |
| <input type="checkbox"/> <b>Information Technology Services</b> | <input type="checkbox"/> <b>Materials Management</b> |

Performance and Resource Overview

**K**ey 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 2008-2009 and FY 2009-2010.

**Allocated Support from the Treatment Plant Operating Fund**

Program	FY 2008-09	FY 2009-10
Communications	58%	45%
Environmental Compliance	10%	43%
Safety	0%	54%
Office of Sustainability <sup>1</sup>	62%	46%
Management & Support Services	67%	71%
ESD-Management Information Systems <sup>2</sup>	65%	65%

<sup>1</sup> Previously the Policy and Planning Group

<sup>2</sup> Previously included within the Support Services Group

# San Jose/Santa Clara Water Pollution Control Plant

Environmental Services Department

## Strategic Support

### Performance and Resource Overview (Cont'd.)

Strategic Support Resource Summary	2007-2008 Actual 1	2008-2009 Adopted 2	2009-2010 Forecast 3	2009-2010 Proposed 4	% Change (2 to 4)
<b>Core Service Budget *</b>					
Personal Services	\$ 5,253,317	\$ 4,278,938	\$ 3,563,442	\$ 3,595,923	(16.0%)
Non-Personal/Equipment	432,652	508,002	312,419	333,993	(34.3%)
<b>Total</b>	<b>\$ 5,685,969</b>	<b>\$ 4,786,940</b>	<b>\$ 3,875,861</b>	<b>\$ 3,929,916</b>	<b>(17.9%)</b>
<b>Authorized Positions</b>	<b>38.26</b>	<b>38.26</b>	<b>30.48</b>	<b>30.93</b>	<b>(19.2%)</b>

### Strategic Support Budget Changes

Proposed Changes	Positions	Treatment Plant Appropriations
<b>1. Technical Services Staffing Adjustments</b>	<b>.45</b>	<b>54,055</b>
<p>This proposal eliminates one vacant Information Systems Analyst position and adds two Systems Applications Programmers. ESD manages and maintains approximately 20 databases that are critical to potable water delivery, sewage treatment, garbage hauler communication, and meeting regulatory reporting requirements. The Information Systems Analyst position, which became vacant in November 2008, had developed and initiated some of the more complex databases over the past several years. More recently, the Information Systems group has had less demand for complex database development, but has been facing an increasing backlog of routine maintenance issues. This has led the Department to reevaluate its staffing requirements. Two Systems Applications Programmers would now meet the group's needs better than the higher-level Information Systems Analyst position. (Ongoing costs: \$51,824)</p>		
<b>Performance Results:</b>		
<p><b>Cost, Cycle Time</b> Proper preventative maintenance of the systems by ESD staff would minimize the use of outside consulting services, which typically cost more. Staff would also be better able to respond to critical requests in a timely manner.</p>		
<b>2009-2010 Proposed Strategic Support Changes Total</b>	<b>0.45</b>	<b>54,055</b>