

PROPOSED  
SAN JOSE / SANTA CLARA  
WATER POLLUTION CONTROL PLANT

700 Los Esteros Road  
San Jose, California 95134

Five-Year 2008-2012  
Capital Improvement Program

Submitted by

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City of San Jose

**TO: Treatment Plant Advisory Committee**

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Councilmember, City of San Jose  
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Councilmember, City of Milpitas  
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Boardmember, West Valley Sanitation District  
Councilmember, City of Santa Clara  
Mayor, City of San Jose  
Deputy City Manager, City of San Jose

# Water Pollution Control Capital Program

## 2008-2012 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 eight tributary sewage collection agencies (Agencies), including municipalities and sanitary sewer districts. The service area includes the following cities and adjacent, unincorporated County territory: San José, Santa Clara, Milpitas, Cupertino Sanitary District, West Valley Sanitary District (Campbell, Los Gatos, Monte Sereno and Saratoga), County Sanitation Districts 2-3, Sunol and Burbank Sanitary Districts. The Plant is jointly owned by the cities of San José and Santa Clara and is administered and operated by the City of San José's Environmental Services Department (ESD), which is also responsible for planning, designing and constructing new wastewater treatment and water reuse facilities.

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

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

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

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

#### Program Priorities and Objectives

The Plant Capital Improvement Program (CIP) projects are 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 2008-2012 Proposed CIP provides funding of \$247.7 million, of which \$92.3 million is allocated in 2007-2008.

Revenues for the Five-Year CIP are derived from several sources: Contributions from the City of Santa Clara and Other Agencies (\$67.3 million); transfers from the City of San José Sewer Service and Use Charge Fund (\$103

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

million) and the Sewage Treatment Plant Connection Fee Fund (\$15.4 million); Interest Earnings (\$12.6 million); Calpine Metcalf Energy Center Facilities Repayments (\$1.9 million); and federal grants from the US Bureau of Reclamation (\$0.5 million). In addition, \$36.4 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 \$67.3 million, which represents a \$16.7 million (33%) increase compared to the 2007-2011 Adopted CIP. This increase results from the additional capital investment plan proposed, including such projects as the Plant Electrical Reliability project, an increase in Plant Infrastructure Improvements project and Equipment Replacement Program, and the Plant Master Plan project.

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 \$20.3 million (24.6%) increase compared to the 2007-2011 Adopted CIP. In 2004-2005,

the City Council approved a three-year 4.5% annual rate increase strategy for the Sewer Service and Use Charge Fee, representing the first increase to this fee since 1994. Continuation of annual increases beyond the Council-approved three-year rate increase strategy is required to fund the minimum recommended program represented in this document. A 9% annual rate increase for 2007-2008 and a similar rate increases in the years beyond have been assumed in preparation of the current CIP. These increases will fund projects as described in the "Program Highlights" category below.

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 2008-2012 Proposed CIP.

**Program Highlights**

Plant Reliability Improvements

The Plant has a current maximum wet weather flow capacity rated at 271 mgd. In the past, the Plant has experienced peak storm flows, in excess of 320 mgd, that have forced an overload of certain operational treatment processes. In November 2001, Plant staff completed a study to assess the Plant's infrastructure and ability to increase wet weather operational capacity.

As a result of the study, improvements were identified that would significantly increase the Plant's wet weather flow peak capacity and operational reliability. These improvements are estimated to increase the Plant's wet weather flow peak capacity to approximately 400 mgd. The Plant Reliability Improvements project was awarded on February 15, 2005

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

##### Plant Reliability Improvements (Cont'd.)

and includes the following components:

1) piping system additions and improvements, and hydraulic improvements for flow equalization; 2) a new raw sewage pump station, and new filter influent pump station; and 3) most importantly, additional parallel headworks facilities that will allow the shutdown of the current headworks facility for much needed maintenance work.

This project is scheduled for completion in the fourth quarter of 2007, ten months ahead of the original contract completion date despite the discovery of asbestos contaminated soil during the trenching and excavation portion of the earth work. The unanticipated encounter with the asbestos soil has required mitigation measures which have a negative impact on the project contingency and may require an additional appropriation of funds during the project close out phase.

##### Plant Electrical Reliability Project

This \$83 million project will include a multi-phase construction schedule based on a master study completed in 2004. The project will replace and upgrade substations and switches, modify and upgrade power distribution buses and cabling, provide backup systems, and enhance the overall safety and reliability of the Plant electrical systems.

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 safety needs, as well as provide for future reliability needs.

Several contracts will be placed to cover the entire scope of this project. The earliest start date for selecting a consultant to prepare the design-build specification would be summer 2008. Once the contract to design-build is awarded, it is estimated that the project will take several years to complete.

In the interim, several elements of this project are being implemented through various projects to address immediate safety needs and improvements to the reliability of the Plant electrical system. Since 2005-2006, \$9.7 million has been programmed for the design and construction of this work, which includes: 1) addition of current limiting reactors at substation one to reduce fault current; 2) retrofitting switchgear with higher rated breakers and buss structures; and 3) addition of new switchgear and new cables to make an interim ring buss distribution system operational. Financing options for the remainder of this project, and the Plant Master Plan Project identified below, are being evaluated in conjunction with ongoing sewer service and use charge modeling efforts.

##### Plant Master Plan Project

The Plant initiated a Plant Master Planning project in 2005. A steering committee developed a vision and goals for the planning process, including regulatory compliance, worker and community safety, habitat protection and restoration, being a good neighbor, and providing for economic opportunities and cost-effective operation of the Plant.

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

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

The consultant team supporting land use planning developed an Opportunities and Constraints report for the buffer land and Pond A18 which will form the foundation for the Plant Master Plan by identifying options for use of Plant lands and A18 and their regulatory, biological, and technical constraints. Another foundational document is the needs assessment described below.

Staff is in the process of developing a comprehensive Request for Proposal (RFP) in support of developing a Plant Master Plan that will be the blue print for the Plant's development over the next 30 years, covering expected flows to the Plant, rates, staffing, Plant infrastructure, use of the buffer lands, bio-solids processing, and many other items. The RFP is scheduled to be issued in the spring of 2007. The range of costs for the preparation of the Master Plan, based on benchmarking research and a Request for Information, was developed and used in the preparation of the Master Plan budget (\$2.5 million in years one and two and \$1 million in year three). The Master Plan will be completed in 30 months.

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 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 requirement has changed from specific elements included in the discharge permit to the submission of an annual work plan that allows for adaptive management. In June 1997, both the San Francisco Bay Regional Water Quality Control Board (Regional Board) and the San José City Council approved the Revised South Bay Action Plan (RSBAP). The RSBAP was included as a provision of the 1998 NPDES permit and included the Expanded Water Recycling, Industrial Water Recycling/Reuse, Groundwater Inflow/Infiltration Reduction, and Environmental Enhancement Pilot projects. In February 1998, Council approved a financing plan that identified \$127 million in funding sources for the RSBAP, primarily through State Revolving Fund loans from the State Water Resources Control Board (SWRCB), and Treatment Plant Capital Fund reserves. Included in the \$127 million was \$100 million for water recycling projects.

On September 17, 2003 the Regional Board approved a new NPDES permit for the Plant and continued the requirement for a South Bay Action Plan to comply with the original 1991 Regional Board Resolution.

The Regional Board SBAP requirement states that the Discharger will continue to implement its water conservation, industrial

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

#### South Bay Action Plan (Cont'd.)

recycling and reuse, and recycling programs. Council approved the first annual SBAP work plan under the 2003 NPDES permit on February 17, 2004. The 2007 SBAP Work plan elements include:

- Water Efficiency Programs - Industrial recycling/reuse and indoor water conservation. Programs will continue.
- South Bay Water Recycling System - Completion of the Zone 3 recycled water reservoir facility and the Santa Clara Looping projects including SC 5- Santa Clara San Jose Connector in Santa Clara, SJ13 Coleman Avenue Extension, and the Coleman Overpass Recycled Water Line in San José. In addition, the collaborative effort with the Santa Clara Valley Water District for future expansion, operation and maintenance of the system is continuing.
- Salt Marsh Vegetative Assessment - Perform marsh assessments in 2007 to identify salt marsh conversion in the study area. The City has performed marsh assessments on an annual basis since 2003.

#### Plant Infrastructure Needs Improvements

The Plant initiated a study in 2006, to assess the condition of existing infrastructure at the Plant and to identify capital improvements required to maintain adequate wastewater service for existing customers under current

regulations and operating permits. Approximately \$249 million in capital improvement projects were identified as high-priority projects that should be implemented over the next five years. These projects were prioritized using a risk management and minimization approach. Risk is measured as a function of the likelihood of a failure, triggers that may require replacement of asset (inadequate capacity, over utilization, obsolescence, excessive maintenance requirements), and the consequences of failure.

The Plant Master Plan project, will further integrate the projected needs for repair and replacement of aging infrastructure with other high-priority and long-term facility needs in order to effectively manage risk and utilize available resources and funding. The Master Plan, however, will take several years to develop and implement. In the interim, there are immediate needs that must be addressed to maintain acceptable wastewater service. To aid in interim capital improvement planning, some of the high priority projects that can be implemented over the next five years have been included in this Proposed CIP. These include the Plant Electrical Reliability project (\$58 million), Digester Gas Line Replacement project (\$10.1 million), and Yard Piping and Digester Upgrades (\$10.3 million) in the Plant Infrastructure Improvements category.

#### Other Projects

The 2008-2012 Proposed Capital Improvement Program includes other major projects that will require an investment of capital funds. The following list of priority projects are required to meet regulatory mandates, ensure process reliability, provide

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

Other Projects (Cont'd.)

for a safe work environment, or provide process efficiencies or cost savings:

- 1 Megawatt Fuel Cell Cogeneration System - \$6.8 million in total costs in this CIP;
- Dissolved Air Flotation Pressure Retention Tank and Valves Replacement - \$600,000 in this CIP, \$2.2 million total project costs;
- Digester Gas Line Replacement - \$10.1 million in total costs in this CIP;
- Filtration Action Plan - Valve Replacement - \$2.6 million in total costs in this CIP;
- Fire Line Replacement - \$400,000 in this CIP, \$750,000 total project costs;
- Inactive Lagoons Bio-Solids Removal Study (characterization of solids) - \$100,000 in this CIP;
- M5, Ring Buss & Cable Replacement - \$7.0 million in this CIP, \$8.2 million total project costs;
- Scum Digestion - \$2.4 million in this CIP, \$2.6 million total project costs (design and build); and
- Warehousing Facility Additions - \$600,000 in this CIP.

Reserve for Equipment Replacement

As in prior CIP's, the 2008-2012 Proposed CIP includes a minimum \$5.0 million reserve for equipment replacement. This reserve minimum was established to satisfy three contractual requirements:

- The State Water Resources Control Board's (SWRCB) Policy for implementing the State Revolving Fund for Construction of Wastewater Treatment requires that annual revenue requirements include funds for the replacement of major equipment for maintaining the capacity and performance of the treatment plant over its useful life. Compliance with the SWRCB's policy is a requirement of State Revolving Fund Loan Agreements. Equipment replacement of \$11.3 million and a reserve of \$5.0 million are included in the 2008-2012 Proposed CIP to satisfy this requirement.
- The Clean Water Financing Authority (CWFA) Bond Covenants require that a reserve be maintained at a minimum level of \$5.0 million to help pay the costs of extraordinary repairs and for renewal and replacement of the treatment plant when insurance and other funds budgeted for such purposes are exhausted, or are insufficient to meet the need.

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

#### Reserve for Equipment Replacement (Cont'd.)

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

#### Major Changes from the 2007-2011 Adopted CIP

Major changes from the 2007-2011 Adopted CIP include the following:

- Eliminate the \$50 million CWFA Revenue Bond Sale in 2009-2010. This Proposed CIP assumes additional rate increases and contribution from other agencies in order to fund projects over the five-year term.
- Additional funding in the amount of \$16.7 million as transfers from City of Santa Clara and Other Agencies for the agencies proportionate costs for CIP projects.
- Additional funding in the amount of \$20.3 million as transfers from the Sewer Service and Use Charge Fund for City of San José costs for CIP projects.

- Additional funding in the amount of \$4.5 million as a rebate from PG & E from the 1MW Fuel Cell project.
- Additional available funding in the amount of \$7.1 million due to lower debt service payments assumed as a result of the elimination of the 2009 bond sale, and the debt service payment reduction from the refinancing of the 2005 bonds.
- Allocation of additional funding for new projects for 1 MW Fuel Cell Cogeneration System (\$6.8 million), Digester Gas Line Replacement (\$10.1 million), Plant Master Plan (\$6.0 million), and Secondary & Nitrification Clarifier Upgrade project (\$4.0 million).
- Allocation of additional funding in the amount of \$10.3 million for digester upgrade program, clarifier rehab program and critical concrete and yard piping repair and replacement projects in the Plant Infrastructure Improvements category.
- Allocation of \$6.0 million for construction of an Advanced Recycled Water Treatment Facility in partnership with the Santa Clara Valley Water District.
- Allocation of an additional \$3.7 million for the Equipment Replacement.



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**Major Changes from the 2007-2011 Adopted CIP (Cont'd.)**

- Allocation of additional funding for the Plant Electrical Reliability project (\$3.0 million), DAF Pressure Retention Tank & Valves project (\$0.396 million), and Scum Digestion project (\$1.6 million)
- Elimination of the \$28.0 million Reserve for Bio-Solid Plans to fund more urgent infrastructure improvement projects.

**Operating Budget Impact**

Although the Alternative Disinfection project has no funding in the 2008-2012 Proposed CIP, it is anticipated that the project will continue into 2007-2008 with encumbered 2006-2007 funding and be complete by mid-2008. This will have an impact on the operating budget beginning 2008-2009, which is supported by the San José-Santa Clara Treatment Plant Operating Fund. This project switches the disinfection method used at the Plant from a chlorine gas and sulfur dioxide system to a safer, alternative liquid sodium hypochlorite and sodium bisulfite system, which reduces the risk of a massive chlorine gas incident. The following table shows the increase in chemical costs as a result of the project. All projects anticipated to be operational in 2007-2008 have been addressed in the 2007-2008 Proposed Operating Budget.

**Net Operating Budget Impact Summary**

	2008-2009	2009-2010	2010-2011	2011-2012
Alternative Disinfection	<u>\$3,000,000</u>	<u>\$3,075,000</u>	<u>\$3,152,000</u>	<u>\$3,230,000</u>
<b>Total</b>	<b>\$3,000,000</b>	<b>\$3,075,000</b>	<b>\$3,152,000</b>	<b>\$3,230,000</b>

Note: The estimated operating costs have been provided by the Environmental Services Department and have not yet been fully analyzed by the Budget Office. That analysis may well result in different costs when the actual budget for the year in question is formulated.

WATER POLLUTION CONTROL PLANT  
SOURCE AND USE OF FUNDS SUMMARY

	Estimate					5-YEAR TOTAL	
	2006-2007	ReBudget	2007-2008	2008-2009	2009-2010		2010-2011
<b>SOURCE OF FUNDS</b>							
<b>SJ/SC TREATMENT PLANT CAPITAL FUND (512)</b>							
Beginning Fund Balance	54,079,940		42,384,969	38,872,969	33,312,969	1,851,969	5,293,969
Reserve for Encumbrances	64,745,063						
Interest Income	1,939,000		5,851,000	2,591,000	1,837,000	1,378,000	1,207,000
Contribution from City of Santa Clara & Agencies							
Equipment Replacement	591,000		591,000	591,000	591,000	591,000	591,000
WPCP Projects	4,486,800		12,020,000	6,050,000	20,350,000	5,010,000	7,110,000
SRF Loan repayment	1,384,000		1,384,000	1,384,000	1,384,000	1,384,000	1,384,000
2005 Bond Debt Service Repayment	1,342,000		1,382,000	1,385,000	1,386,000	1,385,000	1,381,000
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	1,072,000
Capital Project Cost from Fund (541)	8,120,700		18,000,000	10,000,000	10,000,000	12,500,000	19,000,000
Capital Project Cost from Fund (539)	0		0	0	0	0	0
Debt Service Payment from Fund (541)	5,464,000		5,625,000	5,638,000	5,645,000	5,640,000	5,623,000
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	3,080,000
Miscellaneous Revenue	249,766		0	4,500,000	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	389,000
USBR Grant (SBWRP)	2,000,000		500,000	0	0	0	0
<b>TOTAL SOURCE OF FUNDS</b>	<b>148,943,269</b>	<b>0</b>	<b>92,258,969</b>	<b>75,352,969</b>	<b>79,044,969</b>	<b>34,280,969</b>	<b>46,130,969</b>
<b>USE OF FUNDS</b>							
<b>Water Pollution Control Managed Projects</b>							
Alternative Disinfection	6,680,000						
Computer & Inst. Improvements	8,000						
Fitter Influent & Effluent Meters Replacement	3,000						
Headworks Redundancy Modifications	1,000						
Land Acquisition & Improvements	288,000		0	0	0	0	0
Technical Services Building	25,000						
WPCP Reliability Improvements	45,544,000						
Public Art Reserve	0		102,000	70,000	480,000	71,000	15,000
1MW Fuel Cell Co-gen System	0		5,200,000	400,000	400,000	400,000	400,000
Digester Gas Line Replacement	0		1,100,000	0	9,000,000	0	0
DAF Pressure Retention Tank & Valves	402,000		0	0	0	600,000	0
Filtration Action Plan	0		0	0	0	600,000	2,000,000
Fire Line Replacement	150,000	200,000	0	0	0	200,000	200,000
Inactive Lagoons Bio-Solids Removal	38,000		100,000	0	0	0	0
M5 Ring Buss & Cable replacement	1,200,000		7,000,000	0	0	0	0
Plant Electrical Reliability	279,000		5,000,000	0	47,000,000	6,000,000	0
<b>TOTAL USE OF FUNDS</b>	<b>66,800,000</b>	<b>200,000</b>	<b>5,000,000</b>	<b>47,000,000</b>	<b>6,000,000</b>	<b>6,000,000</b>	<b>6,000,000</b>
<b>5-YEAR TOTAL</b>	<b>42,384,969</b>	<b>12,644,000</b>	<b>2,955,000</b>	<b>50,540,000</b>	<b>6,920,000</b>	<b>6,919,000</b>	<b>0</b>

WATER POLLUTION CONTROL PLANT  
SOURCE AND USE OF FUNDS SUMMARY

	Estimate					5-YEAR TOTAL		
	2006-2007	ReBudget	2007-2008	2008-2009	2009-2010		2010-2011	2011-2012
<b>USE OF FUNDS (Cont'd)</b>								
<b>Water Pollution Control Managed Projects (Cont'd)</b>								
SBWR Reservoir Facility	0	0	0	6,000,000	0	0	0	6,000,000
Scum Digestion	250,000	0	2,350,000	0	0	0	0	2,350,000
Sec. & Nitrif. Clarifier Upgrade Project	0	0	0	1,000,000	1,000,000	1,000,000	1,000,000	4,000,000
Wrenching Facility Additions	0	0	0	0	0	100,000	500,000	600,000
Headworks Rehabilitation	0	0	0	0	0	0	0	0
WSP Managed Projects								
ESD MIS Improvements	671,000	0						
Lab Information Management System Replacement	206,000	0						
Salt Marsh Restoration	95,000	0						
South Bay Water Recycling Program	86,000	0	0					0
Revised SBAP - SBWR Extension	22,967,000	5,000,000	2,389,000	3,389,000	389,000	389,000	389,000	6,945,000
<b>Construction Projects Total</b>	<b>78,893,000</b>	<b>5,200,000</b>	<b>23,241,000</b>	<b>10,859,000</b>	<b>58,269,000</b>	<b>9,360,000</b>	<b>4,504,000</b>	<b>106,233,000</b>
<b>Recurring Projects</b>								
Equipment Replacement	1,862,000	0	2,553,000	3,750,000	1,920,000	1,525,000	1,525,000	11,273,000
Plant Infrastructure Improvements	13,995,000	0	7,552,000	13,071,000	4,138,000	6,240,000	17,300,000	48,301,000
Unanticipated/Critical Repairs	438,000	0	250,000	250,000	250,000	250,000	250,000	1,250,000
<b>Total Construction</b>	<b>95,188,000</b>	<b>5,200,000</b>	<b>33,596,000</b>	<b>27,930,000</b>	<b>64,577,000</b>	<b>17,375,000</b>	<b>23,579,000</b>	<b>167,057,000</b>
<b>Non-Construction</b>								
Budget Office - CIP Action Team	2,000	0						
IT Costs - CIP DTBS Enhancmt	8,000	0	0	0	0	0	0	0
Payment for CWFA Trustee	82,000	0	82,000	82,000	82,000	82,000	82,000	410,000
Plant Master Plan (see Reserve Below)	0	1,000,000	2,500,000	2,500,000	1,000,000	0	0	6,000,000
SRF Loan Repayment (Apprn 6590)	4,464,000	0	4,464,000	4,464,000	4,464,000	4,464,000	4,464,000	22,320,000
Transfer to CWFA Debt Service Fund	6,806,000	0	7,007,000	7,023,000	7,029,000	7,025,000	7,004,000	35,088,000
Transfer to CWFA Debt Service Fund	0	0	0	0	0	0	0	0
City Hall Debt Service	8,300	0	37,000	41,000	41,000	41,000	42,000	202,000
<b>Reserves</b>								
Reserve for Plant Master Plan	0	0	0	0	0	0	5,000,000	5,000,000
Reserve for Equipment Replacement	0	0	5,000,000					5,000,000
Reserve for GRS agreement	0	0	500,000					500,000
Reserve for Rate Studies	0	0	200,000					200,000
<b>Total Non-Construction</b>	<b>11,370,300</b>	<b>1,000,000</b>	<b>19,790,000</b>	<b>14,110,000</b>	<b>12,616,000</b>	<b>11,612,000</b>	<b>16,592,000</b>	<b>74,720,000</b>
<b>Total Expenditures</b>	<b>106,558,300</b>	<b>6,200,000</b>	<b>53,386,000</b>	<b>42,040,000</b>	<b>77,193,000</b>	<b>28,987,000</b>	<b>40,171,000</b>	<b>241,777,000</b>
<b>Ending Fund Balance</b>	<b>42,384,969</b>	<b>(6,200,000)</b>	<b>38,872,969</b>	<b>33,312,969</b>	<b>1,851,969</b>	<b>5,293,969</b>	<b>5,959,969</b>	<b>5,959,969</b>
<b>TOTAL USE OF FUNDS</b>	<b>148,943,269</b>	<b>0</b>	<b>92,258,969</b>	<b>75,352,969</b>	<b>79,044,969</b>	<b>34,280,969</b>	<b>46,130,969</b>	<b>247,736,969</b>

**Water Pollution Control Capital Program**  
**2008-2012 Adopted 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>	N/A		

**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), projects that are primarily rehabilitation or maintenance of existing facilities, 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	2006-07 Appn.	2006-07 Estimate	2007-08	2008-09	2009-10	2010-11	2011-12	5-Year Total	Beyond 5-Year	Project Total
Public Art			102	70	480	71	15		738		
<b>TOTAL</b>			<b>102</b>	<b>70</b>	<b>480</b>	<b>71</b>	<b>15</b>		<b>738</b>		

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund			102	70	480	71	15		738		
<b>TOTAL</b>			<b>102</b>	<b>70</b>	<b>480</b>	<b>71</b>	<b>15</b>		<b>738</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>		<b>USGBC LEED:</b>	N/A

**Water Pollution Control Capital Program**  
**2008-2012 Adopted Capital Improvement Program**  
**Detail of Capital Projects**

**2. 1MW Fuel Cell Cogeneration System**

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b> 3rd Qtr. 2007
<b>CSA Outcome:</b>	Reliable Utility Infrastructure	<b>Revised Start Date:</b>
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b> 2nd Qtr. 2009
<b>Council District:</b>	4	<b>Revised Completion Date:</b>
<b>Location:</b>	Water Pollution Control Plant	

**Description:** This project will involve procurement and installation of a 1 MW Fuel Cell system at the Plant. This project will be coordinated through PG&E's Self-Generating Incentive Program (SGIP), which allows the City to receive a financial incentive rebate of up to \$4.5 million from PG&E to partly fund this project. This project will also include a 5-year maintenance agreement for the fuel cell, which is a required condition of the SGIP.

**Justification:** The Plant's self-electrical generation is achieved with eight engine generators that use methane gas and natural gas from PG&E as fuel sources. These have been in service for nearly fifty years and have become less reliable. This has resulted in increased downtime and maintenance and the need to purchase electricity at a cost significantly greater than that from self-generation. This project will reduce the Plant's electrical demand purchased from the grid, reduce operating costs due to reduced operating and maintenance requirements for fuel cell technology over comparable engine generation, produce electrical energy more efficiently than comparable engines, and enable the Plant to generate electricity at a much lower level of emissions. This project will also qualify the City for a financial incentive rebate of up to \$4.5 million.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2006-07 Appn.	2006-07 Estimate	2007-08	2008-09	2009-10	2010-11	2011-12	5-Year Total	Beyond 5-Year	Project Total
Construction			5,200						5,200		5,200
Maintenance				400	400	400	400	400	1,600		1,600
<b>TOTAL</b>			<b>5,200</b>	<b>400</b>	<b>400</b>	<b>400</b>	<b>400</b>	<b>400</b>	<b>6,800</b>		<b>6,800</b>

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund	Prior Years	2006-07 Appn.	2006-07 Estimate	2007-08	2008-09	2009-10	2010-11	2011-12	5-Year Total	Beyond 5-Year	Project Total
			5,200	400	400	400	400	400	6,800		6,800
<b>TOTAL</b>			<b>5,200</b>	<b>400</b>	<b>400</b>	<b>400</b>	<b>400</b>	<b>400</b>	<b>6,800</b>		<b>6,800</b>

ANNUAL OPERATING BUDGET IMPACT (000'S)										
None										

**Major Changes in Project Cost:**

None

**Notes:**

<b>FY Initiated:</b>	2007-2008	<b>Redevelopment Area:</b>	N/A
<b>Initial Project Budget:</b>	\$6,800,000	<b>SNI Area:</b>	N/A
<b>Appn. #:</b>		<b>USGBC LEED:</b>	N/A

**Water Pollution Control Capital Program**  
**2008-2012 Adopted Capital Improvement Program**  
**Detail of Capital Projects**

**3. Digester Gas Line Replacement**

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b> 4th Qtr. 2007
<b>CSA Outcome:</b>	Reliable Utility Infrastructure	<b>Revised Start Date:</b>
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b> 2nd Qtr. 2012
<b>Council District:</b>	4	<b>Revised Completion Date:</b>
<b>Location:</b>	Water Pollution Control Plant	

**Description:** This project will include adding new digester gas lines to replace the existing main digester gas lines that are leaking at the pipe joints. The entire main gas line needs to be replaced with a new, safe, and reliable line.

**Justification:** The existing main digester gas line has deteriorated to an extent that leaks have developed at various points. This project will address safety issues related to digester gas leaks and improve the reliability of the system.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2006-07 Appn.	2006-07 Estimate	2007-08	2008-09	2009-10	2010-11	2011-12	5-Year Total	Beyond 5-Year	Project Total
Design			1,000						1,000		1,000
Construction						9,000			9,000		9,000
Master Plan/Study			100						100		100
<b>TOTAL</b>			<b>1,100</b>			<b>9,000</b>			<b>10,100</b>		<b>10,100</b>

FUNDING SOURCE SCHEDULE (000'S)					
San José-Santa Clara Treatment Plant Capital Fund	2007-08	2008-09	2009-10	2010-11	2011-12
	1,100	9,000	10,100	10,100	10,100
<b>TOTAL</b>	<b>1,100</b>	<b>9,000</b>	<b>10,100</b>	<b>10,100</b>	<b>10,100</b>

ANNUAL OPERATING BUDGET IMPACT (000'S)
None

**Major Changes in Project Cost:**

None

**Notes:**

<b>FY Initiated:</b>	2007-2008	<b>Redevelopment Area:</b>	N/A
<b>Initial Project Budget:</b>	\$10,100,000	<b>SNI Area:</b>	N/A
<b>Appn. #:</b>		<b>USGBC LEED:</b>	N/A

**Water Pollution Control Capital Program**  
**2008-2012 Adopted Capital Improvement Program**  
**Detail of Capital Projects**

**4. Inactive Lagoons Bio-Solids Removal Study**

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

**Description:** The Residual Sludge Management (RSM) facility currently has inactive lagoons, which contain about 320,000 dry tons of old, toxic bio-solid stockpiles constructed between 1960 and 1967, before vigorous and effective source control and pretreatment programs were implemented. Recently, these stockpiles have been analyzed and found to contain lead and cadmium at levels higher than Department of Toxic Substances Control (DTSC) guidelines. Possible disposal alternatives require further regulatory and engineering feasibility evaluation. The Inactive Lagoons Bio-Solids Removal Study described here will complete the feasibility evaluation in 2007-2008.

**Justification:** There is a shortage of storage space, as older stockpiles have occupied badly needed RSM space. Additionally, there is a tendency for environmental regulations to become more complex & cumbersome with time. The plant can not postpone this disposal issue much longer without risking significant increases in costs. Tackling the issue now will free up the badly needed space and conserve limited resources.

**EXPENDITURE SCHEDULE (000'S)**

Cost Elements	Prior Years	2006-07 Appn.	2006-07 Estimate	2007-08	2008-09	2009-10	2010-11	2011-12	5-Year Total	Beyond 5-Year	Project Total
Master Plan/Study		38	38	100					100		138
<b>TOTAL</b>		<b>38</b>	<b>38</b>	<b>100</b>					<b>100</b>		<b>138</b>

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

San José-Santa Clara Treatment Plant Capital Fund	38	38	100						100		138
<b>TOTAL</b>	<b>38</b>	<b>38</b>	<b>100</b>						<b>100</b>		<b>138</b>

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

None

**Major Changes in Project Cost:**

2005-2009 CIP - decrease of \$2.5 million to reflect re-scoping of this project to cover the reevaluation of alternatives for the proper disposal of toxic bio-solids. Once this evaluation is complete, additional funding will most likely be requested to complete the removal.

2007-2011 CIP - decrease of \$1.8 million to reflect the shift of funding for Bio-Solids removal to the Reserve for Bio-Solids Plans.

**Notes:**

Formerly part of an ongoing allocation titled "Residual Sludge Facilities".

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

**Water Pollution Control Capital Program**  
**2008-2012 Adopted Capital Improvement Program**  
**Detail of Capital Projects**

**5. M5, Ring Buss, & Cable Replacement**

CSA:	Environmental and Utility Services	Initial Start Date: 3rd Qtr. 2006
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:
Department:	Environmental Services	Initial Completion Date: 2nd Qtr. 2008
Council District:	4	Revised Completion Date: 2nd Qtr. 2010
Location:	Water Pollution Control Plant	

**Description:** This project will involve design, procurement and installation of a new, 4.16 kV switchgear, installation of new cables, and replacement of critical old 4.16 kV switchgear to form a ring buss arrangement for the 4.16 kV distribution system.

**Justification:** The design of the existing plant 4.16 kV distribution system has inherent weaknesses in terms of reliability and availability to mitigate a common mode failure, i.e., seismic event or fire. The creation of a ring buss system and replacement of the critical cables will improve system reliability and availability. This project will provide the foundation for the electrical master plan reliability project.

**EXPENDITURE SCHEDULE (000'S)**

Cost Elements	Prior Years	2006-07 Appn.	2006-07 Estimate	2007-08	2008-09	2009-10	2010-11	2011-12	5-Year Total	Beyond 5-Year	Project Total
Design		1,200	1,200								1,200
Construction				7,000					7,000		7,000
<b>TOTAL</b>		<b>1,200</b>	<b>1,200</b>	<b>7,000</b>					<b>7,000</b>		<b>8,200</b>

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

San José-Santa Clara Treatment Plant Capital Fund	1,200	1,200	7,000					7,000		8,200
<b>TOTAL</b>	<b>1,200</b>	<b>1,200</b>	<b>7,000</b>					<b>7,000</b>		<b>8,200</b>

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

None

**Major Changes in Project Cost:**

None

**Notes:**

FY Initiated:	2006-2007	Redevelopment Area:	N/A
Initial Project Budget:	\$8,200,000	SNI Area:	N/A
Appn. #:	4124	USGBC LEED:	N/A



**Water Pollution Control Capital Program**  
**2008-2012 Adopted Capital Improvement Program**  
**Detail of Capital Projects**

**6. Plant Electrical Reliability**

CSA: Environmental and Utility Services Initial Start Date: 3rd Qtr. 2003  
 CSA Outcome: Reliable Utility Infrastructure Revised Start Date: 3rd Qtr. 2007  
 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 master study completed in 2004. The project will replace and upgrade substations and switches, modify and upgrade power distribution buses and cabling, provide backup systems, and enhance the overall safety and reliability of the plant electrical systems.

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

**EXPENDITURE SCHEDULE (000'S)**

Cost Elements	Prior Years	2006-07 Appn.	2006-07 Estimate	2007-08	2008-09	2009-10	2010-11	2011-12	5-Year Total	Beyond 5-Year	Project Total
Design		279	279	5,000					5,000		5,279
Construction						47,000	6,000		53,000	25,000	78,000
<b>TOTAL</b>		<b>279</b>	<b>279</b>	<b>5,000</b>		<b>47,000</b>	<b>6,000</b>		<b>58,000</b>	<b>25,000</b>	<b>83,279</b>

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

San José-Santa Clara Treatment Plant Capital Fund	279	279	5,000			47,000	6,000		58,000	25,000	83,279
<b>TOTAL</b>	<b>279</b>	<b>279</b>	<b>5,000</b>			<b>47,000</b>	<b>6,000</b>		<b>58,000</b>	<b>25,000</b>	<b>83,279</b>

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

None

**Major Changes in Project Cost:**

2005-2009 CIP - increase of \$33.5 million (total project cost) to fund construction/rehabilitation costs due to increased project scope.

2008-2012 CIP - increase of \$41 million (total project cost) to fund construction/rehabilitation costs due to increased project scope.

**Notes:**

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

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

**Water Pollution Control Capital Program**  
**2008-2012 Adopted Capital Improvement Program**  
**Detail of Capital Projects**

**7. Scum Digestion**

<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>
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b> 2nd Qtr. 2008
<b>Council District:</b>	4	<b>Revised Completion Date:</b>
<b>Location:</b>	Water Pollution Control Project	

**Description:** This project will involve design and construction of scum mixers on top of two existing digesters and additional digester mixing and scum injection equipment to assist with breaking up and mixing of any scum mat formation in the digesters. This project will also include the design and construction of piping, valves, and instrumentation, as necessary, to feed scum and to monitor scum flows and digester gas production at the two digesters.

**Justification:** Plant scum is currently collected from plant processes, separated and disposed off-site. While the separation of scum has assisted in reducing maintenance and potential process upsets at the Plant, the cost to haul and dispose of the scum is considerable. Digestion of scum has been identified as a feasible and environmentally optimal solution for scum disposal.

**EXPENDITURE SCHEDULE (000'S)**

Cost Elements	Prior Years	2006-07 2006-07 Appn. Estimate	2007-08	2008-09	2009-10	2010-11	2011-12	5-Year Total	Beyond 5-Year	Project Total
Design		250	250							250
Construction				2,200				2,200		2,200
Master Plan/Study			150					150		150
<b>TOTAL</b>		<b>250</b>	<b>250</b>	<b>2,350</b>				<b>2,350</b>		<b>2,600</b>

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

San José-Santa Clara Treatment Plant Capital Fund	250	250	2,350				2,350		2,600
<b>TOTAL</b>	<b>250</b>	<b>250</b>	<b>2,350</b>				<b>2,350</b>		<b>2,600</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

**Notes:**

<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 Capital Program**  
**2008-2012 Adopted 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 consisted of the construction of SBWR Phase II facilities in Santa Clara and Milpitas, and extension of a recycled water transmission line to serve the Metcalf Energy Center in South San José. In addition, this allocation funds future recycled water projects not yet identified.

**Justification:** The Revised SBAP, adopted by the 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	2006-07 Appn.	2006-07 Estimate	2007-08	2008-09	2009-10	2010-11	2011-12	5-Year Total	Beyond 5-Year	Project Total
Development Property & Land Design Construction		27,967	22,967	2,389	3,389	389	389	389	6,945		
<b>TOTAL</b>		<b>27,967</b>	<b>22,967</b>	<b>2,389</b>	<b>3,389</b>	<b>389</b>	<b>389</b>	<b>389</b>	<b>6,945</b>		

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

San José-Santa Clara Treatment Plant Capital Fund	27,967	22,967	2,389	3,389	389	389	389	6,945
<b>TOTAL</b>	<b>27,967</b>	<b>22,967</b>	<b>2,389</b>	<b>3,389</b>	<b>389</b>	<b>389</b>	<b>389</b>	<b>6,945</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 Capital Program**  
**2008-2012 Adopted 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 project provides for the replacement and rehabilitation of 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	2006-07 Appn.	2006-07 Estimate	2007-08	2008-09	2009-10	2010-11	2011-12	5-Year Total	Beyond 5-Year	Project Total
Equipment		1,862	1,862	2,553	3,750	1,920	1,525	1,525	11,273		
<b>TOTAL</b>		<b>1,862</b>	<b>1,862</b>	<b>2,553</b>	<b>3,750</b>	<b>1,920</b>	<b>1,525</b>	<b>1,525</b>	<b>11,273</b>		

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

San José-Santa Clara Treatment Plant Capital Fund	1,862	1,862	2,553	3,750	1,920	1,525	1,525	11,273
<b>TOTAL</b>	<b>1,862</b>	<b>1,862</b>	<b>2,553</b>	<b>3,750</b>	<b>1,920</b>	<b>1,525</b>	<b>1,525</b>	<b>11,273</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 Capital Program**  
**2008-2012 Adopted 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 project 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	2006-07 Appn.	2006-07 Estimate	2007-08	2008-09	2009-10	2010-11	2011-12	5-Year Total	Beyond 5-Year	Project Total
Construction		13,995	13,995	7,552	13,071	4,138	6,240	17,300	48,301		
<b>TOTAL</b>		<b>13,995</b>	<b>13,995</b>	<b>7,552</b>	<b>13,071</b>	<b>4,138</b>	<b>6,240</b>	<b>17,300</b>	<b>48,301</b>		

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

San José-Santa Clara Treatment Plant Capital Fund	13,995	13,995	7,552	13,071	4,138	6,240	17,300	48,301		
<b>TOTAL</b>	<b>13,995</b>	<b>13,995</b>	<b>7,552</b>	<b>13,071</b>	<b>4,138</b>	<b>6,240</b>	<b>17,300</b>	<b>48,301</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. #:** 5690 **USGBC LEED:** N/A

**Water Pollution Control Capital Program**  
**2008-2012 Adopted 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 pay for unforeseen conditions discovered during any project construction phase or repairs to Plant infrastructure to quickly respond to needs.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2006-07 Appn.	2006-07 Estimate	2007-08	2008-09	2009-10	2010-11	2011-12	5-Year Total	Beyond 5-Year	Project Total
Construction		438	438	250	250	250	250	250	1,250		
TOTAL		438	438	250	250	250	250	250	1,250		
FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund		438	438	250	250	250	250	250	1,250		
TOTAL		438	438	250	250	250	250	250	1,250		
ANNUAL OPERATING BUDGET IMPACT (000'S)											
None											

**Major Changes in Project Cost:**  
 N/A

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

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

**Water Pollution Control Capital Program**  
**2008-2012 Adopted Capital Improvement Program**  
**Detail of Capital Projects**

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

<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 project 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	2006-07 Appn.	2006-07 Estimate	2007-08	2008-09	2009-10	2010-11	2011-12	5-Year Total	Beyond 5-Year	Project Total
Program Management		82	82	82	82	82	82	82	410		
<b>TOTAL</b>		<b>82</b>	<b>82</b>	<b>82</b>	<b>82</b>	<b>82</b>	<b>82</b>	<b>82</b>	<b>410</b>		

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund		82	82	82	82	82	82	82	410		
<b>TOTAL</b>		<b>82</b>	<b>82</b>	<b>82</b>	<b>82</b>	<b>82</b>	<b>82</b>	<b>82</b>	<b>410</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>	6584	<b>USGBC LEED:</b>	N/A

**Water Pollution Control Capital Program**  
**2008-2012 Adopted 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. 2010
<b>Location:</b>	Water Pollution Control Plant	

**Description:** There is a need for development of a Plant Master Plan (PMP). The PMP would provide SJ/SC WPCP 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. The cost is projected at \$6 million.

**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	2006-07 Appn.	2006-07 Estimate	2007-08	2008-09	2009-10	2010-11	2011-12	5-Year Total	Beyond 5-Year	Project Total
Master Plan/Study		1,000		2,500	2,500	1,000			6,000		6,000
<b>TOTAL</b>		<b>1,000</b>		<b>2,500</b>	<b>2,500</b>	<b>1,000</b>			<b>6,000</b>		<b>6,000</b>

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund		1,000		2,500	2,500	1,000			6,000		6,000
<b>TOTAL</b>		<b>1,000</b>		<b>2,500</b>	<b>2,500</b>	<b>1,000</b>			<b>6,000</b>		<b>6,000</b>

ANNUAL OPERATING BUDGET IMPACT (000'S)										
None										

**Major Changes in Project Cost:**

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

**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 Capital Program**  
**2008-2012 Adopted Capital Improvement Program**  
**Detail of Capital Projects**

**14. State Revolving Fund Loan Repayment**

**CSA:** Environmental and Utility Services **Initial Start Date:** 3rd Qtr. 1998  
**CSA Outcome:** Healthy Streams, Rivers, Marsh and Bay **Revised Start Date:**  
**Department:** Environmental Services **Initial Completion Date:** 2nd Qtr. 2019  
**Council District:** 4 **Revised Completion Date:**  
**Location:** Water Pollution Control Plant

**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	2006-07 Appn.	2006-07 Estimate	2007-08	2008-09	2009-10	2010-11	2011-12	5-Year Total	Beyond 5-Year	Project Total
Debt Service	32,457	4,464	4,464	4,464	4,464	4,464	4,464	4,464	22,320	29,039	88,280
<b>TOTAL</b>	<b>32,457</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>29,039</b>	<b>88,280</b>

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

San José-Santa Clara Treatment Plant Capital Fund	32,457	4,464	4,464	4,464	4,464	4,464	4,464	4,464	22,320	29,039	88,280
<b>TOTAL</b>	<b>32,457</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>29,039</b>	<b>88,280</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 Capital Program**  
**2008-2012 Adopted Capital Improvement Program**  
**Detail of Capital Projects**

**15. 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>	Water Pollution Control Plant	

**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	2006-07 Appn.	2006-07 Estimate	2007-08	2008-09	2009-10	2010-11	2011-12	5-Year Total	Beyond 5-Year	Project Total
Debt Service	8,075	6,806	6,806	7,007	7,023	7,029	7,025	7,004	35,088	34,957	84,926
<b>TOTAL</b>	<b>8,075</b>	<b>6,806</b>	<b>6,806</b>	<b>7,007</b>	<b>7,023</b>	<b>7,029</b>	<b>7,025</b>	<b>7,004</b>	<b>35,088</b>	<b>34,957</b>	<b>84,926</b>

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund	8,075	6,806	6,806	7,007	7,023	7,029	7,025	7,004	35,088	34,957	84,926
<b>TOTAL</b>	<b>8,075</b>	<b>6,806</b>	<b>6,806</b>	<b>7,007</b>	<b>7,023</b>	<b>7,029</b>	<b>7,025</b>	<b>7,004</b>	<b>35,088</b>	<b>34,957</b>	<b>84,926</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 Electrical Reliability Project.

**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 Capital Program**  
**2008-2012 Adopted Capital Improvement Program**  
**Detail of Capital Projects**

**16. Reserve for Equipment Replacement**

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

**Description:** Funding provides a reserve for 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	2006-07 Appn.	2006-07 Estimate	2007-08	2008-09	2009-10	2010-11	2011-12	5-Year Total	Beyond 5-Year	Project Total
Reserve		5,000		5,000					5,000		
<b>TOTAL</b>		<b>5,000</b>		<b>5,000</b>					<b>5,000</b>		

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

San José-Santa Clara Treatment Plant Capital Fund		5,000		5,000					5,000		
<b>TOTAL</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:**

N/A

**Notes:**

Unexpended funds are rebudgeted each year.

**FY Initiated:** Ongoing **Redevelopment Area:** N/A  
**Initial Project Budget:** **SNI Area:** N/A  
**Appn. #:** 7908 **USGBC LEED:** N/A

**Water Pollution Control Capital Program**  
**2008-2012 Adopted Capital Improvement Program**  
**Detail of Capital Projects**

**17. Reserve for GRS Inc. Agreement**

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

**Description:** Funding provides a contingency reserve for an agreement with GRS, Inc. to construct a pipeline from the neighboring landfill to the Plant for the delivery of methane gas to fuel electrical generators.

**Justification:** The establishment of a contingency reserve is necessary to secure a price structure that guarantees the Plant savings on energy expenditures without the need for capital outlay. GRS, Inc. will assume all construction costs associated with the project in return for the Plant's guarantee to utilize the methane gas for five years.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2006-07 Appn.	2006-07 Estimate	2007-08	2008-09	2009-10	2010-11	2011-12	5-Year Total	Beyond 5-Year	Project Total
Reserve		1,000		500					500		500
<b>TOTAL</b>		<b>1,000</b>		<b>500</b>					<b>500</b>		<b>500</b>

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund		1,000		500					500		500
<b>TOTAL</b>		<b>1,000</b>		<b>500</b>					<b>500</b>		<b>500</b>

ANNUAL OPERATING BUDGET IMPACT (000'S)										
None										

**Major Changes in Project Cost:**

Unexpended funds are reduced each year after construction and benefit of the project was realized starting in 2003-2004.

**Notes:**

FY Initiated:	2002-2003	Redevelopment Area:	N/A
Initial Project Budget:	\$2,300,000	SNI Area:	N/A
Appn. #:	4327	USGBC LEED:	N/A

**Water Pollution Control Capital Program**  
**2008-2012 Adopted Capital Improvement Program**  
**Detail of Capital Projects**

**18. 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 for a reserve for the study and review of rate structures within the industry in the near future.

**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 access the industry norms and anticipate future changes whenever possible.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2006-07 Appn.	2006-07 Estimate	2007-08	2008-09	2009-10	2010-11	2011-12	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)											
Cost Elements	Prior Years	2006-07 Appn.	2006-07 Estimate	2007-08	2008-09	2009-10	2010-11	2011-12	5-Year Total	Beyond 5-Year	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 Capital Program**  
**2008-2012 Adopted Capital Improvement Program**  
**Summary of Projects that Start after 2007-2008**

---

**Project Name:** Dissolved Air Flotation Pressure Retention Tank & Valves  
**5-Year CIP Budget:** \$600,000  
**Total Budget:** \$2,202,000  
**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:** \$2,600,000  
**Total Budget:** \$8,600,000  
**USGBC LEED:** N/A

**Council District:** 4  
**Estimated Start Date:** 4th Qtr. 2010  
**Estimated End Date:** 2nd 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:** \$400,000  
**Total Budget:** \$750,000  
**USGBC LEED:** N/A

**Council District:** 4  
**Estimated Start Date:** 3rd Qtr. 2006  
**Estimated End Date:** 2nd Qtr. 2012

**Description:** The 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:** \$5,000,000  
**Total Budget:** \$65,000,000  
**USGBC LEED:** N/A

**Council District:** 4  
**Estimated Start Date:** 3rd Qtr. 2011  
**Estimated End Date:** 4th Qtr. 2019

**Description:** This reserve will set aside future funding for the Plant master plan and Improvements project.

---

**Project Name:** Secondary and Nitrification Clarifier Rehabilitation and Upgrade  
**5-Year CIP Budget:** \$4,000,000  
**Total Budget:** \$19,000,000  
**USGBC LEED:** N/A

**Council District:** 4  
**Estimated Start Date:** 4th Qtr. 2008  
**Estimated End Date:** 2nd Qtr. 2018

**Description:** This project will include systematic rehabilitation of existing secondary and nitrification clarifiers, including coating of concrete and rehabilitation of clarifier mechanisms. This project will maintain the integrity and ensure the reliability of the existing system.

---

**Water Pollution Control Capital Program**  
**2008-2012 Adopted Capital Improvement Program**  
**Summary of Projects that Start after 2007-2008**

---

<b>Project Name:</b> South Bay Water Recycling Water Storage Facility	<b>Council District:</b> 4
<b>5-Year CIP Budget:</b> \$6,000,000	<b>Estimated Start Date:</b> 3rd Qtr. 2008
<b>Total Budget:</b> \$6,000,000	<b>Estimated End Date:</b> 2nd Qtr. 2010
<b>USGBC LEED:</b> N/A	

**Description:** This project will construct a 4 million gallon recycled water storage facility at the WPCP. The storage facility will allow the WPCP to take unit processes off line for routine maintenance and/or during emergency situations without adversely impacting either quality or quantity of recycled water delivered to system customers.

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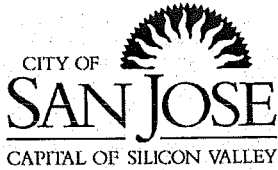
<b>Project Name:</b> Warehousing Facility Additions	<b>Council District:</b> 4
<b>5-Year CIP Budget:</b> \$600,000	<b>Estimated Start Date:</b> 4th Qtr. 2010
<b>Total Budget:</b> \$600,000	<b>Estimated End Date:</b> 4th Qtr. 2011
<b>USGBC LEED:</b> N/A	

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

---







# Memorandum

**TO: TREATMENT PLANT ADVISORY  
COMMITTEE**

**FROM: John Stufflebean**

**SUBJECT: 2007-2008 PROPOSED  
OPERATING BUDGET**

**DATE: May 4, 2007**

This memorandum serves to transmit the 2007-08 Proposed Budget for the Environmental Services Department and the Treatment Plant Operating Fund.

During the previous five budget cycles, the Treatment Plant Operating Budget has increased a total of 6%. The proposed 2007-08 budget, however, reflects a significant increase over prior years at 8.5%. A portion of these increases are fixed personnel costs and reflect not only cost-of-living adjustments associated with the various labor agreements, but also the well publicized increases in health care and pension costs facing numerous California local governments and organizations.

The other portions of this proposed budget are the proposals to increase the number of full-time employees dedicated to addressing infrastructure issues at the Plant. Over the past decade, significant investments have been made to create and expand the South Bay Water Recycling program. The costs associated with this program, coupled with the lack of sufficient rate increases over the past several years, have left fewer funds available for replacement and rehabilitation of existing assets associated with the treatment process. With a significant percentage of these assets approaching and or beyond their useful years of service, the need for increased attention to aspects such as preventative maintenance and asset management has reached a level of urgency.

Many of the current year proposals are a direct response to these concerns and are intended to be a comprehensive approach towards the incorporation of programs that deliver long-term benefits for the Plant's overall infrastructure integrity. These include additions to, or the creation of programs such as: asset management, preventive maintenance, and an effort to record and consolidate the Plant's as-built records/drawings.

We hope you find this report informative and we are happy to answer any further questions you might have.

**JOHN STUFFLEBEAN**  
Director, Environmental Services Department



# PROPOSED

## SAN JOSE / SANTA CLARA WATER POLLUTION CONTROL PLANT

700 Los Esteros Road  
San Jose, California 95134

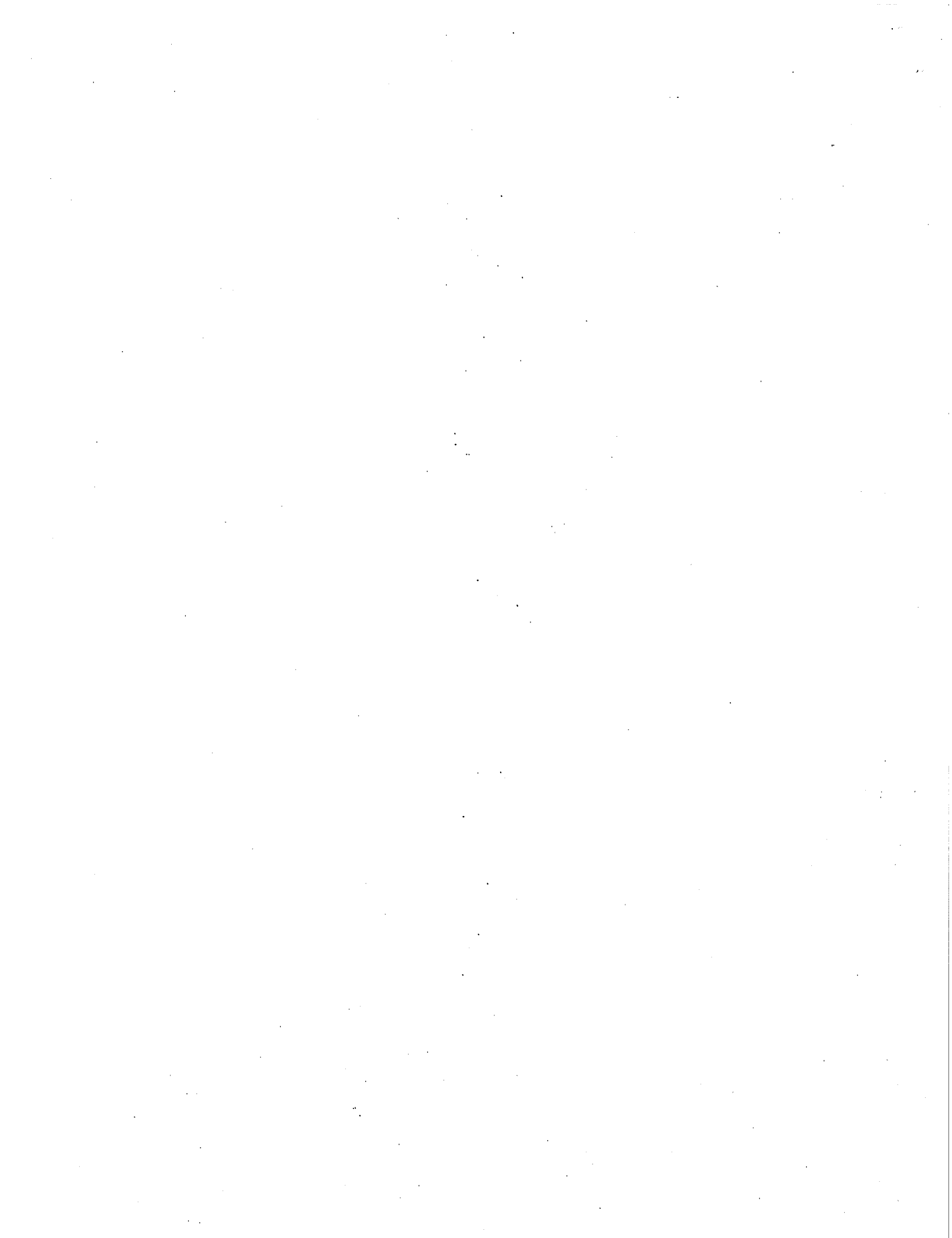
2007 - 2008

### Operating & Maintenance Budget

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

**TO**  
**Treatment Plant Advisory Committee**

Patricia Mahan	(Chairperson)	Mayor, City of Santa Clara
Nora Campos		Councilmember, City of San Jose
Curtis Harrison		Boardmember, Cupertino Sanitary District
Bob Livengood		Councilmember, City of Milpitas
Diane McNutt		Boardmember, West Valley Sanitation District
Kevin Moore		Councilmember, City of Santa Clara
Chuck Reed		Mayor, City of San Jose
Deanna Santana		Deputy City Manager, 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**

700 Los Esteros Road  
San Jose, California 95134

**2007-2008**

**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*

**BUDGET SUMMARY**

	Adopted 06-07	Proposed 07-08	Change
Treatment Plant Operating Fund Budget	69,069,393	74,974,463	8.5%
ESD Authorized Positions	332.51	351.76	5.8%

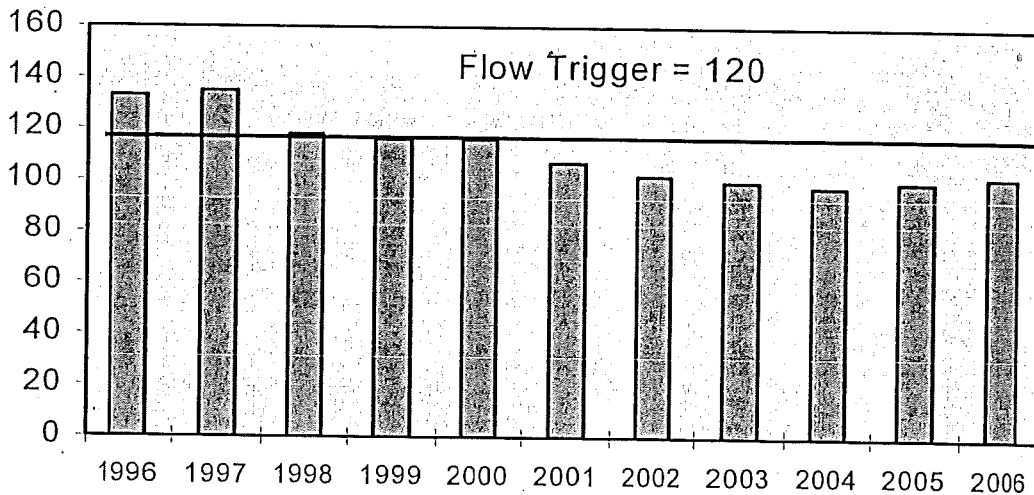
**BUDGET HIGHLIGHTS 2007-2008**

A rate increase of 9% to the 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 22 additional positions are proposed to address asset management (5.0), industrial safety (1.0), preventative maintenance (5.0), Plant expansion and reliability (3.0), as-built drawings (5.0), HVAC staffing ( 1.0), additional lab staffing (2.0)



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



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

**TREATMENT PLANT OPERATING FUND  
BUDGET SUMMARY**

Fund Budget Summary	2005-06 Actual Expenses	2006-07 Adopted Budget	2007-08 Forecast Budget	2007-08 Proposed Budget
<b>Operating Expenses</b>				
Personal Services	30,346,063	34,439,709	36,386,072	38,098,325
Non-personal Expenses	23,550,801	25,184,781	26,414,297	26,537,826
Inventory	259,904	400,000	400,000	400,000
Overhead	4,645,548	5,096,523	5,489,317	5,489,317
NCH Debt Service	198,648	724,235	710,094	710,094
GASB (43/45)				99,998
Workers' Compensation	1,265,442	650,000	650,000	650,000
City Services	1,099,832	874,145	928,619	921,903
<b>Total Operating Expenses</b>	<b>61,366,238</b>	<b>67,369,393</b>	<b>70,978,399</b>	<b>72,907,463</b>
<b>Other Expenses</b>				
Equipment	112,417	0	0	367,000
Contingency	0	1,700,000	1,700,000	1,700,000
<b>TOTAL EXPENSES</b>	<b>\$61,478,655</b>	<b>\$69,069,393</b>	<b>\$72,678,399</b>	<b>\$74,974,463</b>

**ESTIMATED COST DISTRIBUTION**

2007-08 Estimated Total Gallons Treated (MGD)	(1) Percent of Total Sewage Treated	City / District	2007-08 Projected
25,093.662	65.001	City of San Jose (3)	\$50,108,431
5,442,299.000	12.44	City of Santa Clara	8,838,351
<b>30,535,961.000</b>	<b>77.441</b>	<b>Sub-Total</b>	<b>\$58,946,782</b>
3,509.436	9.143	West Valley Sanitation District	6,495,904
2,034.000	5.331	Cupertino Sanitary District	3,787,560
2,427.672	6.143	City of Milpitas	4,364,469
560.232	1.499	Sanitation District # 2 - 3	1,065,007
116.029	0.312	Burbank Sanitary District	221,669
49.597	0.131	Sunol Sanitary District	93,073
<b>8,696.966</b>	<b>22.559</b>	<b>Sub-Total</b>	<b>\$16,027,682</b>
<b>39,232.927</b>	<b>100.0</b>	<b>TOTAL (2)</b>	<b>\$74,974,464</b>

(1) Composite of four parameters (flow, BOD, SS, ammonia). Source 2007-08 Revenue Program.

(2) Includes \$1,700,000 in contingency funds.

(3) Includes \$3,926,625 worth of In-Lieu of Tax fees. These costs are charged only to San Jose.

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

## OVERVIEW

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

- Manage Wastewater
- Manage Recycled Water
- Manage Urban Runoff Quality
- Manage Recycling and Garbage Services
- Manage Potable Water
- Protect Natural & Energy Resources

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 2007-08 Proposed Treatment Plant Operating Fund Budget recommends an 8.5% increase over the 2006-07 Adopted Budget. This increase represents additional costs for benefits and retirement contributions, increased energy and chemical costs for the Recycled Water and Wastewater categories, and \$2.6 million in additional budget proposals.

Although the majority of the operating expenditures associated with this fund have followed a stable and predictable rate of inflation, there have been several items that have exceeded expenditure projections during this period. Most notable among these has been the increase in energy costs over the past five years. Over the past six years, natural gas and electricity costs at the treatment plant have risen 35%, with natural gas prices continuing to rise at an annual average of more than 7%. Total energy costs for the treatment plant now represent approximately one-third of all non-personal costs.

Other items that have exceeded the general rate of inflation include vehicle and facility maintenance costs, workers' compensation costs, retirement, and other personnel costs.

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

## OVERVIEW CONTINUED

### BUDGET SUMMARY

Department Budget Summary	2005-06 Actual 1	2006-07 Adopted 2	2007-08 Forecast 3	2007-08 Proposed 4	% Change (2 to 4)
<b>Dollars by Core Services</b>					
Manage Wastewater	\$ 50,096,410	\$ 52,631,170	\$ 55,782,457	\$ 58,385,239	10.9%
Manage Recycled Water	\$ 2,457,772	\$ 3,929,254	\$ 4,310,582	\$ 4,310,582	9.7%
Protect Natural & Energy Resources	\$ 785,038	\$ 2,492,158	\$ 2,197,244	\$ 2,197,244	(11.8%)
Strategic Support	\$ 5,207,921	\$ 5,955,359	\$ 5,879,712	\$ 5,879,712	(1.3%)
Total	\$ 58,547,141	\$ 65,007,941	\$ 68,169,995	\$ 70,772,777	8.9%
<b>Dollars by Category</b>					
Personal Services					
Salaries/Benefits	\$ 29,605,427	\$ 33,818,504	\$ 35,744,037	\$ 37,456,290	10.8%
Overtime	\$ 740,635	\$ 621,205	\$ 642,035	\$ 642,035	3.4%
Subtotal	\$ 30,346,062	\$ 34,439,709	\$ 36,386,072	\$ 38,098,325	10.6%
Non-personal/Equipment	\$ 28,201,079	\$ 30,568,232	\$ 31,783,923	\$ 32,674,452	6.9%
Total	\$ 58,547,141	\$ 65,007,941	\$ 68,169,995	\$ 70,772,777	8.9%
<b>Authorized Positions</b>	325.51	332.51	334.76	351.76	5.8%

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

## Performance and Resource Overview

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**T**he principal performance measure in the treatment of wastewater is the “Cost-per-million-gallons-treated.” For the past several years, significant declines in influent coupled with increasing maintenance costs associated with aging infrastructure, have resulted in the escalating value of this measure

In response to this trend, two new programs are proposed for next fiscal year. First is the development of an asset management program in order to develop a comprehensive data-driven strategy to address long-term capital needs within the Water Pollution Control Plant. And second, the enhancement of a preventive maintenance team that can develop a systematic approach, with dedicated personnel, to ensure a more thorough and timely maintenance cycle for all major assets. Both programs are intended to deliver long-term savings, as in other similar industrial facilities, by committing resources to extending the useful life of assets and planning and coordinating the rehabilitation and replacement of those assets in the most cost-effective manner possible.

Another key performance measure is the “Million gallons per day discharged to the Bay during average dry weather season.” The 2005-2006 fiscal year marked the second year in which dry-weather influent and effluent was higher than the previous year. This is likely the result of an economy that has been turning around and reversing the downward trend in plant inflows for the years immediately following the local recession, which began in 2000-2001. This will place a greater emphasis and importance on the efforts aimed at expanding the recycled water consumer base. This increase is minimal enough that projections for 2006-2007 and 2007-2008 are expected to continue to meet the Regional Water Quality Control Board’s permit requirements and flow trigger of 120 million gallons per day (mgd). If average discharges from the Water Pollution Control Plant exceed this level during the May through October dry-weather season; however, the

# San Jose/Santa Clara Water Pollution Control Plant







*Environmental Services Department*

Core Service: Manage Wastewater

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

Board could order a number of more stringent measures, such as a building moratorium, that could threaten the area's long-term economic growth.

For 2006-2007, the remaining performance measures are projected to meet or exceed target.

Manage Wastewater Performance Summary	2005-2006 Actual	2006-2007 Target	2006-2007 Estimated	2007-2008 Target
 Millions of gallons per day discharged to the Bay during average dry weather season State order: 120 mgd or less*	100	105	102	105
 % 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	94%	90%	95%	95%
 Cost per million gallons treated	\$794	\$885	\$890	\$955
 % of customers (permitted dischargers) satisfied or very satisfied with service, based on reliability and pre-treatment services	95%	90%	N/A**	90%

*Changes to Performance Measures from 2006-2007 Adopted Budget: No*

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

\*\* No survey was conducted on 2006-2007.

# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

Core Service: Manage Wastewater

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

Activity & Workload Highlights	2005-2006 Actual	2006-2007 Target	2006-2007 Estimated	2007-2008 Target
Average millions of gallons per day treated	121	119	118	120
Total population in service area	1,356,300	1,346,966	1,357,600	1,362,205
Total pounds of suspended solids removed (in millions)	110	105	112	115

*Changes to Activity & Workload Highlights from 2006-2007 Adopted Budget: No*

Manage Wastewater Resource Summary	2005-2006 Actual 1	2006-2007 Adopted 2	2007-2008 Forecast 3	2007-2008 Proposed 4	% Change (2 to 4)
<b>Core Service Budget *</b>					
Personal Services	\$ 24,364,791	\$ 27,298,911	\$ 29,219,573	\$ 30,931,826	13.3%
Non-Personal/Equipment	25,731,619	25,332,259	26,562,884	27,453,413	8.4%
Total	\$ 50,096,410	\$ 52,631,170	\$ 55,782,457	\$ 58,385,239	10.9%
Authorized Positions	260.68	267.88	269.85	286.85	7.1%

\* 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 this budget.

# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

Core Service: Manage Wastewater

## Budget Changes By Core Service

Proposed Core Service Changes	Positions	Treatment Plant Appropriations
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### RELIABLE UTILITY INFRASTRUCTURE

**1. Vehicle Maintenance Staffing (4,000)**

This action would generate city-wide vehicle maintenance and operations cost savings totaling \$69,154 (\$55,323 in the General Fund), resulting from a recommended elimination of a vacant Equipment Mechanic Assistant position (vacant since June 2004) in the General Services Department. The cost savings in the Environmental Services Department, Manage Wastewater Core Service is \$4,000. No impacts to current service levels are anticipated with this reduction because of a decreased fleet size and the end, in 2006-2007, of the multi-year freeze on general fleet replacements, which has resulted in the average age of the fleet decreasing. Vehicle replacements, however, are still subject to an exemption process managed by both the General Services Department and the City Manager's Office. (Ongoing savings: \$4,000)

**Performance Results:**

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

**2. Plant Infrastructure Management Program 5.00 792,849**

This proposal would fund the addition of five positions: 1.0 Financial Analyst, 1.0 Information System Analyst, 1.0 Program Manager, 2 Associate Engineering Technicians. Asset Management is the combination of financial, economic, engineering, and management practices applied to physical assets with the objective of providing the required level of service in the most cost effective manner. It is a data driven program that tracks asset life cycle cost and condition to help managers make better decisions on how to expend limited resources. (Ongoing costs: \$732,304)

**Performance Results:**

**Cost** Reduces labor hour costs per work order by efficiently and effectively addressing current and future capital maintenance, rehabilitation, and improvement projects.

**3. Plant Preventive Maintenance Program 5.00 660,518**

This proposal would fund the addition of 1.0 Electrician, 1.0 Instrument Control Technician, and 3.0 Plant Mechanic for a five-year, aggressive, preventive maintenance program to supplement the current maintenance program at the Plant. One of the most essential maintenance elements of an industrial facility, such as the Plant, is the existence of a comprehensive preventive maintenance program. The primary goal of such a program is the reduction of breakdown/emergency repairs, increased planned maintenance work, reduced downtime costs, and the elimination of root causes of problems, all of which help create a more efficient facility that can better achieve high-quality wastewater effluent. (Ongoing costs: \$585,901)



# 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
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**Performance Results:**

**Cost** Reduces labor hour costs per work order by efficiently and effectively addressing current and future capital maintenance, rehabilitation, and improvement projects.

**4. Plant As-Built Drawing Program** 5.00 557,889 \*

This proposal would fund the addition of 2.0 Electrician, 1.0 Senior Engineering Technician, 1.0 Senior Engineer, and 1.0 Associate Engineer to update and maintain over 6,000 drawings that represent the as-built conditions at the Plant. The proposed program will allow for a creation of a master set of record drawings for the Plant and an ongoing as-built drawing program to provide an organized and sustainable system for use with the master set of Plant drawings. (Ongoing costs: \$563,031)

*\*This proposal is funded entirely through the Treatment Plant Capital Fund (512)*

**Performance Results:**

**Cost** Reduces labor hour costs per work order by efficiently and effectively addressing current and future capital maintenance, rehabilitation, and improvement projects.

**5. Plant Expansion and Reliability Improvements** 3.00 461,006

This proposal would fund the addition of 1.0 Electrician, 1.0 Senior Plant Operator, and 1.0 Instrument Control Technician to support the various expansions and reliability improvement projects that have been implemented over the past decade. The proposed staffing would provide necessary support to operate and maintain the additional assets acquired or built, such as the Recycled Water Pumping Stations, Pond A-18, and the New Parallel Headworks. (Ongoing costs: \$379,174)

**Performance Results:**

**Cost** Reduces labor hour costs per work order by efficiently and effectively addressing current and future capital maintenance, rehabilitation, and improvement projects.

**6. Plant Industrial Safety Program** 1.00 153,511

This proposal would provide funding for the addition of 1.0 Industrial Safety Engineer (Associate Engineer) to establish, manage, and oversee an enhanced safety program at the San José/Santa Clara Water Pollution Control Plant. This position is an enhancement of the Department's current safety personnel in that the proposed position is assigned directly to the Plant's maintenance section to work on a daily basis within the trades-groups in order to develop policies and practices that ensure the Plant's full compliance with Cal-OSHA standards. (Ongoing costs: \$148,823)

# 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
-------------------------------	-----------	--------------------------------

### RELIABLE UTILITY INFRASTRUCTURE (CONT'D.)

**Performance Results:**

**Quality** Ensure the Treatment Plant's full compliance with Cal-OSHA standards.

**7. Plant Master Plan Outreach** **100,000**

This proposal would fund the cost of outreach efforts associated with the Plant Master Planning effort and continue the funding into the near future to provide the public with an understanding of Plant operations and benefits. This includes meeting the public's request for tours of the Plant; providing video and printed material to the public for better understanding of how we treat sewage to protect the environment, local economy and public health; and also building community understanding and support for necessary infrastructure improvements. (Ongoing costs: \$0)

**Performance Results:**

**Quality** This action will facilitate the public's understanding and acceptance of the Treatment Plant, and build community understanding and support for necessary infrastructure improvements.

**8. Diesel Retrofit Mandate Compliance** **90,000**

This proposal would provide funding for the Fleet Management Division of the General Services Department to retrofit three trucks in the Environmental Services Department fleet in order to reduce emissions. This funding is necessary as a result of recent State legislation requiring that public agencies and utility companies retrofit their entire fleet of on-road, heavy-duty, diesel fueled vehicles by the end of 2011. This funding, along with funding in the Airport Department for three of their vehicles, will bring 20% of the City's fleet into compliance in 2007-2008. (Ongoing costs: \$0)

**Performance Results:**

**Quality** This action will reduce emissions produced by the City's on-road, heavy-duty, diesel fleet, thus producing less pollution.

**9. Plant HVAC Management Program** **1.00** **56,321**

This proposal would provide funding for the addition of 1.0 Air Conditioning Mechanic position at the San José/Santa Clara Water Pollution Control Plant to provide support to the Environmental Services Building (ESB). The Plant's maintenance staff did not have enough HVAC staff to adequately service the building. The ESB has complex HVAC due to the large and complex laboratory that requires significant venting and air handling. (Ongoing costs: \$39,631)

**Performance Results:**

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

# 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>RELIABLE UTILITY INFRASTRUCTURE (CONT'D.)</b>		
<b>10. Infrastructure Mapping Equipment</b>		<b>33,320</b>
<p>This proposal would fund the purchase of an off-road capable vehicle with amber warning lights and signals to assist with ongoing infrastructure mapping associated with the San José-Santa Clara Water Pollution Control Plant, South Bay Water Recycling Program, and Municipal Water System. (Ongoing costs: \$1,320)</p>		
<b>Performance Results:</b>		
<p><b>Cost</b> Reduces labor hour costs per work order by efficiently and effectively addressing current and future capital maintenance, rehabilitation, and improvement projects.</p>		
<b>HEALTHY STREAMS, RIVERS, MARSH AND BAY</b>		
<b>11. Plant Lab Staffing</b>	<b>2.00</b>	<b>187,565</b>
<p>This proposal would fund for additional 1.0 Laboratory Technician and 1.0 Chemist to address increased workloads for Laboratory support from the Water Pollution Control Plant and Watershed Protection unit. The Chemist will be dedicated to quality assurance/quality control responsibilities and be available for sample receiving or bench scale pilot studies when requested. The Lab Technician will be utilized to help bring in-house the 608 (Pesticides and Polychlorinated Biphenyls) and 625 (semi-volatiles) analyses currently being sent out to contract labs. (Ongoing costs: \$189,588)</p>		
<b>Performance Results:</b>		
<p><b>Quality</b> Ensures that the City is in compliance with the NPDES permit and improves the quality of runoff.</p>		
<b>12. Pretreatment Program Staffing</b>		<b>86,692</b>
<p>This proposal will fund one temporary staff position for one year to ensure adequate staffing to implement routine program activities and maintain customer compliance while also implementing an aggressive staff training program required to meet the response to the 2005 EPA Administrative Order. (Ongoing costs: \$0)</p>		
<b>Performance Results:</b>		
<p><b>Quality</b> Ensures that the City is in compliance with the NPDES permit and improves the quality of runoff based upon the 2005 EPA Administrative Order.</p>		
<b>2007-2008 Proposed Core Service Changes Total</b>	<b>17.00</b>	<b>2,617,782</b>

# 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:

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

## Performance and Resource Overview

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**T**he City's investment in South Bay Water Recycling (SBWR) and its expansion is helping the City protect endangered species habitat while providing an alternate supply of high-quality water for turf irrigation and other purposes. This effort supports the City's economic development goals and the associated growth, while keeping the Water Pollution Control Plant's discharges to South San Francisco Bay within the wastewater discharge flow trigger of 120 million gallons per day (mgd) set by the Regional Water Quality Control Board.

Over 500 SBWR customers are currently using recycled water in a variety of ways including irrigation at parks, schools, golf courses, and businesses; landscape features such as ponds and fountains; water processing for manufacturing and cooling towers; and irrigation of local crops. As more customers are added to the system, the amount of water diverted from discharge into the South San Francisco Bay will continue to increase and approach the system's transmission capacity. The recent addition of a new power plant in Santa Clara and the Metcalf Energy Center have increased recycled water consumption by as much as 5 million gallons a day for the summer months.

Beginning in 2004-2005, SBWR wholesale water rates were indexed to the Santa Clara Valley Water District (SCVWD) rate for untreated water, currently \$435 per acre-foot (AF). In 2007-2008 the SCVWD is proposing to increase the untreated water rate by \$35 per AF. Consistent with the SBWR wholesale rate ordinance, the wholesale price of recycled water will rise dollar for dollar with the increase approved by the SCVWD.







The first performance measure, "Millions of gallons per day diverted from flow to the Bay for beneficial purposes during the dry weather period" is estimated to end the year above targeted levels due to higher water use by industrial customers and connection of a number of new landscape customers.

# 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 Performance Summary	2005-2006 Actual	2006-2007 Target	2006-2007 Estimated	2007-2008 Target
 Millions of gallons per day diverted from flow to the Bay for beneficial purposes during the dry weather period*	12.6	13.5	14	15
 Millions of gallons of recycled water delivered annually	2,796	3,000	3,100	3,300
 % 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*	11%	10%	12%	12%
 Cost per million gallons of recycled water delivered	\$1,012	\$1,100	\$1,100	\$1,100
 % of recycled water customers rating service as good or excellent, based on reliability, water quality, and responsiveness	69%**	75%**	N/A**	75%

*Changes to Performance Measures from 2006-2007 Adopted Budget: No*

- \* Dry weather period defined as lowest 3 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 2005-2006 Recycled Water Customer Satisfaction Survey in September 2006. The next scheduled survey will cover the 2007-2008 fiscal year and will be reported in fall 2008.

Activity & Workload Highlights	2005-2006 Actual	2006-2007 Forecast	2006-2007 Estimated	2007-2008 Forecast
Total number of South Bay Water Recycling customers	536	540	560	600

*Changes to Activity & Workload Highlights from 2006-2007 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	2005-2006 Actual 1	2006-2007 Adopted 2	2007-2008 Forecast 3	2007-2008 Proposed 4	% Change (2 to 4)
<b>Core Service Budget *</b>					
Personal Services	\$ 1,298,573	\$ 1,653,057	\$ 2,053,961	\$ 2,053,961	24.3%
Non-Personal/Equipment	1,159,199	2,250,096	2,256,621	2,256,621	0.3%
Total	<u>\$ 2,457,772</u>	<u>\$ 3,903,153</u>	<u>\$ 4,310,582</u>	<u>\$ 4,310,582</u>	10.4%
Authorized Positions	15.03	15.03	17.33	17.33	15.3%

**Budget Changes By Core Service**

Proposed Core Service Changes	Positions	Treatment Plant Appropriations
NONE		

# 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:

- |  |   |
|--|---|
| <input type="checkbox"/> Protect and Monitor Groundwater Quality | <input type="checkbox"/> Habitat Protection |
| <input type="checkbox"/> NPDES Permits Development               | <input type="checkbox"/> 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, other than water conservation activities, direct services are more limited and the focus is on practicing leadership through education, influence, and coordination.

### Environmentally Preferable Procurement Policy

In February 2007, the Transportation and Environment Committee approved a revised Environmentally Preferable Procurement Policy and staff report on progress made in its implementation. In addition to its support of buying products with recycled content, the new policy includes language in support of the Urban Environmental Accords such as providing locally grown organic food in city facilities and addressing vehicle emissions for fleet purchases, as well as for the City's Green Building Policy by ensuring that all new City funded buildings and major renovations utilize materials and building systems that will help facilitate future in Leadership in Energy and Environmental Design (LEED) certification.

### Energy Efficiency

Energy supply, reliability, and costs continue to be a concern. As part of the Sustainable Energy Policy, San José is increasing its efforts to pursue energy efficiency in City operations. In particular, as part of Mayor and Council direction, the potential use of renewable or solar energy on City facilities will be assessed and explored.

The City is continuing its partnership with PG&E and the California Public Utilities Commission through the Silicon Valley Energy Watch Program (SVEW). The 2007-2008 SVEW Program will provide targeted energy education and outreach services within the South Bay/Silicon Valley. Through this new agreement, the City will develop outreach to increase energy efficiency program participation, based on the unique needs of the South Bay/Silicon Valley. Acting as a Regional Coordinator for PG&E Portfolio Programs, the City will work closely with PG&E, local government partnerships, and third party energy efficiency providers to augment the success of

# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

Core Service: Protect Natural and Energy Resources

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

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regional programs through enhanced coordination. This will reduce customer confusion and lost opportunities, while increasing program permeation in customer markets.

### **Water Conservation**

The Water Efficiency Program (WEP) is maintaining modest flow reduction efforts. Flows to the Water Pollution Control Plant remain appreciably below the trigger of 120 mgd. As the effluent flow remains below the trigger level, WEP staffing will continue at the reduced level approved in the 2006-2007 Adopted Operating Budget.

The cost sharing with the Santa Clara Valley Water District (SCVWD) on indoor water conservation programs continues to leverage funds and achieve increased water conservation with fewer dollars. The City is increasing its contribution to District programs over the next year.

WEP also continues to serve the residential sector through administration of the Neighborhood Preservation Water Conservation Program. Funded by the SCVWD through the cost sharing agreement, financial assistance is provided to low-income San José residents identified under the

City's Neighborhood Preservation Ordinance who upgrade their landscapes using water conserving landscape materials and plants. WEP also provides water conservation information to residents as well as high efficiency toilet and washer rebates through a cost sharing agreement with SCVWD.

### **Support for San José Businesses**

In 2007-2008, staff will continue to lead and support Environmental Service's efforts to work more effectively with the business community. ESD's Business Environmental Support Team (BEST) serves the business sector through collaborative efforts offering information, and incentives that support San José businesses in becoming more resource-efficient while improving our environment. In addition to Water Efficient Technology (WET) rebates, BEST collaborates with the County Green Business Program, local business associations, and the Santa Clara Valley Water District's Water Efficiency Program to provide San José businesses with more comprehensive input regarding environmental management practices that benefit businesses and the environment.

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 near the targeted 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.)

Protect Natural and Energy Resources Performance Summary	2005-2006 Actual	2006-2007 Target	2006-2007 Estimated	2007-2008 Target
 (Water) % of annual goal for gallons of water conserved tributary-wide	108%	100%	107%	100%
 (Water) Net cost per million gallons per day of water conserved through City programs*	\$1.93	\$2.00	\$2.05	\$2.10
 (Water) % of residents demonstrating water conservation knowledge	No Survey	30%	29%	30%

*Changes to Performance Measures from 2006-2007 Adopted Budget: Yes<sup>1</sup>*

<sup>1</sup> Changes to Performance Measures from 2006-2007 Adopted Budget:

⊖ The Water Cost measure was revised to provide more meaningful and understandable information to residents.

\* Cost after Santa Clara Valley Water District cost-sharing.

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

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

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

Activity & Workload Highlights	2005-2006 Actual	2006-2007 Forecast	2006-2007 Estimated	2007-2008 Forecast
Millions of gallons per day conserved (tributary area-wide)	0.122	0.150	0.161	0.150
Cumulative millions of gallons per day conserved since July 1992 (tributary area-wide)	7.312	7.432	7.473	7.623

*Changes to Activity & Workload Highlights from 2006-2007 Adopted Budget: No*

Protect Natural and Energy Resource Summary	2005-2006 Actual 1	2006-2007 Adopted 2	2007-2008 Forecast 3	2007-2008 Proposed 4	% Change (2 to 4)
<b>Core Service Budget *</b>					
Personal Services	\$ 371,742	\$ 658,422	\$ 425,323	\$ 425,323	(35.4%)
Non-Personal/Equipment	413,296	1,778,465	1,771,921	1,771,921	(0.4%)
<b>Total</b>	<b>\$ 785,038</b>	<b>\$ 2,436,887</b>	<b>\$ 2,197,244</b>	<b>\$ 2,197,244</b>	<b>(9.8%)</b>
 Authorized Positions	 5.70	 5.70	 3.16	 3.16	 (44.6%)

**Budget Changes By Core Service**

Proposed Core Service Changes	Positions	Treatment Plant Appropriations
NONE		

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

**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, and GIS mapping activities.

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 2006-2007 and FY 2007-2008.

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

Program	FY 2006-07	FY 2007-08
Marketing Communications	38%	43%
Municipal Environmental Compliance	40%	40%
Policy & Planning	64%	64%
Management & Support Services	75%	74%
Water Efficiency Program	98%	57%

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

**Strategic Support**

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

Strategic Support Resource Summary	2005-2006 Actual 1	2006-2007 Adopted 2	2007-2008 Forecast 3	2007-2008 Proposed 4	2007-2008 % Change (2 to 4)
<b>Core Service Budget *</b>					
Personal Services	\$ 4,310,956	\$ 4,757,153	\$ 4,687,215	\$ 4,687,215	(1.5%)
Non-Personal/Equipment	896,965	1,198,206	1,192,497	1,192,497	(0.5%)
<b>Total</b>	<b>\$ 5,207,921</b>	<b>\$ 5,955,359</b>	<b>\$ 5,879,712</b>	<b>\$ 5,879,712</b>	<b>(1.3%)</b>
Authorized Positions	42.74	44.10	44.42	44.42	0.7%

**Strategic Support Budget Changes**

Proposed Changes	Positions	Treatment Plant Appropriations
NONE		