# SAN JOSE / SANTA CLARA WATER POLLUTION CONTROL PLANT

700 Los Esteros Road San Jose, California 95134

2005-2006

PROPOSED

**Operating & Maintenance Budget** 

Environmental Services Department City of San Jose



# Memorandum

TO:TREATMENT PLANT ADVISORY COMMITTEE

FROM: Carl W. Mosher

SUBJECT: 2005-2006 PROPOSED OPERATING BUDGET

**DATE:** May 3, 2005

This memorandum serves to transmit the 2005-06 Proposed Budget for the Environmental Services Department and the Treatment Plant Operating Fund.

This year's TPAC Budget continues the format it has been presented in for the past five years, and reflects the City's progress in the Investing in Results process. The budget marks the fifth year of data for these measures. There are no changes to any of the measures for the current fiscal year following last year's comprehensive review and modification of several measures. This data continues to be used to better analyze and maximize operational efficiency and effectiveness at the Treatment Plant and in other programs funded by the Treatment Plant Operating Fund.

CARL W. MOSHER

Director, Environmental Services Department

# **PROPOSED**

# SAN JOSE / SANTA CLARA WATER POLLUTION CONTROL PLANT

700 Los Esteros Road San Jose, California 95134

2005 - 2006

# **Operating & Maintenance Budget**

Submitted by
Carl W. Mosher, Director
Environmental Services Department
City of San Jose

# TO **Treatment Plant Advisory Committee**

Patricia Mahan	(Chairperson)	Mayor, City of Santa Clara
Jim Beall	•	Boardmember, West Valley Sanitation District
Cindy Chavez		Councilmember, City of San Jose
Ron Gonzales		Mayor, City of San Jose
Curtis Harrison		Boardmember, Cupertino Sanitary District
Jim Holgersson		Deputy City Manager, City of San Jose
Bob Livengood		Councilmember, City of Milpitas
Jaime Matthews		Councilmember, City of Santa Clara
Chuck Reed		Councilmember, City of San Jose

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

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Environmental Services Department

#### **BUDGET SUMMARY**

	Adopted 04-05	Proposed 05-06	Change
Treatment Plant Operating Fund Budget	63,819,032	65,408,601 -	2.5%
ESD Authorized Positions	324.07	325.93	0.6%

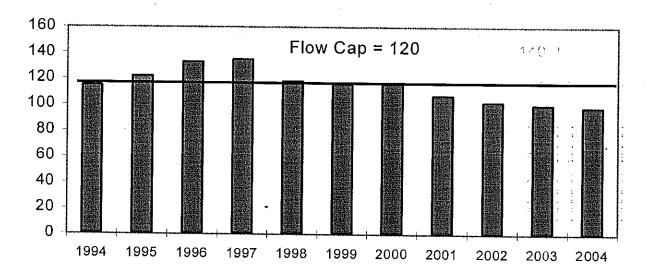
#### **BUDGET HIGHLIGHTS 2005-2006**

The second year of a three year 4.5% Council-approved rate increase strategy to the Sewer Service and Use Charge fees is proposed to adequately fund maintenance and rehabilitation of the sanitary sewer system, Water Pollution Control Plant, and the South Bay Water Recycling program.

Refinancing of the 1995 Clean Water Financing Authority (CWFA) bonds associated with the South Bay Water Recycling program will save approximately \$10 million over the remaining life of the bonds and an estimated \$2 million savings in 2005-2006.

Budget yte

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



Environmental Services Department

# TREATMENT PLANT OPERATING FUND BUDGET SUMMARY

TOTAL EXPENSES	\$56,047,917	\$63,819,032	\$65,408,601	\$65,408,601
Contingency —	. 0	1,700,000	1,700,000	1,700,000
Equipment	693,216	0	0	0
Other Expenses				
Total Operating Expenses	55,354,701	62,119,032	63,708,601	63,708,601
City Services	1,171,686	1,332,378	1,188,005	1,188,005
Workers' Compensation	774,671	955,000	974,100	974,100
Overhead	4,674,235	3,566,072	4,645,548	4,645,548
Inventory	242,027	400,000	400,000	400,000
Non-personal Expenses	20,478,560	25,210,510	24,979,783	24,979,783
Personal Services	28,013,522	30,655,072	31,521,165	31,521,165
Operating Expenses	•			
Summary	Expenses	Budget	Budget	Budget
Budget	_ Actual	Adopted	Forecast	Proposed
Fund	2003-04	2004-05	2005-06	2005-06

# **ESTIMATED COST DISTRIBUTION**

(1) Percent of Total Sewage Treated	City / District	2005-06 Projected
6 <b>4</b> .442 12.799	City of San Jose (3) City of Santa Clara	\$43,40 <b>7</b> ,083
77.241	Sub-Total	\$51,326,466
9.339	West Valley Sanitation District	5,778,508
5.050		3,124,688
6.382	City of Milpitas	3,948,864
1.523	Sanitation District # 2 - 3	942,356
0.325		201,094
0.140	Sunol Sanitary District	86,625
22.759	Sub-Total	\$14,082,135
100.0	TOTAL (2)	\$65,408,601
	Percent of Total Sewage Treated 64.442 12.799 77.241 9.339 5.050 6.382 1.523 0.325 0.140 22.759	Percent of Total Sewage Treated  City / District  64.442 City of San Jose (3) 12.799 City of Santa Clara  77.241 Sub-Total  9.339 West Valley Sanitation District 5.050 Cupertino Sanitary District 6.382 City of Milpitas 1.523 Sanitation District # 2 - 3 0.325 Burbank Sanitary District 0.140 Sunol Sanitary District  22.759 Sub-Total

<sup>(1)</sup> Composite of four parameters (flow, BOD, SS, ammonia). Source 2005-06 Revenue Program.

<sup>(2)</sup> Includes \$1,700,000 in contingency funds.

<sup>(3)</sup> Includes \$3,533,585 worth of In-Lieu of Tax fees. These costs are charged only to San Jose.

Environmental Services Department

#### **OVERVIEW**

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

- □ 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 2005-06 Proposed Treatment Plant Operating Fund Budget recommends a 2.5% increase over the 2004-05 Adopted Budget. This increase represents additional costs for benefits and retirement contributions, increased energy costs for the Recycled Water and Wastewater categories and an increase of \$1.1 million for City overhead costs.

The 2005-06 Proposed Budget realizes the second of three annual rate increases of 4.5% each for the City's Sewer Service and Use Charge Fund. This fund is the City's source of revenue for its share of Treatment Plant Operating Fund. The combined factors of ten previous years without a rate increase, standard inflationary costs associated with operations and maintenance, and deficit spending within the City's Sewer Service and Use Charge Fund dictate the need for such rate increases. Before the approval of these increases, the revenue growth in each of these sectors was sufficient to keep pace with the associated inflation factors for the Treatment Plant Operating Fund. Moreover, the rate structure and growth allowed a sufficient fund balance to help defer capital costs associated with the next cycle of system maintenance and rehabilitation.

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

#### **OVERVIEW CONTINUED**

During the past several years, however, the Sewer Service and Use Charge Fund has experienced flat or declining revenues in relation to two primary factors. First, the downturn in the economy has slowed revenue growth as residential development has decreased, rendering the growth rate to below 0.5%. Second, and more significantly, industrial and commercial migration from the area has substantially reduced revenues from these sectors.

Specifically, 3.5% of the decreased revenues are the result of six large industrial users that ceased operations in San José between 2000 and 2004, representing a loss of \$2.5 million in annual revenues. The combined impact of the economic downturn and commercial and industrial migration over the past several years has reduced revenues by a level equivalent to 9% from the high point in 1998-1999.

As a result of the trends discussed above, current year projections indicate that expenditures will exceed revenues, resulting in deficit spending by approximately \$2 million; and without the proposed 4.5% rate increase for 2005-2006, such a revenue shortfall would drop the balance below the stated goal of 15% of annual operating expenses.

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 four years. Natural gas and electricity costs at the treatment plant have risen significantly despite numerous energy efficiency programs that have reduced the energy demand per million gallons treated. Although energy prices have stabilized, they remain significantly above 1999-2000 levels. Other items that have exceeded the general rate of inflation include vehicle and facility maintenance costs, workers' compensation costs, and insurance.

As operating expenses are increasing, the Plant's capital infrastructure needs are becoming ever more critical. Over 50% of the Plant's infrastructure exceeds 30 years of age, reflecting the expansion to an advanced wastewater treatment facility in the early to mid 1970's. Several major components of the treatment plant are reaching the end of their useful years of service, thereby creating the need for several critical infrastructure upgrades and rehabilitation projects which are described in the 2006-2010 Proposed Capital Improvement Program.

In addition to the impending rehabilitation projects over the next ten years, it will be necessary to fund a number of planned security projects at the Plant. The most critical project with the greatest budgetary impact is the conversion from gaseous chlorine as the primary disinfection source to alternate methods in order to address security concerns. The completion of the project, estimated for 2005-2006, is projected to increase chemical costs by \$3.5 million, or approximately 5% of current year revenues.

In order to maintain the fund's viability and solvency, fund necessary system operations and maintenance requirements, and address critical infrastructure rehabilitation needs, rate increases of 4.5% are recommended in each of the next two years. Moreover, with respect to current revenue and expenditure trends, and capital infrastructure needs, it is likely that rate increases in the proceeding years will be necessary as well.

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

# **BUDGET SUMMARY**

	 	 					_
Department	2003-04	2004-05		2005-06		2005-06	%
Budget	Actual	Adopted		Forecast		Proposed	Change
Summary	 1	 2		3	,	4 -	(2 to 4)
Dollars by Core Services							
Manage Wastewater	\$ 42,069,892	\$ 44,460,188	\$	46,204,108	\$	46,204,108	3.9%
Manage Recycled Water	\$ 2,743,839	\$ 3,254,983	\$	3,661,492	\$	3,661,492	12.5%
Protect Natural						•	
& Energy Resources	\$ 725,023	\$ 2,553,547	\$	2,337,601	\$	2,337,601	(8.5%)
Strategic Support	\$ 3,888,571	\$ 4,153,224	\$	4,697,747	\$	4,697,747	13.1%
Total	\$ 49,427,325	\$ 54,421,942	\$	56,900,948	\$	56,900,948	4.6%
)	•						
Dollars by Category							
Personal Services						Full 2012/150	r viaco
Salaries/Benefits	\$ 27,678,901	\$ 30,037,108	. \$	30,908,156	\$	30,908,156	2.9%
Overtime	\$ 576,647	\$ 617,964	\$	613,009	\$	613,009	(0.8%)
Subtotal	\$ 28,255,548	\$ 30,655,072	\$	31,521,165	\$	31,521,165	2.8%
Non-personal/Equipment	\$ 21,171,777	\$ 23,766,870	\$	25,379,783	\$	25,379,783	6.8%
Total	\$ 49,427,325	\$ 54,421,942	\$	56,900,948	\$	56,900,948	4.6%
Authorized Positions	222 64	224.07		20'5 02		60# 55	o inci
Authorized Positions	322.64	324.07		325.93		325.93	0.0

Core Service: Manage Wastewater Environmental Services Department

#### **Core Service Purpose**

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:	• •
	Source Management and Control Operation of Treatment System and Processes Maintain Equipment and Facilities Regulatory Compliance	Regulatory Development and Technical Guidance Process Control Monitoring System Improvements

#### **Performance and Resource Overview**

or the past several years, the key performance issue for this core service has been 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, the Board could order a number of more stringent measures, such as a building moratorium, that could threaten the area's long-term economic growth.

Due to successful conservation programs, the growth of the recycled-water market, and the effect of the economy in reducing the influent to below the effluent trigger, this performance measure is expected to be met without extraordinary efforts for the next several years.

The performance measure of more concern currently is the "Cost per million gallons treated." Although the significant decline in influent over the past several years is a significant driver of the rising cost-per-gallon-treated, the increasing maintenance costs associated with the aging infrastructure at the treatment plant is a growing factor.

In response to this trend last year, seven program positions from within the CSA were converted to mechanical and electrical maintenance positions. This has allowed the facility to address maintenance backlogs, and will also aid in the development of a more comprehensive preventive maintenance program in the next fiscal year. In addition to this, there are several capital maintenance projects within the proposed five-year CIP budget that will address specific components of the Plant and significantly reduce operations and maintenance inflationary costs.

#### Core Service: Manage Wastewater Environmental Services Department

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

In this core service, the Department is projected to meet or exceed its performance measurement targets in 2004-2005. The performance measure "Million gallons per day discharged to the Bay during average dry weather season" is well below targeted levels due to both increased recycled water consumption and the downturn in the economy, which is reflected in the reduction in the Plant's influent. With no indications that this trend is reversing, projections for 2005-2006 indicate that the water discharged to the Bay will remain well below the 120 mgd flow trigger. With the downturn in economy, ESD experienced a similar downturn in the number of permitted industrial dischargers. The Department expects to continue meeting the target in both the percent of inspection completed on time and the percent of customers satisfied or very satisfied with service.

#### Performance Measure Development

No new performance measures were added to this core service.

	Manage Wastewater Performance Summary	2003-2004 Actual	2004-2005 Target	2004-2005 Estimated	2005-2006 Target
<b>©</b>	Millions of gallons per day discharged to the Bay during average dry weather season State order: 120 mgd or less*	100	110	97.5	100
<b>©</b>	% of time pollutant discharge requirements are met or surpassed	100%	100%	100%	100%
<b>©</b>	% of suspended solids removed	99%	99%	99%	99%
•	% of scheduled industrial inspections completed on time	94%	90%	90%	90%
[3]	Cost per million gallons treated	\$752	\$785	\$785	\$820
N	% of customers (permitted dischargers) satisfied or very satisfied with service, based on reliability and pre-treatment services	90%	90%	90%**	90%

Average dry weather season is defined as the lowest three month continuous average between May and October.
 Survey conducted March 2004. Next survey scheduled for 2005-2006.

Core Service: Manage Wastewater Environmental Services Department

# Performance and Resource Overview (Cont'd.)

Activity & Workload Highlights	2003-2004 Actual	2004-2005 Forecast	2004-2005 Estimated	2005-2006 Forecast
Average millions of gallons per day treated	116	116	116	115
Total population in service area	1,304,568	1,316,256	1,316,256	1,333,600
Total pounds of suspended solids removed (in millions)	100	105	105	104

Manage Wastewater Resource Summary	2003-2004 Actual 1	2004-2005 Adopted 2	2005-2006 Forecast 3	2005-2006 Proposed 4	% Change (2 to 4)
Core Service Budget *					·
Personal Services Non-Personal/Equipment	\$ 22,184,600 19,885,292	\$ 24,731,213 19,728,975	\$ 25,098,885 21,105,223	\$ 25,098,885 21,105,223	1.5% 7.0%
Total	\$ 42,069,892	\$ 44,460,188	\$ 46,204,108	\$ 46,204,108	3.9%
Authorized Positions	257.47	262.11	260.68	260,68	(0.5%)

# **Budget Changes By Core Service**

Proposed Core Service Changes	Positions	Appropriations
Bronocod Coro Sorvino Champan	D. Id.	Treatment Plant

NONE

Core Service: Manage Recycled Water Environmental Services Department

#### **Core Service Purpose**

ل	evelop, operate, and maintain a provides a reliable and high qual	recycled water system that reduces effluent to the Bay and ty alternative water supply.
Key	y Operational Services:	
	System Operations and Maintenance Regulatory Compliance	<ul> <li>Customer Connection Services</li> <li>Education and Marketing</li> <li>System Expansion and Development</li> </ul>

#### **Performance and Resource Overview**

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 turf 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 upcoming addition of the Metcalf Energy Center will increase recycled water consumption by as much as 7 million gallons a day for the summer months.

Beginning in 2004-2005, South Bay Water Recycling (SBWR) wholesale water rates were indexed to the Santa Clara Valley Water District (SCVWD) rate for untreated water, currently \$405 per acrefoot (AF). In 2005-2006, the SCVWD is proposing to increase the untreated water rate by \$15 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 below targeted levels in 2004-2005 due to cooler 2004 summer temperatures which reduced the need for irrigation, and a lower than anticipated water use resulting from the continuing economic slowdown.

#### Core Service: Manage Recycled Water Environmental Services Department

# Performance and Resource Overview (Cont'd.)

The percentage of recycled water customers rating service as good or excellent is estimated to be 76%, which is slightly below the target of 80% for 2003-2004. However, it is worth noting that only 3% of those surveyed were dissatisfied with the service; the remaining 21% of the customers did not offer an opinion. ESD continues to implement process changes to improve delivery time and process review for recycled water customers. The survey is scheduled every other year to make the survey data more sustainable. The next survey is scheduled for 2005-2006. The number of SBWR system customers in 2004-2005 is projected to end the year at 510 customers, 2% above the targeted level of 500 customers.

#### Performance Measure Development

No changes are proposed at this time.

	Manage Recycled Water Performance Summary	2003-2004 Actual	2004-2005 Target	2004-2005 Estimated	2005-2006 Target
<u>©</u>	Millions of gallons per day diverted from flow to the Bay for beneficial purposes during the dry weather period*	10.2	11.5	11.5	11.2
<b>©</b>	Millions of gallons of recycled water delivered annually	2,360	2,500	2,500	2,800
<b>©</b>	% of time recycled water quality standards are met or surpassed	98%	100%	100%	100%
<b>©</b>	% of wastewater influent recycled for beneficial purposes during the dry weather period*	9%	9%	9%	9%
8	Cost per million gallons of recycled water delivered	\$1,010	\$1,300	\$1,300	\$1,150
R	% of recycled water customers rating service as good or excellent, based on reliability, water quality, and responsiveness**	76%	76%	76%**	75%

<sup>\*</sup> Dry weather period defined as lowest 3 months continuous average between May and October, which runs through the middle of the reporting period.

Data for this measure comes from the 2004 Recycled Water Customer Satisfaction Survey. The next survey is scheduled for 2005-2006.

#### Core Service: Manage Recycled Water Environmental Services Department

# Performance and Resource Overview (Cont'd.)

Activity & Workloa Highlights	d			2003-2004 Actual	,	2004-2005 Forecast		2004-2005 Estimated	2005-2006 Forecast
Total number of South Bay Water Recycling customers		ater Recycling 445			500		510	530	
Manage Recycled Water Resource Summary		2003-2004 Actual 1		2004-2005 Adopted 2		2005-2006 Forecast 3		2005-2006 Proposed 4	% Change (2 to 4)
Core Service Budget *	**			*					<u> </u>
Personal Services Non-Personal/Equipment <b>Total</b>	\$ 	1,741,819 1,002,020 <b>2,743,839</b>	\$	1,621,548 1,633,435 <b>3,254,983</b>	\$	1,653,057 2,008,435 <b>3,661,492</b>	\$	1,653,057 2,008,435 <b>3,661,492</b>	1.9% 23.0% <b>12.5</b> %
Authorized Positions		16.41		16.28		16.13	•	16.13	(0.9%)

## **Budget Changes By Core Service**

Proposed Core Service Changes	Positions	Treatment Plant Appropriations		
NONE		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		

Core Service: Protect Natural and Energy Resources

Environmental Services Department

#### **Core Service Purpose**

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

#### **Key Operational Services:**

- Manage Green Building Program
- Protect and Monitor Groundwater
   Quality
- NPDES Permits Development
- □ Habitat Protection
- Water Conservation

# **Performance and Resource Overview**

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.

2004-2005 represented the second year of the Water Pollution Control Plant's latest NPDES Permit that primarily governs the activities of the Water Efficiency Program (WEP). Because flows to the Water Pollution Control Plant remain appreciably below the trigger of 120 mgd, the WEP continues to scale back its flow reduction efforts accordingly.

In 2005-2006, WEP will continue to focus on maintaining the flow reduction it achieved through the Revised South Bay Action Plan by promoting such programs as leak identification and repair. WEP's flow reduction strategies will focus on the business sector, in support of the City's efforts to improve its economic outlook. WEP will also continue to cost share with the Santa Clara Valley Water District (SCVWD) on its indoor water conservation programs. In particular, the City's cost-sharing agreement for the SCVWD's High Efficiency Toilet program is responsible for the reduction in the "Net cost per million gallons per day of water conserved through City" performance measure. By leveraging funds with the SCVWD, the City can achieve increased water conservation with fewer dollars.

WEP expanded its water conservation focus to outdoor water use with the Neighborhood Preservation Water Conservation Pilot Program. This program is funded by the Santa Clara Valley Water District and offers financial assistance 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. The pilot program, which helps beautify San José's neighborhoods

# Core Service: Protect Natural and Energy Resources Environmental Services Department

while minimizing impacts to water supply, will be evaluated in May 2005 to determine whether or it will be continued in 2005-2006.

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 on target

# **Performance and Resource Overview**

					··
Prot	ect Natural and Energy Resources Performance Summary	2003-2004 Actual	2004-2005 Target	2004-2005 Estimated	2005-2006 Target
<b>©</b>	(Water) % of annual goal for gallons of water conserved tributary-wide	77%	100%	100%	100%
[3]	(Water) Net cost per million gallons per day of water conserved through City programs*	\$1.49 million	\$2.50 million	\$1.43 million	\$2.00 million
R	(Water) % of residents demonstrating water conservation knowledge	No Survey	30%	No Survey	30%
	· · · · · · · · · · · · · · · · · · ·				

Cost after Santa Clara Valley Water District cost-sharing.

Activity & Workload Highlights	2003-2004 Actual	2004-2005 Forecast	2004-2005 Estimated	<sup>2005-2006</sup> Forecast
Millions of gallons per day conserved (tributary area-wide)	0.14	0.175	_0.175	_0.175
Cumulative millions of gallons per day conserved since July 1992 (tributary area-wide)	N/A**	7.150	7.175	7.350

Core Service: Protect Natural and Energy Resources

Environmental Services Department

# Performance and Resource Overview (Cont'd.)

Protect Natural and Energy Resource Summary	 003-2004 Actual 1	2004-2005 Adopted 2	2005-2006 Forecast 3	005-2006 Proposed 4	% Change (2 to 4)
Core Service Budget *					
Personal Services Non-Personal/Equipment	\$ 603,574 121,449	\$ 753,898 1,799,649	\$ 658,422 1,679,179	\$ 658,422 1,679,179	(12.7%) (6.7%)
Total	\$ 725,023	\$ 2,553,547	\$ 2,337,601	\$ 2,337,601	(8.5%)
Authorized Positions	8.80	6.80	5.70	5.70	(16.2%)

# **Budget Changes By Core Service**

Proposed Core Service Changes	Positions	Treatment Plant Appropriations

NONE

#### Strategic Support Environmental Services Department

Strategic Support represents services provide provision of the core services. Strategic Department includes:	ed within departments that support and guide the c Support within the Environmental Services
Key Operational Services:  Public Education  Long Range Planning  Financial Management	<ul> <li>Employee Services</li> <li>Facility Management</li> <li>Clerical Support</li> </ul>
	Materials Management  esource Overview

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 2004-2005 and FY 2005-2006.

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

Program	FY 2004-05	FY 2005-06
Marketing Communications	55%	35%
Municipal Environmental Compliance	40%	40%
Policy & Planning	64%	64%
Support Services	72%	75%
Water Efficiency Program	100%	. 100%

# Strategic Support Environmental Services Department

# Performance and Resource Overview (Cont'd.)

Strategic Support Resource Summary	. 2	2003-2004 Actual 1	2004-2005 Adopted 2	 005-2006 Forecast 3	_	005-2006 Proposed 4	% Change (2 to 4)
Core Service Budget *						·	•
Personal Services Non-Personal/Equipment	\$	3,483,528 405,043	\$ 3,548,412 604,812	\$ 4,110,801 586,946	\$	4,110,801 586,946	15.8% (3.0%)
Total	\$	3,888,571	\$ 4,153,224	\$ 4,697,747	\$	4,697,747	13.1%
Authorized Positions		39.96	38.88	43.42		43.42	11.7%

# **Strategic Support Budget Changes**

Proposed Core Service Changes	Positions	Treatment Plant Appropriations		
NONE .		7-		

# **PROPOSED**

# SAN JOSE / SANTA CLARA WATER POLLUTION CONTROL PLANT

700 Los Esteros Road San Jose, California 95134

# Five-Year 2006-2010 Capital Improvement Program

Submitted by
Carl W. Mosher, Director
Environmental Services Department
City of San Jose

# TO: Treatment Plant Advisory Committee

Jim Beall
Cindy Chavez
Ron Gonzales
Curtis Harrison
Jim Holgersson
Bob Livengood
Patricia Mahan
Jamie Matthews
Chuck Reed

Boardmember, West Valley Sanitation District Councilmember, City of San Jose Mayor, City of San Jose Boardmember, Cupertino Sanitary District Deputy City Manager, City of San Jose Councilmember, City of Milpitas (Chair) Mayor, City of Santa Clara Councilmember, City of Santa Clara

Councilmember, City of San Jose

# **PROPOSED**

# San Jose/Santa Clara Water Pollution Control Plant

Five-Year 2006-2010 Capital Improvement Program

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#### 2006-2010 Proposed Capital Improvement Program

#### Overview

#### Introduction

The San José/Santa Clara Water Pollution Control Plant (Plant) is a regional wastewater treatment facility serving eight tributary sewage collection agencies (Agencies), including municipalities and sanitary sewer districts. The service area includes the following cities and adjacent, unincorporated County territory: San José, Santa Clara, Milpitas, Cupertino Sanitary District, West Valley Sanitary District (Campbell, Los Gatos, and Saratoga), Sereno 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 improve efficiency and effectiveness.

#### Sources of Funding

The 2006-2010 Proposed CIP provides funding of \$111.6 million, of which \$34.4 million is allocated in 2005-2006.

Revenues for the Five-Year CIP are derived from seven sources: Contributions from the City of Santa Clara and Other Agencies (\$34.8 million); transfers from the City of San José Sewer Service and Use Charge Fund (\$33.4

# 2006-2010 Proposed Capital Improvement Program

#### Overview

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

million) and the Sewage Treatment Plant Connection Fee Fund (\$15.4 million); Interest (\$6.3 million); Calpine Metcalf Energy Center Facilities Repayments (\$1.9 million); and federal grants from the US Bureau of Reclamation (\$500,000). In addition, \$19.1 million from the available fund balance is programmed to support projects.

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. contributions reimburse the City for actual project expenditures. In this Proposed CIP, these transfers total \$34.7 million which represents a \$6.0 million (14.7%) decrease compared to the 2005-2009 Adopted CIP. This decline results from a decline in reimbursements assumed in this CIP due to a decrease in programmed project costs in the 2006-2010 Proposed CIP compared to the 2005-2009 Adopted CIP.

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 Proposed Water Pollution Control Capital Improvement Program reflect a \$4.6 million (15.9%) increase compared to the 2005-2009 Adopted CIP. In 2004-2005, the City Council approved a three-year 4.5% annual rate increase strategy to the Sewer Service and Use Charge fee, representing the first increase to

this fee since 1994. These increases will continue through the first two years of this CIP including the 2005-2006 fiscal year. Continuation of annual increases in the range of 5% annually, beyond the Council-approved three-year rate increase strategy will however, be required to maintain the program represented in this document and 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 2006-2010 Proposed CIP. This transfer is consistent with the amount programmed in the 2005-2009 Adopted 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 the Plant's 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

#### 2006-2010 Proposed Capital Improvement Program

#### Overview

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

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

and includes the following components: 1) additions and improvements of piping systems, and hydraulic improvements for flow equalization; 2) a new raw sewage pump station and new filter influent pump station; and 3) and 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 second quarter of 2009.

The lowest bid on the construction contract for the Plant Reliability Improvements project was significantly higher than budgeted, due in part to the rapid price escalation of cement, reinforced concrete pipe, and steel. In order to fund this project, given the cost escalations, additional funding was provided through a transfer from the Sewage Treatment Plant Connection Fee Fund, a reprioritization of projects, and the realization of project savings. As a result of these actions, several schedule changes to projects in the CIP are proposed including the delay of the start date of the Plant Electrical Reliability project from 2004-2005 to 2008-2009, the delay of the Inactive Lagoons Bio-Solids Removal project from 2006-2007 to 2007-2008, and the removal of the Filter Improvements project from this CIP. An increase to the Plant Infrastructure Improvements allocation is proposed to ensure adequate reserve funding is available to perform emergency electrical repairs and replacement, as necessary, until the start of the Plant Electrical Reliability project, and to fund other critical repairs at the Treatment Plant.

#### 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 Pilots 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

#### 2006-2010 Proposed Capital Improvement Program

#### Overview

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

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

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

- 1. Water Efficiency Programs Industrial recycling/reuse and indoor water conservation. Programs will continue but at a reduced level of effort.
- 2. South Bay Water Recycling System Completion of the Silver Creek Pipeline extension to Coyote Valley and the Metcalf Energy Center, and continue collaborative effort with the Santa Clara Valley Water District for future expansion, operation and maintenance of the system.
- 3. Salt Marsh Vegetative Assessment Perform marsh assessments in 2005
  and 2007 to identify salt marsh
  conversion in the study area.
  Historically, the City has performed
  marsh assessments on an annual basis
  and is investigating more costeffective and efficient methods of
  continuing the annual assessments.
- 4. California Clapper Rail and the Salt Marsh Harvest Mouse Survey. In 2006, perform a synoptic survey of the clapper rail and harvest mouse. This was included in the work plan, but not required in 2004.

#### Other Projects

The 2006-2010 Proposed Capital Budget includes other major projects that will require an investment of capital funds. These projects are required to meet regulatory mandates or ensure process reliability:

- Alternative Disinfection (design and build) \$4.5 million
- Plant Electrical Reliability (formerly Electrical System Improvements) \$17.0 million in this CIP, \$67.7 million total project costs
- Land Management & Improvements \$5.6 million
- Dissolved Air Flotation Pressure Retention Tank & Valves - \$1.2 million
- Replace Generators 1-5 (Power and Air Building) - \$1.0 million this CIP,
   \$13.0 million total project costs
- Inactive Lagoons Bio-Solids Removal,
   Phase 1 (characterization of solids) -\$500,000

#### Reserve for Equipment Replacement

As in prior Capital Improvement Programs, the 2006-2010 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

#### 2006-2010 Proposed Capital Improvement Program

#### Overview

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

Reserve for Equipment Replacement (Cont'd.)

Implementing the State Revolving Fund for Construction of Wastewater annual Treatment requires that revenue requirements include funds for the replacement  $\mathbf{of}$ equipment for maintaining capacity and performance of the treatment plant over its useful life. Compliance with the SWRCB's policy is a requirement of our State Revolving Fund Loan Agreements. Equipment replacement of \$7.7 million and a reserve of \$5.0 million included in the 2006-2010 Proposed CIP satisfy this to requirement.

- The Clean Water Financing Authority (CWFA) Bond Covenants require that a reserve be maintained at a minimum level of \$5 million to help pay the costs of extraordinary repairs, renewal and replacement of the treatment plant when insurance and other funds budgeted for such purposes are exhausted, or are insufficient to meet the need.
- The Master Agreements for Wastewater Treatment between City of San José, 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 2005-2009 Adopted CIP

Major changes from the 2005-2009 Adopted CIP include the following:

- Programming of funding for the Plant Electrical Reliability project reflecting a delay in the start of the project from 2004-2005 until 2008-2009 due to higher than anticipated costs in the Plant Reliability Improvements project described above.
- Additional funding in the amount of \$11.7
  million to fund the Plant Infrastructure
  Improvements program to fund
  emergency electrical repairs and
  replacement.
- Elimination of the Filter Improvements project in the amount of \$6.0 million to fund higher priority projects due to due to higher than anticipated costs in the Plant Reliability Improvements project described above.
- Additional funding in the amount of \$5.1 million for Land Management and Improvements to fund the review, planning, and environmental mitigation for possible alternative uses of salt pond A18.
- Reallocation of funding for the Dissolved Air Flotation Pressure Retention Tank & Valves project from \$200,000 annually to \$402,000 every other year.

#### 2006-2010 Proposed Capital Improvement Program

#### **Overview**

#### Major Changes from the 2005-2009 Adopted CIP (Cont'd.)

 New funding for the replacement of Generators 1-5 in the Power and Air Building (\$1.0 million this CIP, \$13.0 million total project costs).

#### **Operating Budget Impact**

The Alternative Disinfection project in the 2006-2010 Proposed CIP is anticipated to have an impact on the operating budget, 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 catastrophe. The following table shows the increase in chemical costs as a result of the project. All projects anticipated to be operational in 2005-2006 have been addressed in the 2005-2006 Proposed Operating Budget.

#### Net Operating Budget Impact Summary

,	2006	2007	2007-2008	2008-2009	2009-2010
Alternative Disinfection	\$	0	\$3,000,000	<u>\$3,075,000</u>	<u>\$3,152,000</u>
Total	\$	0	\$3,000,000	\$3,075,000	\$3,152,000

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

	Herimate						5 VC A D
	2004-2005	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	TOTAL
SOURCE OF FUNDS							
SJ/SC TREATMENT PLANT CAPITAL FUND(512)							
Beginning Fund Balance Reserve for Encumbrances	107,722,954	19,474,673	9,809,673	6,653,673	2,986,673	4,331,673	19,474,673
Interest Income	2,975,000	2,368,000	1,980,000	1,135,000	324,000	473,000	6.280.000
Contribution from City of Santa Clara & Agencies		•	·	`			
Equipment Replacement	607,000	591,000	591,000	591,000	591,000	591,000	2,955,000
WPCP Projects	8,300,000	1,825,000	1,750,000	2,300,000	1,985,000	8,590,000	16,450,000
SRF Loan repayment	1,384,000	1,384,000	1,384,000	1,384,000	1,384,000	1,384,000	6,920,000
1995/97 Bond Debt Service Repayment	1,309,000	1,697,000	1,662,000	1,662,000	1,660,000	1,675,000	8,356,000
Inter-Fund Transfers:							
SJ-Equip. Replacement from Fd 541	1,056,000	1,072,000	1,072,000	1,072,000	1,072,000	1,072,000	5,360,000
From SS & UC Fund (541)	4,400,000	2,000,000	3,000,000	4,000,000	6,000,000	13,000,000	28,000,000
From Connection Fee Fund (539)	13,080,000	3,080,000	3,080,000	3,080,000	3,080,000	3,080,000	15,400,000
Miscellaneous Revenue	0	0	0	0	0	0	0
Calpine MEC Facilities Repayment	389,000	389,000	389,000	389,000	389,000	389,000	1,945,000
SCVWD - Silver Creek Pipeline Contribution	2,800,000	0	0	0	0	0	0
Silver Creek segment - Grant	1,350,000	0	0	0	0	0	0
USBR Grant (SBWRP)	500,000	200,000	0	0	0	0	500,000
TOTAL SOURCE OF FUNDS	176,621,673	34,380,673	24,717,673	22,266,673	19,471,673	34,585,673	111,640,673
USE OF FUNDS							
Water Pollution Control Managed Projects							
Admin Building & Gate Security Impvements	50,000	,					
BNR Q2 Air Upgrade	100,000	,	,				
Computer & Inst. Improvements	195,000						
Fiter Influent & Effluent Meters Replacement	200,000						
FIP Pump 1-4 Controller Replacement	923,000			٠			
Headworks Redundancy Modifications	1,000		¢				•
Raw Sewage & Effluent Sampling Stations	100,000						٦.
Revised SBAP - I/I Reduction	20,000						. <del>-</del>
Technical Services Building	25,000	,					
1 DAF Pressure Retention Tank & Valves	0	402,000	0	402,000	0	402,000	1,206,000
2 Land Acquisition & Improvements	55,000	150,000	150,000	150,000	150,000	5,000,000	5,600,000
	80,626,000	0	0	2,009,000		0	2,009,000
Alternative Disinfection	000'009	0	4,500,000	0	o .	0	4,500,000
Inactive Lagoons Bio-Solids Removal	353,000	0	0	200,000	0	0	200,000
Plant Electrical Reliability	4,551,000	0	0	0	2,003,000	15,024,000	17,027,000
Generators 1-5 (P&E bldg)	0	0	0	0	1,000,000	0	1,000,000

# WATER POLLUTION CONTROL PLANT SOURCE AND USE OF FUNDS SUMMARY

	-						
	Estimate	2005 2008	2006 2002	2000 2000	0000 0000	2000 2040	5-YEAR
USE OF FUNDS (Contd.)	0007-1-007	0007-0007	7007-007	7, 2001	2007-007	0107-007	10101
WSP Managed Projects							
ESD MIS Improvements  Lab Information Management System Replacement Salt Marsh Restoration South Bay Water Recycling Program	734,000 500,000 749,000	•					
4 Revised SBAP - Indust. Recycle/Reuse 5 Revised SBAP - SBWR Extension	50,000 50,000 51,832,000	100,000 391,000	100,000 391,000	100,000 391,000	100,000 391,000	391,000	400,000 1,955,000
Construction Projects Total Recurring Projects	142,059,000	1,043,000	5,141,000	3,552,000	. 3,644,000	20,817,000	34,197,000
<ol> <li>Equipment Replacement</li> <li>Plant Infrastructure Improvements</li> <li>Unanticipated/Critical Repairs</li> </ol>	2,564,000 5,636,000 332,000	1,600,000 8,418,000 250,000	1,525,000 4,827,000 250,000	1,525,000 7,632,000 250,000	1,525,000 3,401,000 250,000	1,525,000 5,238,000 250,000	7,700,000 29,516,000 1,250,000
Total Construction	150,591,000	11,311,000	11,743,000	12,959,000	8,820,000	27,830,000	72,663,000
Budget Office - Capital Program Staff Budget Office - CIP Action Team Information Technology Staff Civic Center Start-up Costs	65,000 41,000 86,000 1,000						
City Hall O & M 9 Arbitrage Rebate	100,000	13,000	14,000	14,000	14,000	15,000 0	300,000
	135,000	70,000	135,000	135,000	135,000	135,000	610,000
<ol> <li>SKF Loan Kepayment (Appm 6590)</li> <li>Transfer to CWFA Debt Service Fund</li> <li>Transfer to GF - City Hall Occupancy</li> </ol>	4,464,000 1,309,000 0	4,464,000 1,697,000 16,000	4,464,000 1,662,000 46,000	4,464,000 1,662,000 46,000	4,464,000 1,660,000 47,000	4,464,000 1,675,000 46,000	22,320,000 8,356,000 201,000
Transfer to GF - Calpine Basement 13 Reserve for Equipment Replacement 14 Reserve for GRS agreement 15 Reserve for Rate Studies	355,000	5,000,000 1,500,000 200,000	0	0	0	0	5,000,000 1,500,000 200,000
Total Non-Construction	6,556,000	13,260,000	6,321,000	6,321,000	6,320,000	6,335,000	38,557,000
Total Expenditures	157,147,000	24,571,000	18,064,000	19,280,000	15,140,000	34,165,000	111,220,000
Ending Fund Balance	19,474,673	9,809,673	6,653,673	2,986,673	4,331,673	420,673	420,673
TOTAL USE OF FUNDS	176,621,673	34,380,673	24,717,673	22,266,673	19,471,673	34,585,673	111,640,673

# 2006-2010 Proposed Capital Improvement Program Detail of Capital Projects

#### 1. Dissolved Air Flotation Pressure Retention Tank & Valves

CSA:

Environmental and Utility Services

Initial Start Date: 3rd Qtr. 2004

**CSA Outcome:** 

Reliable Utility Infrastructure

**Revised Start Date:** 

Department:

Environmental Services

Initial Completion Date: 3rd Qtr. 2010

Council District:

4

**Revised Completion Date:** 

Location:

Water Pollution Control Plant

Description:

This project will replace 15 of the 16 pressurized tanks and their valves located in the sludge

processing area.

Justification:

The pressurized steel tanks have outlived the useful service lives and require replacement to

ensure safety and process reliability.

	italiyata	A 2000	E	XPENDIT	URE SCH	EDULE (0	00'S)				y vijeka za
Cost Elements	Prior Years	2004-05 Appn.	2004-05 Estimate	2005-06	2006-07	2007-08	2008-09	2009-10	5-Year, Total	Beyond 5-Year	Project Total
Design		30		30		30		30	90	. 30	120
Construction		140		342	-	342		342	1,026	341	1,367
Engineering & Inspection		30		30		30		30	90	. 30	120
TOTAL ,		200		402		402		402	1,206	401	1,607
<b>发展的"电影"的</b>			FUN	IDING SO	JRCESC	HEDULE (	000'S)				
San José-Santa Clara Treatment Plant Capital Fund		200		402		402		402	1,206	401	1,607
TOTAL		200		402		402		402	1,206	401	1,607
			ANNU/	L OPERA	TING BUD	IGET IMP	ACT (000'	S)			

None

Major Changes in Project Cost:

None

Notes:

FY Initiated:

2004-2005

Redevelopment Area:

N/A

Initial Project Budget:

\$1,600,000

SNI Area:

N/A

Appn. #: .

5157

IN/P

# 2006-2010 Proposed Capital Improvement Program **Detail of Capital Projects**

#### 2. Land Management & Improvements

CSA:

Environmental and Utility Services

**CSA Outcome:** 

Healthy Streams, Rivers, Marsh and Bay

**Revised Start Date:** 

Initial Start Date: 2nd Qtr. 1997

Department:

**Environmental Services** 

Initial Completion Date: 1st Qtr. 2007

**Council District:** 

Revised Completion Date: 2nd Qtr. 2012

Location:

Water Pollution Control Plant

Description:

This project provides resources for the environmental planning and review of technical issues related to the development and evaluation of possible alternative uses of salt pond A18 and the San José/Santa Clara Water Pollution Control Plant buffer lands. The project also provides for the implementation of the planning effort, with Council approval, after the five-year budget period.

Justification:

The department purchased salt pond A18 in 2003. As the owner of pond A18, the City will be required to plan for future uses of A18. In addition, the City is also in negotiations with the State Water Resources Control Board for the management and restoration of the Moseley tack.

Cost Elements	Prior Years	2004-05 Appn.	2004-05 Estimate	2005-06	2006-07	2007-08	2008-09	2009-10	5-Year Total	Beyond 5-Year	Project Total
Development	20,181		55	150	150	150	150	5,000	5,600	3-Teal	25,830
TOTAL	20,181	55	55	150	150	150	150	5,000	5,600		25,83
			FUN	DING SOL	JRCESCI	HEDULE (	000'S)				
San José-Santa Clara Treatment Plant Capital Fund	20,181	55	55	150	150	150	150	5,000	5,600		25,830
TOTAL	20,181	55	<b>5</b> 5	150	150	150	150	5,000	5 <b>,6</b> 00		25,83
			ANNUA	L OPERA	TING BUC	GET IMP	ACT (000)	S)			

#### None

#### Major Changes in Project Cost:

2005-2009 CIP - increase of \$500,000 for alternative use analysis, property management, and development of salt pond

1999-2003 CIP - increase of \$15 million to address scope changes.

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

FY Initiated:

1996-1997

Redevelopment Area:

N/A

Initial Project Budget:

\$10,100,000

SNI Area:

N/A

Appn. #:

# 2006-2010 Proposed Capital Improvement Program **Detail of Capital Projects**

#### 3. WPCP Reliability Improvements

CSA:

**Environmental and Utility Services** 

Reliable Utility Infrastructure

**CSA Outcome:** Department:

**Environmental Services** 

**Council District**;

Water Pollution Control Plant

Description:

Location:

The goal of this project is to improve the Plant's ability to handle wet weather flows, and to improve the reliability of several of the plant's critical systems, such as headworks, filtration, and major pumping stations. The project will also look at ways to improve the reliability and efficiency of producing recycled water, as well as water discharge to the Bay. Funding in 2007-2008 provides an allocation to evaluate operating processes, provide for operating manual development, and fund start up costs for the headworks upon completion of the WPCP Reliability Improvements project, The revised start date reflects the design phase, which preceded the construction project

Initial Start Date: 2nd Qtr. 2000

Revised Start Date: 2nd Qtr. 2003

Initial Completion Date: 2nd Qtr. 2008

Revised Completion Date: 2nd Qtr. 2009

described here.

Justification:

Over the past several winters, the Plant has experienced wet weather flows that exceed the original hydraulic design of some of the Plant's treatment facilities. These periodic high flows have caused sewage overflows, and process upsets that make the Plant vulnerable to future incidents. Improvements in the Plant's ability to handle wet weather flows in a reliable and consistent manner require the rehabilitation or replacement of existing major facilities and/or the addition of new facilities.

Cost Elements	Prior Years	2004-05 Appn.	2004-05 Estimate	2005-06	2006-07	2007-08	2008-09	2009-t0	5-Year Totai	Beyond 5-Year	Project Total
Development	<b>77</b> 0										770
Design	3,450										3,450
Construction	1,966	80,626	80,626			2,009			2,009		84,60
TOTAL	6,186	80,626	80,626			2,009		١	2,009		88,82
			FUN	IDING SOL	JRCE SCI	łEDULE (	000'S)				
San José-Santa Clara Treatment Plant Capital Fund	6,186	80,626	80,626	:	•	2,009			2,009	•	88,821
TOTAL	6,186	80,626	80,626			2,009			2,009		88,821
			ANNUA	L OPERA	TING BUD	GET IMP	ACT (000)	S)			

#### Major Changes in Project Cost:

2006-2010 CIP - increase of \$25 million to fund higher than anticipated construction costs related to the price escalation of cement, reinforced concrete pipe, and steel.

2005-2009 CIP - increase of \$6 million to fund construction costs based on revised estimates at 90% design completion.

2004-2008 CIP - increase of \$11 million based on revised estimates at 10% design completion.

2003-2007 CIP - increase of \$40 million to fund anticipated reliability project.

Funding in 2007-2008 provides an allocation for start up costs, provide training, and create an online operating manual upon completion of the WPCP Reliability Improvements project.

# 2006-2010 Proposed Capital Improvement Program **Detail of Capital Projects**

FY Initiated:

1998-1999

Redevelopment Area: - · N/A

initial Project Budget:

\$4,000,000

SNI Area:

N/A

Appn. #:

## 2006-2010 Proposed Capital Improvement Program **Detail of Capital Projects**

#### 4. Revised South Bay Action Plan - Industrial Recycle/Reuse

CSA:

**Environmental and Utility Services** 

Initial Start Date: 3rd Qtr. 1999

**CSA Outcome:** 

Healthy Streams, Rivers, Marsh and Bay

Revised Start Date:

Department:

**Environmental Services** 

Initial Completion Date: 2nd Qtr. 2003

**Council District:** 

Revised Completion Date: 2nd Qtr. 2010

Location:

Water Pollution Control Plant

Description:

This project provides technical assistance and retrofit equipment required to ensure industrial users in the service area are recycling their wastewater and/or using South Bay Water Recycling (SBWR) to the largest extent possible. The project includes investigative research, pilot projects and a financial incentive program that will assist industrial users in implementing the use of SBWR, or water conservation and recycling of their own wastewater.

Justification:

This project increases the use of SBWR recycled water or onsite use of industrial wastewater in manufacturing processes, thus reducing discharge to the sanitary sewer system. Industrial flow to the Plant ranges from 8 - 12 million gallons per day (mgd) and could be reduced by up to 25% (2 -3 mgd). This project includes investigative research, stakeholder involvement, pilot studies, incentive/cost evaluation, and implementation.

			XPENDIT	URE SCH	EDULE (0	00'S)			
Cost Elements	Prior 2004 Years App		2005-06	2006-07	2007-08	2008-09	2009-10 5-Year Total	Beyond 5-Year	Project Total
Development	683	50	100	100	100	100	400		1,133
TOTAL	683	50	100	100	100	100	. 400		1,133
		FUI	IDING SOI	JRCE SCI	HEDULE (	000'8)			
Sàn José-Santa Clara Treatment Plant Capital Fund	683	50	100	100	100	100	400		1,133
TOTAL	683	50	100	100	100	100	400		. 1,133
	177	ANNU	AL OPERA	TING BUD	GET IMP	ACT (000'	S)		¥60

#### None

#### Major Changes in Project Cost:

2002-2006 CIP - decrease of \$1.6 million to reflect actual anticipated activities.

2003-2007 CIP - decrease of \$1.8 million to reflect actual anticipated activities.

2006-2010 - decrease of \$200,000 to provide funding for WPCP Reliability Improvements Project.

#### Notes:

A funding augmentation of \$50,000 in 2004-2005 has been assumed in this presentation.

FY Initiated:

1997-1998

Redevelopment Area:

N/A

**Initial Project Budget:** 

\$5,000,000

SNI Area:

N/A

Appn. #:

# 2006-2010 Proposed Capital Improvement Program Detail of Capital Projects

#### 5. Revised South Bay Action Plan - SBWR Extension

CSA:

**Environmental and Utility Services** 

Initial Start Date:

Ongoing

**CSA Outcome:** 

Healthy Streams, Rivers, Marsh and Bay

**Revised Start Date:** 

\_ \_

Department:

Environmental Services

Initial Completion Date:

Ongoing

Council District:

4

Revised Completion Date:

Location:

Water Pollution Control Plant

Description:

The National Pollutant Discharge Elimination System (NPDES) permit requires continued development of the South Bay Water Recycling (SBWR) system to increase use of recycled water and further reduce Plant discharge. This allocation consists of the completion of the design and construction of SBWR Phase II facilities in Santa Clara, Milpitas, and extension of a recycled water transmission line to serve the planned Metcalf Energy Center in South San José and the new City Hall. 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.

Cost Elements	Prior Years	2004-05 Appn.	2004-05 Estimate	2005-06	2006-07	2007-08	2008-09	2009-10	5-Year Total	Beyond 5-Year	Project Total
Development											
Property & Land		. 8,000	8,000		•						
Design		690	690								
Construction		43,142	43,142	391	391	391	391	391	1,955		
TOTAL		51,832	51,832	391	391	391	391	391	1,955		
			FUN	DINGSOL	JRCE SC	EDULE (	000'S):				
San José-Santa Clara Treatment Plant Capital Fund	,	51,832	51,832	391	391	391	391	391	1,955		•
TOTAL		51,832	51,832	391	391	391	391	391	1,955		

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

None

#### Major Changes in Project Cost:

N/A

Notes:

The \$391,000 annual allocation represents recycled water pipeline funding from Calpine for their share of the pipeline to the Metcalf Energy Center. This allocation is anticipated to fund future recycled water projects.

FY Initiated:

Ongoing

Redevelopment Area:

N/A

Initial Project Budget:

SNI Area:

ŃΑ

Appn. #:

# 2006-2010 Proposed Capital Improvement Program **Detail of Capital Projects**

#### 6. Equipment Replacement

CSA:

**Environmental and Utility Services** 

**Initial Start Date:** 

Ongoing

**CSA Outcome:** 

Reliable Utility Infrastructure

**Revised Start Date:** 

Department:

**Environmental Services** 

Initial Completion Date:

Ongoing

**Council District:** 

Location:

Water Pollution Control Plant

**Revised Completion Date:** 

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.

		Antonio de la Carte		XPENDIT		A500 A500 A500 A500 A500 A500 A500 A500	ANTO A POPLANDA ANTA				
Cost Elements	Prior Years	2004-05 Appn.	2004-05 Estimate	2005-06	2006-07	2007-08	2008-09	2009-10	5-Year Totai	Beyond 5-Year	Project Total
Equipment		2,564	2,564	1,600	1,525	1,525	1,525	1,525	7,700		
TOTAL		2,564	2,564	1,600	1,525	1,525	1,525	1,525	7,700		
			, FUN	DING SO	JRCE SCI	IEDULE (	000'S)				
San José-Santa Clara Treatment Plant Capital Fund		2,564	2,564	1,600	1,525	1,525	1,525	1,525	7,700		
TOTAL		2,564	2,564	1,600	1,525	1,525	1,525	1,525	7,700		
			ANNUA	LOPERA	TING BUD	GETIMP	ACT (000'	S)			

Major Changes in Project Cost:

N/A

None

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. #:

## 2006-2010 Proposed Capital Improvement Program **Detail of Capital Projects**

#### 7. 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:** 

**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.

Cost Elements	Prior Years	2004-05 Appn.	2004-05 Estimate	2005-06	2006-07	2007-08	2008-09	2009-10	5-Year Total	Beyond 5-Year	Project Total
Construction		5,636	<b>5,</b> 636	8,418	4,827	7,632	3,401	5,238	29,516	-	
TOTAL		5,636	5,636	8,418	4,827	7,632	3,401	5,238	29,516		
			FUN	DING SOL	JRCE SCI	HEDULE (	000'S)			- F	
San José-Santa Clara Treatment Plant Capital Fund		5,636	5,636	8,418	4,827	7,632	3,401	5,238	29,516		
TOTAL		5,636	5,636	8,418	4,827	7,632	3,401	5,238	29,516		

None

Major Changes in Project Cost:

N/A

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. #:

# 2006-2010 Proposed Capital Improvement Program **Detail of Capital Projects**

#### 8. Unanticipated/Critical Repairs

CSA:

**Environmental and Utility Services** 

**Initial Start Date:** 

Ongoing

**CSA Outcome:** 

Reliable Utility Infrastructure

**Revised Start Date:** 

Department:

**Environmental Services** 

Ongoing

**Council District:** 

**Initial Completion Date: 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.

	mignis.		E	XPENDIT	URESCH	EDULE (0	00'S)			A Section 18	
Cost Elements	Prior Years	2004-05 Appn.	2004-05 Estimate	2005-06	2006-07	2007-08	2008-09	2009-10	5-Year Total	Beyond 5-Year	Project Total
Construction		332	332	250	250	250	250	250	1,250		
TOTAL		332	332	250	250	250	250	250	1,250		
			FUN	DING SOL	JRCE SCI	HEDULE (	000'S)				
San José-Santa Clara Treatment Plant Capital Fund		332	<b>332</b>	250	250	250	250	250	1,250		. ·
TOTAL	•	332	332	. 250	250	250	250	250	1,250		
	i, ii.		ANNUA	L OPERA	TING BUE	GET IMP	ACT (000'	S)			
None											

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

# 2006-2010 Proposed Capital Improvement Program Detail of Capital Projects

#### 9. Arbitrage Rebate Payment

CSA:

**Environmental and Utility Services** 

Initial Start Date: 2nd Qtr. 2004

CSA Outcome:

Healthy Streams, Rivers, Marsh and Bay

Revised Start Date:

Department:

Environmental Services

Initial Completion Date: 2nd Qtr. 2006

Council District:

.

**Revised Completion Date:** 

Location:

Water Pollution Control Plant

Description:

This allocation provides funding for remittance to the IRS of interest earned in excess of the

arbitrage yield on the bonds.

Justification:

Federal tax law requires the remittance to the IRS of interest in excess of the arbitrage yield on the

bonds

Cost Elements	Prior Years	2004-05 Appn.	2004-05 Estimate	2005-06	2006-07	2007-08	2008-09	2009-10	5-Year Total	Beyond 5-Year	Project Total
Transfer to Other Agencies		100	100	300				ه	300		400
TOTAL		100	. 100	300				·	300		400
			FUN	IDING SO	JRCESC	HEDUĽE (	000'S)	WW.Ed	4. V 32. 33. 3		
San José-Santa Clara Treatment Plant Capital Fund		1 <b>0</b> 0	100	300					300		400
TOTAL		100	100.	300			•		300	·- <u>·</u>	400
			ANNU	AL OPERA	TING BUL	GET IMP	ACT:(000'	S)	-		

#### Major Changes in Project Cost:

2006-2010 CIP - decrease of \$100,000 to reflect payments that were not needed in 2003-2004.

Notes:

FY Initiated:

2003-2004

Redevelopment Area:

N/A

Initial Project Budget:

\$500,000

SNI Area:

N/A

Appn.#:

## 2006-2010 Proposed Capital Improvement Program **Detail of Capital Projects**

#### 10. Payment for Clean Water Financing Authority Trustee

CSA:

**Environmental and Utility Services** 

**Initial Start Date:** 

Ongoing

**CSA Outcome:** 

Reliable Utility Infrastructure

**Revised Start Date:** 

Department:

**Environmental Services** 

Initial Completion Date:

Ongoing

**Council District:** 

4

Location:

**Revised Completion Date:** 

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.

	\$4\\$/			XPENDIT	URESCH	EDULE (0	00'S)				
Cost Elements	Prior Years	2004-05 Appn.	2004-05 Estimate	2005-06	2006-07	2007-08	2008-09	2009-10	5-Year Total	Beyond 5-Year	Project Total
Program Management	,	135	135	70	135	135	-135	135	610		
TOTAL		135	135	70	135	135	135	135	610		
			FUN	IDING SO	URCE SCI	IEDULE (	000 <sup>(</sup> S)				
San José-Santa Clara Treatment Plant Capital Fund		135	135	70	135	135	135	135	610		
TOTAL	•	135	135	. 70	135	135	135	135	610		

None

Major Changes in Project Cost:

N/A

Notes:

FY Initiated:

Ongoing

Redevelopment Area:

N/A

Initial Project Budget:

SNI Area:

N/A

Appn. #:

# 2006-2010 Proposed Capital Improvement Program Detail of Capital Projects

## 11. 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:

. .

Revised Completion Date:

Location:

Water Pollution Control Plant

Description:

This allocation provides for the repayment of low interest State loans awarded for the South Bay

Water Recycling projects.

Justification:

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

Pri	or										
Cost Elements Yea		2004-05 Appn.	2004-05 Estimate	2005-06	2006-07	2007-08	2008-09	2009-10	5-Year Total	Beyond 5-Year	Project Total
Debt Service 23	,528	4,464	4,464	4,464	4,464	4,464	4,464	4,464	22,320	38,102	88,414
TOTAL 23	,528	4,464	4,464 ELIN	4,464	4,464	4,464 IEDUIEN	4,464 000/SV	4,464	22,320	38,102	88,414
San José-Santa Clara 23 Treatment Plant Capital Fund	,528	4,464	<b>4,</b> 46 <b>4</b>	<b>4,</b> 464	, <b>4,</b> 464	4,464	4,464	4,464	22,320	38,102 ·	88,414
TOTAL 23	,528	4,464	4,464	4,464	4,464	4,464	4,464	4,464	22,320	38,102	88,414

None

Major Changes in Project Cost:

None

Notes:

FY Initiated:

1998-1999

Redevelopment Area:

N/A

Initial Project Budget:

\$87,533,000

SNI Area:

N/A

Appn. #:

# 2006-2010 Proposed Capital Improvement Program Detail of Capital Projects

#### 12. Transfer to Clean Water Financing Authority Debt Service Payment Fund

CSA:

**Environmental and Utility Services** 

Initial Start Date: 2nd Qtr. 1996

**CSA Outcome:** 

Healthy Streams, Rivers, Marsh and Bay

Revised Start Date:

Department:

**Environmental Services** 

Initial Completion Date: 4th Qtr. 2020

Council District:

4

**Revised Completion Date:** 

Location:

Water Pollution Control Plant

**Description:** 

This funding provides for the transfer of Santa Clara's and outside agencies' shares 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.

			E	XPENDIT	URESCH	EDULE (0	00 <sup>1</sup> S)				
Cost Elements	Prior Years	2004-05 Appn.	2004-05 Estimate	2005-06	2006-07	2007-08	2008-09	2009-10	5-Year Total	Beyond 5-Year	Project Total
Debt Service	6,584	1,309	1,309	1,69 <b>7</b>	1,662	1,662	1,660	1,675	8,356	20,697	36,946
TOTAL	6,584	1,309	1,309	1,697	1,662	1,662	1,660	1,675	8,356	20,697	36,946
			FUN	IDING SO	JRCE SC	HEDULE (	000'S)				
San José-Santa Clara Treatment Plant Capital Fund	6,584	1,309	1,309	1,697	1,662	1,662	1,660	1,675	8,356	20,697	36,946
TOTAL	6,584	1,309	1,309	1,697	1,662	1,662	1,660	1,675	8,356	20,697	36,946
			ANNUA	AL OPERA	TING BUD	GET IMP	ACT (000)	s) 🦠		377	
Nama		•									

None

Major Changes in Project Cost:

None

Notes:

FY Initiated:

2001-2002

Redevelopment Area:

N/A

**Initial Project Budget:** 

\$34,851,000

SNI Area:

N/A

Appn. #:

0005

.

# 2006-2010 Proposed Capital Improvement Program **Detail of Capital Projects**

#### 13. 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:

**Council District:** 

Revised Completion Date:

N/A

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.

Cost Elements	Prior Years	2004-05 Appn.	2004-05 Estimate	2005-06	2006-07	2007-08	2008-09	2009-10	5-Year Total	Beyond 5-Year	Project Total
Reserve		5,000		5,000					5,000		•
TOTAL		5,000		5,000	· · · · · ·				5,000		
gin en gan et 2000 en 1900 en 1900 en 1900. De la gant de la gant en 1900			FUN	IDING SOL	JRCESC	EDULE(	000'S)			2X\$1000022226C 232225224 <u>25</u>	8 24 A 135
San José-Santa Clara Treatment Plant Capital Fund		5,000		5,000					5,000		
TOTAL		5,000		5,000				-	5,000		

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. #:

# 2006-2010 Proposed Capital Improvement Program Detail of Capital Projects

#### 14. Reserve for GRS 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:** 

1

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 the next five years.

Reserve	Cost Elements	Prior Years	2004-05 Appn.	2004-05 Estimate	2005-06	2006-07	2007-08	2008-09	2009-10	5-Year Totai	Beyond 5-Year	Project Total
FUNDING SOURCE SCHEDULE (000'S)  San José-Santa Clara 1,800 1,500 1,500  Treatment Plant Capital Fund	Reserve	-	1,800		1,500					1,500		1,500
San José-Santa Clara 1,800 1,500 1,500 Treatment Plant Capital Fund	TOTAL		1,800		1,500					1,500		1,500
Treatment Plant Capital Fund				FUΛ	DINGSO	JRCE SCI	HEDULE (	000'S)				
	Treatment Plant Capital		1,800	-	1,500		,		·	1,500		1,500
TOTAL 1,800 1,500 1,500	TOTAL		1,800		1,500					1,500		1,500
	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. #:

## 2006-2010 Proposed Capital Improvement Program **Detail of Capital Projects**

#### 15. Reserve for Rate Studies

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:

**Revised Completion Date:** 

Location:

Water Pollution Control Plant

Description:

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.

				XPENDIT	URE SCH	EDULE (0	00'S)			32.57 (5) (5)	i i
Cost Elements	Prior Years	2004-05 Appn.	2004-05 Estimate	2005-06	2006-07	2007-08	2008-09	2009-10	5-Year Total	Beyond 5-Year	Project Total
Reserve		200		200					200		200
TOTAL		200		200					200		200
			FUI	IDING SO	JRCE SC	HEDULE (	000'S)				
San José-Santa Clara Treatment Plant Capital Fund	٠	200	:	200	,				200		200
TOTAL		200	-	200					200		200
			ANNUA	AL OPERA	TING BUI	GET IMP	ACT (000	S).			
None											

Major Changes in Project Cost:

None

Notes:

FY Initiated:

2003-2004

Redevelopment Area:

N/A

initial Project Budget:

SNI Area:

N/A

Appn. #:

#### 2006-2010 Proposed Capital Improvement Program

#### Summary of Projects that Start after 2005-2006

**Project Name: Alternative Disinfection** 

Initial Start Date: 2nd Qtr. 2004

5-Year CIP Budget:

\$4,500,000

Revised Start Date: -

**Total Budget:** 

\$5,100,000

Initial End Date:

3rd Qtr. 2007

Council District: 4

Revised End Date: 2nd Qtr. 2008

Description: The WPCP disinfects the filtered effluent using chlorine and neutralizes the chlorine residual with sulfur dioxide prior to discharge. Chlorine and sulfur dioxide are delivered to the Plant in railcar containers. To minimize risk of damage, this project provides funding for the design and construction of facilities to replace the gaseous chlorine and sulfer dioxide system with a liquid sodium hypochlorite and sodium bisulfite system. The initial start date reflects the start of the alternative disinfection study, which preceded the construction project described here. The revised end date reflects the anticipated project completion.

Project Name: Inactive Lagoons Bio-Solids Removal

**Initial Start Date:** 

3rd Qtr. 2002

5-Year CIP Budget: **Total Budget:** 

\$500,000 \$1,853,000 **Revised Start Date:** 

Initial End Date: 2nd Qtr. 2010.

Council District: 4

Revised End Date:

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 regulator and engineering feasibility evaluation. The initial start date reflects prior-year projects related to inactive lagoons management. The initial end date reflects the evaluation of alternative disposal of inactive lagoon stockpiles.

Project Name: Plant Electrical Reliability

**Initial Start Date:** 

3rd Qtr. 2003

5-Year CIP Budget:

\$17,027,000

**Revised Start Date:** 

3rd Qtr. 2008

**Total Budget:** 

\$67,652,000

Initial End Date:

2nd Qtr. 2015

Council District: 4

Revised End Date:

Description: This project will include a four-phase construction schedule based upon the recently completed master study. 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.

Project Name: Replace Generators 1-5 (Power and Air

Initial Start Date:

2nd Qtr. 2009

5-Year CIP Budget:

\$1,000,000

Revised Start Date: Initial End Date: 3rd Qtr. 2008 4th Qtr. 2015

**Total Budget:** 

\$13,000,000

Building)

Council District: 4

Revised End Date:

4th Qtr. 2014

Description: This project will replace aged and obsolete generating facilities and equipment in the Power and Air Building at the Water Pollution Control Plant.