SAN JOSE / SANTA CLARA WATER POLLUTION CONTROL PLANT

700 Los Esteros Road San Jose, California 95134

2006-2007

PROPOSED

Operating & Maintenance Budget

Environmental Services Department City of San Jose

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Memorandum

TO: TREATMENT PLANT ADVISORY

FROM: John Stufflebean

COMMITTEE

SUBJECT: 2006-2007 PROPOSED OPERATING BUDGET

May 4, 2006 DATE:

This memorandum serves to transmit the 2006-07 Proposed Budget for the Environmental Services Department and the Treatment Plant Operating Fund. We hope you find this report informative and we are happy to answer any further questions you might have.

Director, Environmental Services Department

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2006 - 2007

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
Jim Beall		Boardmember, West Valley Sanitation District
Nora Campos	•	Councilmember, City of San Jose
Cindy Chavez		Councilmember, City of San Jose
Curtis Harrison		Boardmember, Cupertino Sanitary District
Bob Livengood		Councilmember, City of Milpitas
Jaime Matthews		Councilmember, City of Santa Clara
Chuck Reed		Councilmember, City of San Jose
Deanna Santana		Deputy City Manager, City of San Jose

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

TABLE OF CONTENTS

Page No.

SUMMARY INFORMATION	
Budget Summary & Highlights	1
Budget & Estimated Cost Distribution	2
Overview	3
Budget Summary by Core Service	5
CORE SERVICES INFORMATION	
Manage Wastewater	6
Manage Recycled Water	10
Protect Natural & Energy Resources	13

Environmental Services Department

BUDGET SUMMARY

	Adopted 05-06	Proposed 06-07	Change
Treatment Plant Operating Fund Budget ESD Authorized Positions	65,607,249	69,069,393	5.3%
	325,93	332.51	2.0%

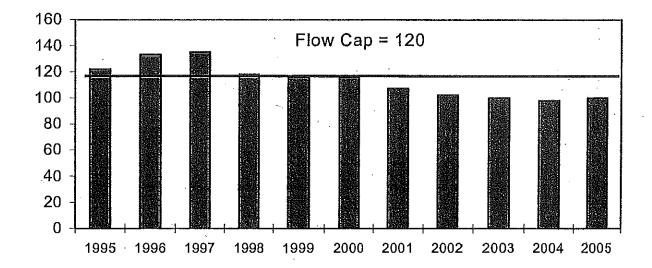
BUDGET HIGHLIGHTS 2005-2006

The third 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.

A total of 7 positions are proposed to address pre-treatment monitoring and enforcement (4), increased engineering services at the Plant (2), and operations support for the proposed conversion of the Plant's maintenance management software system (1).

Budget

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



Environmental Services Department

TREATMENT PLANT OPERATING FUND BUDGET SUMMARY

•				
Fund ·	2004-05	2005-06	2006-07	2006-07
Budget	Actual	Adopted	Forecast	Proposed
Summary	Expenses	Budget	Budget	Budget
Operating Expenses			•	
Personal Services	28,552,351	29,517,643	33,847,999	34,439,709
Non-personal Expenses	21,108,314	26,983,305	24,739,440	25,411,290
Inventory	286,414	- 400,000	400,000	400,000
Overhead	3,540,079	4,645,548	4,870,014	4,870,014
Workers' Compensation	670,430	974,100	650,000	650,000
City Services	1,172,436	1,386,653	1,598,580	1,598,380
Total Operating Expenses	55,330,024	63,907,249	66,106,033	67,369,393
Other Expenses	,			
Equipment	522,874	0	0	0
Contingency	0	1,700,000	1,700,000	1,700,000
TOTAL EXPENSES	\$55,852,898	\$65,607,249	\$67,806,033	\$69,069,393

ESTIMATED COST DISTRIBUTION

2006-07 Estimated Total Gallons Treated (MGD)	(1) Percent of Total Sewage Treated	City / District	2006-07 Projected
24,765.384 5,369.875	64.794 12.487	City of San Jose (3) City of Santa Clara	\$45,996,857 8,183,456
30,135.259	77.281	Sub-Total	\$54,180,313
3,482.708	9.146	West Valley Sanitation District	5,993,905
1,951.220	5.172	Cupertino Sanitary District	3,389,512
2,472.667	6.432	City of Milpitas	4,215,263
560.298	1.511	Sanitation District #2 - 3	990,246
119.315	0.319	Burbank Sanitary District	209,059
52.011	0.139	Sunol Sanitary District	91,095
8,638.219	22 .7 19	Sub-Total	\$14,889,080
38,773.478	100.0	TOTAL (2)	\$69,069,393

⁽¹⁾ Composite of four parameters (flow, BOD, SS, ammonia). Source 2006-07 Revenue Program.

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

⁽³⁾ 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 2006-07 Proposed Treatment Plant Operating Fund Budget recommends a 5.3% increase over the 2005-06 Adopted Budget. This increase represents additional costs for benefits and retirement contributions, increased energy costs for the Recycled Water and Wastewater categories, and \$1.1 million in additional budget proposals.

The 2006-07 Proposed Budget realizes the third 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.

Environmental Services Department

OVERVIEW CONTINUED

Prior to FY2004-2005, the Sewer Service and Use Charge Fund had experienced flat or declining revenues in relation to two primary factors. First, the downturn in the economy slowed revenue growth as residential development 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 moderate deficit spending by approximately \$100,000; and without the proposed 4.5% rate increase for 2006-2007, such a revenue shortfall would create approximately \$9 million in deficit spending.

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, retirement and other personnel related costs.

As operating expenses are increasing, the Plant's capital infrastructure needs are becoming ever more critical. Over 50% of the Plant's infrastructure exceeds thirty 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; some of which are described in the 2007-2011 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 2006-2007, is projected to increase chemical costs by \$3.5 million, or approximately 5% of current year revenues.

In order to maintain the fund's short-term financial health, and fund both operations and maintenance requirements, and critical capital projects; a rate increase of 4.5% is recommended for the proposed fiscal year. Moreover, with respect to current revenue and expenditure trends, as well as 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

	 					-	Andrew Company of the	**************************************
Department	2004-05		2005-06		2006-07		2006-07	 %
Budget	Actual		Adopted		Forecast		Proposed	Change
Summary	1		Ż ,		3		4	(2 to 4)
·								
Dollars by Core Services								÷
Manage Wastewater	\$ 46,110,183	\$	49,408,724	\$	51,521,428	\$	52,631,170	6.5%
Manage Recycled Water	\$ 2,259,361	\$	3,903,153	\$	3,929,254	\$	3,929,254	0.7%
Protect Ņatural					•		, , , ,	
& Energy Resources	\$ 1,016,347	\$	2,436,887	\$	2,492,158	\$	2,492,158	2.3%
Strategic Support	\$ 4,252,779	\$	5,290,044	\$	5,955,359	\$	5,955,359	12.6%
Total	\$ 53,638,670	\$	61,038,808	\$	63,898,199	\$	65,007,941	6.5%
·								
Dollars by Category	•				•			
Personal Services					•			
Salaries/Benefits	\$ 27,942,131	\$	30,908,156	\$	33,234,990	\$	33,818,504	9.4%
Overtime	\$ 610,220	\$	613,009	\$	621,205	\$	621,205	1.3%
Subtotal	\$ 28,552,351	\$	31,521,165	\$	33,856,195	\$	34,439,709	9.3%
Non-personal/Equipment	\$ 25,086,319	.\$	29,517,643	\$	30,042,004	\$	30,568,232	3.6%
Total	\$ 53,638,670	\$	61,038,808	\$	63,898,199	\$	65,007,941	6.5%
Authorized Positions	324.30		325.93		325.51		332.51	2.0%

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	· a	Regulatory Development and Technical Guidance Process Control Monitoring
	Maintain Equipment and Facilities Regulatory Compliance		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.

To continue to meet discharge requirements and related inspection requirements as required by the EPA, Water Board, and the Water Pollution Control Plants' NPDES permit 8.0 new positions are proposed. These positions will ensure implementation of new food-related facility inspections required by the Sanitary Sewer Master Plan, new control efforts to address specific pollutants such as mercury and pharmaceuticals, and surveillance monitoring and inspections to ensure proper pretreatment of wastewater by the industrial sector.

In this core service, the Department is projected to meet or exceed its performance measurement targets in 2005-2006. 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 long-term downturn in the economy. Fiscal year 2005-2006, however, marks the first year in several in which dry-weather influent and annual effluent were higher than the previous year. This is likely an indicator that the economy is beginning to turn around and will reverse the recent declining trend over the past several years placing a greater emphasis on the expansion of the recycled-water consumer base. This increase is minimal enough that projections

for 2006-2007 indicate that the water discharged to the Bay will remain well below the 120 mgd flow trigger.

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, three are several capital maintenance projects proposed within the 2007-2011 Capital Improvement Program (CIP) that will address specific components of the Plant and reduce some operations and maintenance costs in the future. Three new positions are proposed to manage and oversee the technical document management program and daily operations of the planned computerized maintenance management software system. The maintenance costs associated with repairing obsolete equipment through overtime, parts, and supplies, will only to continue to increase as capital maintenance projects are deferred. Only through a more aggressive and comprehensive CIP planning and budget can this performance measure be contained to reasonable annual increases in future years.

Performance Measure Development

No new performance measures were added to this core service.

	Manage Wastewater Performance Summary	2004-2005 Actual	2005-2006 Target	2006-2007 Estimated	2006-2007 Target
<u>©</u>	Millions of gallons per day discharged to the Bay during average dry weather season State order: 120 mgd or less*	97.5	100	100	100
` ©	% 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	90%	90%	90%	90%
[3	Cost per million gallons treated	\$776	\$820	\$820	\$885
R	% of customers (permitted dischargers) satisfied or very satisfied with service, based on reliability and pre-treatment services	95%	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 2006-2007.

Core Service: Manage Wastewater Environmental Services Department

Performance and Resource Overview (Cont'd.)

Activity & Workload Highlights	2004-2005 Actual	2005-2006 Forecast	2006-2007 Estimated	2006-2007 Forecast
Average millions of gallons per day treated	117	115	118	119
Total population in service area	1,337,500	1,333,600	1,339,600	1,346,966
Total pounds of suspended solids removed (in millions)	104	104	104	105

Manage Wastewater Resource Summary	2004-2005 Actual 1	2005-2006 Adopted 2	2006-2007 Forecast 3	2006-2007 Proposed 4	% Change (2 to 4)
Core Service Budget *					
Personal Services	\$ 23,202,590	\$ 25,098,885	\$ 26,715,397	\$ 27,298,911	8.8%
Non-Personal/Equipment	22,907,593	24,309,839	24,806,031	25,332,259	4.2%
Total	\$ 46,110,183	\$ 49,408,724	\$ 51,521,428	\$ 52,631,170	6.5%
Authorized Positions	255.36	260.68	260.68	267.68	2.7%

Budget Changes By Core Service

Proposed Core Service Changes		Positions	Treatment Plant Appropriations
	_		•

RELIABLE UTILITY INFRASTRUCTURE

1. In-Source Vehicle Maintenance Activities (0) (1,100)

This action would bring more vehicle maintenance and repair services in-house, while producing savings to the City through a reduction to the contractual services budget. This proposal, which is contingent upon the filling of two vacant Mechanic position vacancies, will result in a cost savings of \$272,500, of which \$220,725 is generated in the General Fund. As a result of using in-house Fleet Maintenance staff to troubleshoot and resolve mechanical problems, efficiencies should be gained as less fleet equipment will be transported to and from outside facilities; however, cycle times may rise during peak workload periods due to the reduction in the ability for Fleet Management to use contractual services for some major and complex repairs. The cost savings in the Environmental Services Department, Manage Wastewater Core Service is \$1,100. (Ongoing savings: \$1,100)

Budget Changes By Core Service (Cont'd)

Proposed Core Service Changes

Positions

Treatment Plant Appropriations

Performance Results:

Quality A higher quality of work on repairs that are completed should be realized as it will be easier to monitor in-house staff repairs than with a vendor. **Cycle Times** Cycle times for routine repairs are anticipated to decrease as a result of bringing more of them in-house. Cycle times for major and complex repairs could increase, however, as the reduction in the ability to use contractual services during peak workload periods may cause some non-public safety related repairs to be deferred.

2. Plant Technical Document Management

3.00

304,443

This proposal would fund the addition of one Electrical Engineer, one Senior Engineering Technician and one Associate Engineer to establish, manage, and oversee the full implementation of the San José/Santa Clara Water Pollution Control Technical Document Management program and also to support data-entry conversion and daily operations of the planned Computerized Maintenance Management Software System. (Ongoing costs: \$337,652)

Performance Results:

Cost Reduces labor costs per work order by efficiently and effectively planning and assigning both preventive maintenance and repair orders.

3. Poliution Prevention Program Resources

2.00

188,580

This proposal would fund the addition of one Senior Environmental Services Specialist and one Environmental Services Specialist to develop new and expanded pollution prevention programs for the residential, commercial, and industrial sectors as required by the NPDES permit for the Treatment Plant. (Ongoing costs: \$193,688)

Performance Results:

Quality Ensures that the City is in compliance with the NPDES permit and improves the quality of runoff based on new C.3 requirements.

HEALTHY STREAMS, RIVERS, MARSH, AND BAY

4. Environmental Protection Agency (EPA) Administrative Order

2.00

617,819

This proposal would fund the addition of one Senior Environmental Specialist and one Assistant Environmental Inspector and a consultant agreement for technical support in the pretreatment and the pollution prevention programs. In addition, funding is proposed for consultant services to develop and deliver training modules for the Source Control Staff and to expand the surveillance and trunkline monitoring programs as part of the EPA Administrative Order #CWA-307-9-05-36 requirements are proposed. These contracts will ensure that the City is in compliance with the critical elements of the EPA Administrative Order. (Ongoing costs: \$217,230)

Performance Results:

Quality Ensures that the City maintains performance levels in pollution prevention programs while addressing requirements of the EPA Administrative Order.

Core Service: Manage Recycled Water Environmental Services Department

Core Service Purpose

	evelop, operate, and maintain a recycled provides a reliable and high quality alter	r system that reduces effluent to the Bay and water supply.
Key	Operational Services:	
	System Operations and Maintenance Regulatory Compliance	Customer Connection Services Education and Marketing System Expansion and Development

Performance and Resource Overview

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 acre-foot (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 above targeted levels in 2005-2006 due to a somewhat higher than anticipated water use from large industrial customers, such as the Metcalf Energy Center The customer surveys for this core service are conducted every other year. The next survey is scheduled for 2005-2006 and is currently underway. Results of this survey are expected to be reported in Summer 2006.

Core Service: Manage Recycled Water Environmental Services Department

Performance and Resource Overview (Cont'd.)

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	Manage Recycled Water Performance Summary	2004-2005 Actual	2005-2006 Target	2005-2006 Estimated	2006-2007 Target
©	Millions of gallons per day diverted from flow to the Bay for beneficial purposes during the dry weather period*	10.6	112	12,5	13.5
6	Millions of gallons of recycled water delivered annually	2,059	2,800	2,800	3,000
©	% 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*	10%	9%	10%	10%
6	Cost per million gallons of recycled water delivered	\$1,315	\$1,150	\$1,100	\$1,100
R	% of recycled water customers rating service as good or excellent, based on reliability, water quality, and responsiveness**	76%	75%	75%**	75%

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 Recycled Water Customer Satisfaction Survey. The next survey is scheduled for 2005-2006, with results available Summer 2006.

Core Service: Manage Recycled Water Environmental Services Department

Performance and Resource Overview (Cont'd.)

Activity & Workload Highlights				2004-2005 2005-2006 Actual Forecast			2005-2006 Estimated		2006-2007 Forecast
Fotal number of South Bay Water Recycling customers		526			530		530	540	
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Manage Recycled Water Resource Summary	2	2004-2005 Actual 1		2005-2006 Adopted 2		2006-2007 Forecast 3		2006-2007 Proposed 4	% Change (2 to 4)
Core Service Budget *								Salar a carrer mare traction to the council of a comp _{ensi} e	
Personal Services Non-Personal/Equipment	\$	1,303,359 956,002	\$	1,653,057 2,250,096	\$	1,672,633 2,256,621	\$	1,672,633 2,256,621	1.2% 0.3%
Total	\$	2,259,361	\$	3,903,153	\$	3,929,254	\$	3,929,254	0.7%
Authorized Positions		16.13		16.13		15,03		15.03	(6.8%)

Budget Changes By Core Service

Proposed Core Service Changes	Po	sitions	Treatment Plant Appropriations	
			•	
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NONE

Core Service: Protect Natural and Energy Resources

Environmental Services Department

Core Service Purpose

romote 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.

Sustainable (Green) Building

The City's West Valley Branch Library, a Leadership in Energy and Environmental Design (LEEDTM) certified facility, was awarded the 2005 Building Owners and Managers Association Green Building Award.. The program honors and recognizes the operations and building management teams for the achievements that preserve and enhance the internal and external environment through an all around "green" program. Staff continues to review existing construction projects to determine to what extent green building measures can be incorporated. Cross-training of staff within Environmental Services, Public Works, Redevelopment Agency, and Planning, Building and Code Enforcement continues. To date, eight City staff are LEEDTM Accredited Professionals.

The two energy performance measures relating to conservation and the incorporation of Green Building Guidelines in new City facilities are estimated to meet or exceed targeted levels. 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

Performance and Resource Overview (Cont'd.)

Energy Efficiency

Energy supply, reliability and costs continue to be a concern. As part of the Sustainable Energy Policy, San José continues to pursue energy efficiency in City operations, encourages renewable and clean energy use, and promotes energy efficiency in the community.

The Silicon Valley Energy Partnership (SVEP), a collaborative between the City and PG&E, proved to be highly successful at helping Silicon Valley businesses reduce their operating and maintenance energy costs during 2004-06. Over 600 San José businesses received rebates for installing energy efficient equipment. For the 2006-08 period, San Jose will be working to provide continued education and training to various stakeholders (businesses, architects, builders, code officials and homeowners) on energy efficiency opportunities.

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, and the revised, smaller program size continues to be appropriate.

In 2006-2007, WEP staff will continue to lead and support Environmental Service's Business Environmental Support Team (BEST). BEST serves the business sector through collaborative efforts bringing information, assistance, and incentives that support San Jose businesses in becoming more resource-efficient while improving our environment.

As well as Water Efficient Technology (WET) rebates, BEST now also offers Integrated Assessments. Integrated Assessments provide useful information regarding energy efficiency, pollution prevention, waste reduction and recycling, as well as water conservation. BEST collaborates with the County Green Business Program and the Santa Clara Valley Water Agency's Water Efficiency Program in order to provide San Jose businesses with more comprehensive input regarding environmental management practices that benefit businesses and our environment.

The cost sharing with the Santa Clara Valley Water District (SCVWD) on its indoor water conservation programs continues to leverage funds, achieving increased water conservation with fewer dollars.

WEP also continues to serve the residential sector through administration of the Neighborhood Preservation Water Conservation Program. Funded by the Santa Clara Valley Water District 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 the cost sharing agreement with SCVWD

Core Service: Protect Natural and Energy Resources Environmental Services Department

Performance and Resource Overview (Cont'd.)

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 below target due to a four month delay in approving the Cost Sharing Agreement with the SCVWD, coupled with the unexpected delay in cost sharing on High Efficiency Toilet retrofits for the Commercial, Industrial, and Institutional sectors.

Performance and Resource Overview

Prote	ect Natural and Energy Resources Performance Summary	2004-2005 Actual	2005-2006 Target	2005-2006 Estimated	2006-2007 Target
6	(Water) % of annual goal for gallons of water conserved tributary-wide	108%	100%	50%	100%
B	(Water) Net cost per million gallons per day of water conserved through City programs*	\$1.4 million	\$2.0 million	\$2.0 million \$2.0 million	
A	(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	2004-2005 Actual	2005-2006 Forecast	2005-2006 Estimated	2006-2007 Forecast
Millions of gallons per day conserved (tributary area-wide)	0.189	0.175	0.088	0.150
Cumulative millions of gallons per day conserved since July 1992 (tributary area-wide)	7.195	7.350	7.283	7.432

Core Service: Protect Natural and Energy Resources Environmental Services Department

Performance and Resource Overview (Cont'd.)

Protect Natural and Energy Resource Summary	2	004-2005 Actual 1	_	2005-2006 Adopted 2	_	006-2007 Forecast 3	2006-2007 Proposed 4	% Change (2 to 4)
Core Service Budget *		÷'						
Personal Services Non-Personal/Equipment	\$	512,867 503,480	\$	658,422 1,778,465	\$	711,012 1,781,146	\$ 711,012 1,781,146	8.0% 0.2%
Total	\$	1,016,347	\$	2,436,887	\$	2,492,158	\$ 2,492,158	2.3%
Authorized Positions		6.80		5.70		5.70	5.70	0.0%

Budget Changes By Core Service

Proposed Core Service Changes	Positions	Treatment Plant Appropriations

NONE

Strategic Support Environmental Services Department

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

Performance and Resource 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 2005-2006 and FY 2006-2007.

Allocated Support from the Treatment Plant Operating Fund

Program	FY 2005-06	FY 2006-07
Marketing Communications	35%	38%
Municipal Environmental Compliance	40%	40%
Policy & Planning	64%	64%
Support Services	75%	75%
Water Efficiency Program	100%	98%

Strategic Support Environmental Services Department

Performance and Resource Overview (Cont'd.)

Strategic Support Resource Summary	2	004-2005 Actual 1	005-2006 Adopted 2	006-2007 Forecast 3	_	2006-2007 Proposed 4	% Change (2 to 4)
Core Service Budget *		. "					
Personal Services Non-Personal/Equipment	\$	3,533,535 719,244	\$ 4,110,801 1,179,243	\$ 4,787,153 1,198,206	\$	4,757,153 1,198,206	15.7% 1.6%
Total	\$	4,252,779	\$ 5,290,044	\$ 5,985,359	\$	5,955,359	12.6%
Authorized Positions		46.01	43.42	42.74		44.10	1.6%

Strategic Support Budget Changes

Proposed Core Service Changes	Ç.	Positions	Treatment Plant Appropriations
NONE		•	,

SAN JOSE / SANTA CLARA WATER POLLUTION CONTROL PLANT

700 Los Esteros Road San Jose, California 95134

2007-2011

PROPOSED

Capital Improvement Program

Environmental Services Department City of San Jose

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Memorandum

TO: TREATMENT PLANT ADVISORY COMMITTEE

FROM: John Stufflebean

SUBJECT: FIVE-YEAR 2007-2011CAPITAL IMPROVEMENT PROGRAM

DATE: May 4, 2006

This memorandum serves to transmit the Proposed Budget for the San Jose/Santa Clara Water Pollution Control Plant's Five-Year 2007-11 Capital Improvement Program. 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

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PROPOSED

SAN JOSE / SANTA CLARA WATER POLLUTION CONTROL PLANT

700 Los Esteros Road San Jose, California 95134

Five-Year 2007-2011 Capital Improvement Program

Submitted by

John Stufflebean, Director

Environmental Services Department

City of San Jose

TO: Treatment Plant Advisory Committee

Jim Beall Boardmember, West Valley Sanitation District Nora Compos Councilmember, City of San Jose Vice Mayor, City of San Jose Cindy Chavez Boardmember, Cupertino Sanitary District Curtis Harrison Councilmember, City of Milpitas Bob Livengood Patricia Mahan (Chair) Mayor, City of Santa Clara Jamie Matthews Councilmember, City of Santa Clara Chuck Reed Councilmember, City of San Jose Deanna Santana Deputy City Manager, City of San Jose

PROPOSED

San Jose/Santa Clara Water Pollution Control Plant

Five-Year 2007-2011 Capital Improvement Program

TABLE OF CONTENTS

Page No.

Description

1-6

2006-2010 Overview.

7 - 8

Source & Use of Funds Summary

V-137 -- V-155

Detail of Capital Projects

28

List of Projects that Start after 2005-2006

2007-2011 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 collection agencies (Agencies), sewage 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, Sereno and Saratoga), 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 2007-2011 Adopted CIP provides funding of \$236.4 million, of which \$50.2 million is allocated in 2006-2007.

Revenues for the Five-Year CIP are derived from eight sources: Contributions from the City of Santa Clara and Other Agencies (\$50.6 million); transfers from the City of San José Sewer Service and Use Charge Fund (\$87.4

2007-2011 Proposed Capital Improvement Program

Overview

Sources of Funding (Cont'd.)

million) and the Sewage Treatment Plant Connection Fee Fund (\$15.4 million); Interest (\$7.1 million); Calpine Metcalf Energy Center Facilities Repayments (\$1.9 million); and federal grants from the US Bureau of Reclamation (\$2.0 million). In addition, \$50.0 million from a Clean Water Financing Authority Revenue Bond Sale in 2009-2010, and \$10.0 million from the available fund balance are 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 Adopted CIP, these contributions from the City of Santa Clara and the other agencies total \$50.6 million, which represents a \$15.9 million (31.4%) increase compared to the 2006-2010 Adopted CIP. This increase results from the increase in reimbursements assumed in this CIP due to an increase in the 2007-2011 Adopted CIP compared to the 2006-2010 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 Water Pollution Control Capital Improvement Program reflect a \$72.1 million (53.1%) increase compared to the 2006-2010 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. Continuation of annual increases in the range of 5% annually, beyond the Council-approved three-year rate increase strategy, will 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 2007-2011 Adopted CIP. This transfer is consistent with the amount programmed in the 2006-2010 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 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 and includes the following components:

2007-2011 Proposed Capital Improvement Program

Overview

Program Highlights (Cont'd.)

Plant Reliability Improvements (Cont'd.)

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) 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 are included in this CIP, 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 2010-2011, and the removal of the Filter Improvements project from this CIP. An increase to the Plant Infrastructure Improvements allocation was approved to ensure adequate reserve funding is available to critical electrical repairs 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 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

2007-2011 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 Adopted 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 in this CIP, \$5.0 million total project costs
- Bio-Solids Master Plan \$16.0 million in this CIP, \$66.0 million total project costs
- Fire Line Replacement \$\$0.75 million total costs in this CIP
- Inactive Lagoons Bio-Solids Removal, Phase 1 (characterization of solids) -\$5.125 million in this CIP, \$20.2 million total project costs
- Land Management & Improvements . \$0.5 million
- M5, Ring Buss & cable replacement -\$8.2 million total project costs in this CIP
- Scum Digestion \$1.0 million in total project costs in this CIP

Reserve for Equipment Replacement

As in prior Capital Improvement Programs, the 2007-2011 Adopted CIP includes a minimum \$5.0 million reserve for equipment replacement. This reserve minimum was

2007-2011 Proposed Capital Improvement Program

Overview

Program Highlights (Cont'd.)

Reserve for Equipment Replacement (Cont'd.)

established to satisfy three contractual requirements:

- The State Water Resources Control Board's (SWRCB) Policy implementing the State Revolving Fund for Construction of Wastewater Treatment requires that annual revenue requirements include funds for replacement of \mathbf{for} equipment 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 million and a reserve of \$5.0 million are included 2006-2010 in the Adopted satisfy CIP to requirement.
- The Clean Water Financing Authority (CWFA) Bond Covenants require that a reserve be maintained at a minimum level of \$5.0 million to help pay the costs of extraordinary repairs and for renewal and replacement of the treatment plant when insurance and other funds budgeted for such purposes are exhausted, or are insufficient to meet the need.
- The Master Agreements for Wastewater Treatment between City of San José, 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 2006-2010 Adopted CIP

Major changes from the 2006-2010 Adopted CIP include the following:

- New funding, from a \$50 million CWFA Revenue Bond Sale in 2009-2010, to fund the Plant Electrical Reliability Improvements program.
- Additional funding in the amount of \$2.0 million from the USBR Grant to reimburse fund 512 for prior SBWR project costs.
- Additional funding in the amount of \$10.8 million as transfers from City of Santa Clara & Other Agencies for costs for CIP projects (\$9.6 million), for 2005 refi debt service (reduced \$1.2 million) & for 2009 bond debt service payments (\$2.4 million).
- Additional funding in the amount of \$35.0 million as transfers from fund 541 for City of San Jose costs for CIP projects (\$8.0 million), for 2005 refi debt service (\$22.4 million previously reported only in fund 541) & for 2009 bond debt service payments (\$4.7 million).
- Additional funding in the amount of \$1.8 million from interest earnings as a result of increased contributions from City of Santa Clara & Agencies, increased transfers from 541, and additional funds acquired from the 2009 bond sale.

2007-2011 Proposed Capital Improvement Program

Overview

Major Changes from the 2006-2010 Adopted CIP (Cont'd.)

 Reallocation of the \$1.0 million funding in FY 2008-09 to replace Generators 1-5 to the newly created Scum Digestion Program.

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- Reallocation of \$5.0 million and \$0.3 million from the Land Management and Revised SBAP-Industrial Recycle projects to the previously delayed Filtration Action plan project.
- Allocation of additional funding for new projects for the Bio-Solids Master Plan (\$16.0 million), for the Fire line replacement (\$0.75 million), for the M5 & Ring Buss project (\$8.2 million), and the Scum Digestion Program (\$1.0 million).
- Allocation of additional funding in the amount of \$3.5 million for critical concrete repair projects in the Plant Infrastructure Improvements category.

 Allocation of additional funding for the payment of increased debt service for the 2005 refinance and the 2009 new bond sale.

Operating Budget Impact

The Alternative Disinfection project in the 2006-2010 Adopted 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 Adopted Operating Budget.

Net Operating Budget Impact Summary

•	2006-2007	2007-2008	2008-2009	2009-2010
Alternative Disinfection	\$0	<u>\$3,000,000</u>	<u>\$3,075,000</u>	\$3,152, 0 00
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

•	Estimate		-		•	÷	5-YEAR
· _	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	TOTAL
SOURCE OF FUNDS		-					
SJ/SC TREATMENT PLANT CAPITAL FUND	(512)					•	
Beginning Fund Balance	34,453,175	21,903,233	13,096,933	10,934,433	9,267,933	12,872,433	21,903,233
Reserve for Encumbrances	108,654,058						
Interest Income	2,171,000	1,939,000	1,316,000	1,479,000	1,201,000	1,207,000	7,142,000
Contribution from City of Santa Clara & Agencies		÷					
Equipment Replacement	591,000	591,000	591,000	591,000	591,000	591,000	2,955,000
WPCP Projects	1,825,000	7,170,000	5,660,000	5,660,000	5,760,000	7,260,000	31,510,000
SRF Loan repayment	1,384,000	1,384,000	1,384,000	1,384,000	1,384,000	1,384,000	6,920,000
2005 Bond Debt Service Repayment	1,592,000	1,342,000	1,382,000	1,385,000	1,386,000	1,385,000	6,880,000
2009 Bond Repayment Contributions	0	0	. 0	0	816,000	1,553,000	2,369,000
Inter-Pund 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	5,360,000
Capital Project Cost from Fund (541)	3,400,000	3,600,000	7,000,000	10,000,000	13,588,000	15,138,000	49,326,000
Debt Service Payment from Fund (541)	6,483,000	5,464,000	5,625,000	5,638,000	5,643,000	5,640,000	28,010,000
2009 Bond Payment from Fund 541	. 0	. 0	. 0	0	1,588,000	3,138,000	4,726,000
SRF Loan Repayment from Fund (539)	3,080,000	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
2006 Bond Sale Proceeds	. 0.	. 0	0	. 0	50,000,000	0	50,000,000
Calpine MEC Facilities Repayment	389,000	389,000	389,000	389,000	389,000	389,000	1,945,000
USBR Grant (SBWRP)	500,000	2,000,000	0	~ 0	0	0	2,000,000
← TOTAL SOURCE OF FUNDS	165,594,233	49,934,233	40,595,933	41,612,433	95,765,933	54,709,433	236,446,233
LINE OFFICE .					1	<u>`</u>	
USE OF FUNDS							
Water Pollution Control Managed Projects	. 25,000		٠.				
Admin Building & Gate Security Imprement	35,000						
Computer & Inst. Improvements	13,000	0	100.000		100.000		
DAF Pressure Retention Tank & Valves	402,000	. 0	402,000	0	402,000	0	804,000
Filtration Action Plan - valve replacement	. 0 .	. 0	600,000	2,000,000	2,000,000	2,000,000	6,600,000
Fiter Influent & Effluent Meters Replacemer.	110,000				*		
FIP Pump 1-4 Controller Rplcmnt	231,000		4		•		
Headworks Redundancy Modifications	1,000						
Plant Electrical Reliability	777,000	. 0	Q	5,000,000	50,000,000	0	55,000,000
Raw Sewage & Effluent Sampling Stations	19,000	,	-			•	
Technical Services Building	25,000				•		
Warehousing Facility Additions	0	0	500,000	0	0	0	500,000
Alternative Disinfection	518,000	6,300,000	0	0	. 0	0	6,300,000
2 Bio-Solids Master Plan	0	1,000,000	0	0	0	0	1,000,000
3 Fire Line Replacement	0	350,000	200,000	200,000	. 0	0	750,000
4 Inactive Lagoons Bio-Solids Removal	38,000	25,000	100,000	0	0	Ó	125,000
5 Land Acquisition & Improvements	155,000	150,000	150,000	150,000	0	0	450,000
2 rang vedaramon & unbrosements	•						•
	. 0	1,200,000	7,000,000	0	. 0	0	8,200,000
	-	1,200,000 250,000	7,000,000 750,000	0	. 0 0	0 0	8,200,000 1,000,000

WATER POLLUTION CONTROL PLANT SOURCE AND USE OF FUNDS SUMMARY

	Estimate						5-YEAR
WOR OF EVEN AND ASSESSED.	2005-2006	2006-2007	2007-2008	2008-2009	2009-2010	2010-2011	TOTAL
USE OF FUNDS (Cont'd.)					_		,
WSP Managed Projects						•	
ESD MIS Improvements	671,000		•				- `
Lab Information Management System Replac	-				-		
Salt Marsh Restoration	. 99,000		•				
South Bay Water Recycling Program	301,000	0 ′			•		ı
Revised SBAP - Indust. Recycle/Reuse	100,000	0	0	0	0	0	,
9 Revised SBAP - SBWR Extension	38,888,000	391,000	391,000	391,000	391,000	391,000	1,955,00
Construction Projects Total	118,222,000	11,675,000	10,093,000	7,741,000	52,793,000	2,391,000	84,693,000
Recurring Projects	•					,,	, ,
10. Equipment Replacement	2,505,000	1,525,000	1,525,000	1,525,000	1,525,000	1,525,000	7,625,000
11. Plant Infrastructure Improvements	9,681,000	5,827,000	6,232,000	6,251,000	6,338,000	7,390,000	32,038,000
12. Unanticipated/Critical Repairs	332,000	250,000	250,000	250,000	250,000	. 250,000	
				250,000	250,000	. 250,000	1,250,000
Total Construction	130,740,000	19,277,000	18,100,000	15,767,000	60,906,000	11,556,000	125,606,000
Non-Construction			•		, ,		,,
Arbitrage Rebate	300,000					,	
Budget Office - CIP Action Team	13,000		•				
City Hall Furn., Fix. & Equip.	12,000	•					0
City Hall Occupancy	4,000					-	0
13 Payment for CWFA Trustee	70,000	82,000	82,000	82,000	82,000	82,000	410,000
14 SRF Loan Repayment (Appm 6590)	4,464,000	4,464,000	4,464,000	4,464,000	4,464,000	4,464,000	22,320,000
15 Transfer to CWFA Debt Service Fund	8,075,000	6,806,000	7,007,000	7,023,000	7,029,000	7,025,000	34,890,000
Transfer to CWFA Debt Service Fund	0	0	. 0	0	2,404,000	4,691,000	7,095,000
16 City Hall O&M	13,000	8,300	8,500	8,500	8,500	8,500	42,300
Reserve for Bio-Solids Plans	0		-	5,000,000	8,000,000	15,000,000	28,000,000
17 Reserve for Equipment Replacement	•	5,000,000			-,,	13,000,000	5,000,000
18 Reserve for GRS agreement		1,000,000		•			1,000,000
19 Reserve for Rate Studies		200,000	,			•	200,000
Total Non-Construction	12,951,000	17,560,300	11,561,500	16,577,500	21,987,500	31,270,500	98,957,300
Total Expenditures	143,691,000	36,837,300	29,661,500	32,344,500	82,893,500	42,826,500	224,563,300
Ending Fund Balance	21,903,233	13,096,933	10,934,433	9,267,933	12,872,433	11,882,933	11,882,933
- FOTAL USE OF FUNDS	165,594,233	49,934,233	40,595,933	41,612,433	95,765,933	54,709,433	236,446,233

2007-2011 Proposed Capital Improvement Program **Detail of Capital Projects**

1. Alternative Disinfection

CSA:

Environmental and Utility Services

Revised Start Date:

CSA Outcome:

Reliable Utility Infrastructure

Initial Start Date: 2nd Qtr. 2004

Department:

Environmental Services

Initial Completion Date: 3rd Qtr. 2007

Council District:

Revised Completion Date: 3rd Qtr. 2008

Location:

Water Pollution Control Plant

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 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 estimated start date reflects the start of the alternative disinfection study, which preceded the construction project described here. The construction project will begin in 2006-2007. The estimated end date reflects the anticipated project completion.

Justification:

The presence of large quantities of sulfur dioxide and chlorine gas poses a high risk of damage in an event of massive sudden release. Since the terrorist attack event on September 11, 2001, reducing the potential risk of a massive catastrophe is the goal.

		4700		XPENDIT	URE SCH	EDULE (0	00'S)				0.40%, 48%
Cost Elements	Prior Years	2005-06 Appn	2005-06 Estimate	2006-07	2007-08	2008-09	2009-10	2010-11	5-Year Total	Beyond 5-Year	Project Total
Design Construction		518	518	6,300					6,300		518 6,300
TOTAL		518	518	6,300					6,300		6,818
			FUN	IDING SO	JRCE SC	HEDULE (000'S)				400
San José-Santa Clara Treatment Plant Capital Fund		518	518	6,300					6,300		6,818
TOTAL		518	518	6,300					6,300		6,818
			ANNU	AL OPERA	TING BUI	GET IMP	ACT (000	'S)			1.11.15.3
Operating					٠	3,000	3,075	3,152			
TOTAL						3,000	3,075	3,152			

Major Changes in Project Cost:

2005-2009 CIP - increase of \$4.5 million to allocate funds from prior Reserve for Alternate Disinfection. 2007-2011 CIP - increase of \$1.8 million due to higher than anticipated construction costs.

Notes:

FY Initiated:

2003-2004

Redevelopment Area:

N/A

Initial Project Budget:

\$500,000

SNI Area:

N/A

Appn. #:

2007-2011 Proposed Capital Improvement Program **Detail of Capital Projects**

2. Bio-solids Master Plan

CSA:

Environmental and Utility Services

Initial Start Date: 3rd Otr 2006

CSA Outcome:

Healthy Streams, Rivers, Marsh and Bay

Revised Start Date:

Department: Council District: **Environmental Services**

Initial Completion Date: 2nd Qtr 2008

Revised Completion Date:

Location:

Water Pollution Control Plant

Description:

This project will develop a master plan to evaluate existing digestion and residual sludge management (RSM) facilities in terms of space, treatment methods, and personnel resources. It will identify ways to most economically and effectively process biosolids in the near term, and future decades. The master plan will also consider odor issues and optimization of buffer lands,

including A-18.

Justification:

There are infrastructure improvements needed in RSM, a backlog of wastes to be removed, and significant repairs and possible upgrades due for the digesters. Because of the recent acquiring of A-18, the approved ongoing planning of an overall site master plan, and the potential odor issues, the biggest land uses of the facility(solids handling) should be evaluated for long-term siting of facilities and the methods used for the processing of biosolids. The repairs and changes made now will set the process for the next few decades, and so should not be based solely on evaluations and practices from 20 or more years ago.

				XPENDIT	UNE SUF	-PULE (V	ບບ ຮຸງ		mental and the state of	various valor	
Cost Elements	Prior Years	2005-06 Appn.	2005-06 Estimate	2006-07	2007-08	2008-09	2009-10	2010-11	5-Year Total	Beyond 5-Year	Project Total
Master Plan/Study				1,000			-		1,000		1,000
TOTAL	es formación como co			1,000			• .	·	1,000		1.000
			FUN	DING SOL	IRCE SCH	IEDULE (000'S)	WENT	y 11 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1		
San José-Santa Clara Treatment Plant Capital Fund	ı		•	1,000		٠			1,000		1,000
TOTAL				1,000					1,000		1,000

Major Changes in Project Cost:

None

Notes:

FY Initiated:

2006-2007

Initial Project Budget:

Redevelopment Area:

N/A

\$1,000,000

SNI Area:

N/A

Appn. #:

2007-2011 Proposed Capital Improvement Program Detail of Capital Projects

3. 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: 2nd Qtr. 2005

Department:

Environmental Services

Initial Completion Date: 3rd Qtr. 2010

Council District:

Eliatioi truettrar per

Revised Completion Date: 4th Qtr. 2016

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 their useful service lives and require replacement to

ensure safety and process reliability.

	Years	2005-06 Appn.	2005-06 Estimate	2006-07	2007-08	2008-09	2009-10		5-Year Total	Beyond 5-Year	Project Total
Design		30	30		30		30		60	30	
construction		342	342		342		342		684	341	1,367
Engineering & Inspection		30	30	•	30		30		60	30	. 120
TOTAL		402			402	•	402		804	401	1,60
			· FUN	IDING SOL	JRCE SCI	HEDULE (000'S)	and dist	48日本		
San José-Santa Clara Treatment Plant Capital Fund		402	402		402		402		804	401	1,607
TOTAL		402	402		402	-	402	. •	804	401	1,60

Major Changes in Project Cost:

None

Notes:

FY Initiated:

2004-2005

Redevelopment Area:

Initial Project Budget:

\$1,600,000

N/A

Appn. #:

5157

N/A

SNI Area:

2007-2011 Proposed Capital Improvement Program **Detail of Capital Projects**

4. Fire Line 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 2009

Council District:

4

Revised Completion Date:

Location:

Water Pollution Control Plant

Description:

The project will require replacement of a total of 14,400 ft, of ductile iron pipe, 34 fire hydrants, 34

gate valves, and additional isolation valves that are not currently in the system.

Justification:

The existing fire protection water pipelines, which were first installed in the 1970's are aging and corroded, and are due for replacement. The existing system is unreliable and both frequency and

cost of repairs have been increasing.

		STYPE IN E	XPENDIT	URE SCH	EDULE (0	00'S) 🐘			
Prior Years	2005-06 Appn.	2005-06 Estimate	2006-07	2007-08	2008-09	2009-10	2010-11 5-Year Total	Beyond 5-Year	Project Total
			350	200	200		750		750
			350	200	. 200		750		750
(Y)		FUN	DING SOL	JRCE SCH	HEDULE (000'S) 🚲	and the second	Karansur s	naels (s.)
	,		350	200	200		750		750
•			350	200	- 200		750		750
		Years Appn.	Prior 2005-06 2005-06 Years Appn. Estimate	Prior 2005-06 2005-06 2006-07 Years Appn. Estimate 350 FUNDING SOL	Prior 2005-06 2005-06 2006-07 2007-08 Years Appn. Estimate 350 200 FUNDING SOURCE SCH	Prior 2005-06 2005-06 2006-07 2007-08 2008-09 Years Appn. Estimate 350 200 200 SETUNDING SOURGE SCHEDULE (350 200 200	Years Appn. Estimate 350 200 200 350 200 200 FUNDING SOURCE SCHEDULE (000'S) 350 200 200	Prior Years 2005-06 Appn. 2005-06 Estimate 2006-07 2007-08 2008-09 2009-10 2010-11 5-Year Total 350 200 200 750 FUNDING SOURCE SCHEDULE (000'S) 350 200 200 750	Prior Years 2005-06 Appn. 2005-06 Estimate 2006-07 2007-08 2008-09 2009-10 2010-11 5-Year Total Beyond 5-Year 350 200 200 750 FUNDING SOURCE SCHEDULE (000'S) 350 200 200 750

None

Major Changes in Project Cost:

None

Notes:

FY Initiated:

2006-2007

Initial Project Budget:

\$750,000

Redevelopment Area:

N/A

SNI Area:

N/A

Appn. #:

2007-2011 Proposed Capital Improvement Program **Detail of Capital Projects**

5. Inactive Lagoons Bio-Solids Removal Study

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:

Revised Completion Date:

Location:

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 regulator and engineering feasibility evaluation. The Inactive Lagoons Bio-Solids Removal Study described here will complete the feasibility evaluation in 2007-2008. A

separate Reserve for Bio-Solids Plans has been established to implement the findings.

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.

Cost Elements	Prior Years	2005-06 Appn.	2005 Estim		2006-07	2007-08	2008-09	2009-10	2010-11	5-Year Total	Beyond 5-Year	Project Total
Master Plan/Study	10010	38		38	25	100	*			125	!	163
TOTAL		38		38	25	100				125		163
				FUN	IDING SO	JRCE SCI	HEDULE (000'S) :	A. A. A.		V. Suisia	
San José-Santa Clara Treatment Plant Capital Fund	•	38	÷.	38	25	100			,	125		163
TOTAL	<u>.</u>	38		38	25	100				125		163

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:

None

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

FY Initiated:

2003-2004

Redevelopment Area:

N/A

Initial Project Budget:

\$4,500,000

SNI Area:

N/A

Appn. #:

2007-2011 Proposed Capital Improvement Program **Detail of Capital Projects**

6. Land Management & Improvements

CSA:

Environmental and Utility Services

Initial Start Date: 2nd Qtr. 1997

CSA Outcome: Department:

Healthy Streams, Rivers, Marsh and Bay

Revised Start Date:

Initial Completion Date: 1st Qtr. 2007

Environmental Services

Council District:

Revised Completion Date: 2nd Qtr. 2009

Location:

Description:

Water Pollution Control Plant

This project provides resources for the environmental planning and review of technical issues related to the development and evaluation of possible alternative uses of salt pond A-18 and the San José/Santa Clara Water Pollution Control Plant buffer lands. 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 A-18 in 2003. As the owner of pond A-18, the City will be required to plan for future uses of A-18. In addition, the City is also in negotiations with the State

Water Resources Control Board for the management and restoration of the Moseley tract.

Cost Elements	Prior Years	2005-06 Appn.	2005-06 Estimate	2006-07	2007-08	2008-09	2009-10	2010-11	5-Year Total	Beyond 5-Year	Project Total
Property & Land	20,235	155	155	150	150	150	,		450		20,840
TOTAL	20,235	155	155	150	150	150			450		20,840
			. See FUN	DING SOL	JRCE SCH	IEDULE (000'S) -				
San José-Santa Clara Treatment Plant Capital Fund	20,235	155	155	150	150	150			450		20,840
TOTAL	20,235	155	155	150	150	150			450		20,840

None

Major Changes in Project Cost:

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

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

2007-2011 CIP - decrease of \$5 million to address scope changes.

Notes:

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

FY Initiated:

1996-1997

Redevelopment Area:

N/A

Initial Project Budget:

\$10,100,000

SNI Area:

N/A

Appn. #:

2007-2011 Proposed Capital Improvement Program Detail of Capital Projects

7. 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:

Location:

4

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.

	D-J	2005-06	2005-06	2006-07	2007-08	-			5-Year	Beyond	Project
Cost Elements	Prior Years	Аррп.	Estimate	2000-01	2001 00				Total	5-Year	Total
Construction				1,200	7,000				8,200	·	8,200
TOTAL		<u> </u>		1,200	7,000				8,200		8,200
		4	FUN	IDING SO	JRCE SCI	HEDULE (000'S) 🔆			2010 (4.55° - 37	N4-17-1914
San José-Santa Clara Treatment Plant Capital				1,200	7,000	•			8 , 2 0 0		8,200
Fund ·									· · · · ·		
TOTAL				1,200	7,000			- The state of the	8,200		8,200

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

SNí Area:

N/A

Appn. #:

2007-2011 Proposed Capital Improvement Program **Detail of Capital Projects**

8. Scum Digestion

CSA:

Environmental and Utility Services

Water Pollution Control Project

Initial Start Date: 3rd Qtr 2006

CSA Outcome:

Healthy Streams, Rivers, Marsh and Bay

Revised Start Date:

Department:

Environmental Services

initial Completion Date: 2nd Qtr 2008

Council District:

Location:

Revised Completion Date:

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.

Cost Elements	Prior Years	 2005-06 Estimate	2006-07	2007-08	2008-09	2009-10	2010-11	5-Year Total	Beyond 5-Year	Project Total
Construction			250	750	•	,		1,000		1,000
TOTAL		San	250	750				1,000		1,000
		SON FUN	DING SOL	IRCE SCH	iEDULE (000'S)	1 - 10 1 - 1			14211
San José-Santa Clara Freatment Plant Capital . Fund		_	250	750				1,000		1,000
TOTAL		 -	250	750		· ·		1,000		1,000

Major Changes in Project Cost: None

Notes:

FY Initiated;

2006-2007

Redevelopment Area:

N/A

Initial Project Budget:

\$1,000,000

SNI Area:

N/A

Appn. #:

2007-2011 Proposed Capital Improvement Program **Detail of Capital Projects**

9. WPCP Reliability Improvements

CSA:

Environmental and Utility Services

Initial Start Date: 2nd Qtr. 2000

CSA Outcome:

Reliable Utility Infrastructure

Revised Start Date: 2nd Qtr. 2003

Department:

Environmental Services

Initial Completion Date: 2nd Qtr. 2008

Council District:

Revised Completion Date:

Location:

Water Pollution Control Plant

Description:

This project will improve the Plant's ability to handle wet weather flows and 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 2006-2007 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,

Justification:

Over the past several winters, the Plant has experienced wet weather flows that exceeded 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 manner require the rehabilitation or replacement of existing facilities and/or the addition of new facilities.

				XPENDIT							
Cost Elements	Prior Years	2005-06 Appn.	2005-06 Estimate	2006-07	2007-08	2008-09	2009-10	2010-11	5-Year Total	Beyond 5-Year	Project Total
Development	770	-									770
Design	3,450										3,450
Construction	7,102		75,490	2,009					2,009		84,601
TOTAL	11,322	75,490	-	2,009					2,009	Switches and the Mark	88,821
	NACTOR A		FUN	IDING SO	JRCE SC	HEDULE (000'5) 💀	100			
San José-Santa Clara	11,322	75,490	75,490	2,009	•		٠.		2,009		88,821
Treatment Plant Capital Fund											
TOTAL	11,322	75,490	75,490	2,009					2,009		88,821
			ANNUA	AL OPERA	TING BUI	GET IMP	ACT (000'	S) 🖟 🤲			Parallel Med
FOR THE REAL PROPERTY OF THE PARTY OF THE PA										- '	4
None								•			

Major Changes in Project Cost:

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

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

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

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.

Notes:

FY Initiated:

1998-1999

Redevelopment Area:

N/A

initial Project Budget:

\$4,000,000

SNI Area:

N/A

Appn. #:

2007-2011 Proposed Capital Improvement Program **Detail of Capital Projects**

10. 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:

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 and 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	2005-06 Appn.	2005-06 Estimate	2006-07	2007-08	2008-09	2009-10	2010-11	5-Year Total	Beyond 5-Year	Project Total
Development Property & Land Design					,						
Construction		38,888	38,888	391	391	391	391	391	1,955		
TOTAL		38,888	38,888	391	391	391	391	391	1,955		
			FUN	DING SOL	IRCE SCI	EDULE ((8'0.0	Zille Viger			4.0
San José-Santa Clara Treatment Plant Capital Fund		38,888	38,888	391	391	391	391	391	1,955		V -
TOTAL		38,888	38,888	391	391	391	391	391	1,955		

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 \$391,000 annual allocation beginning in 2005-2006 represents recycled water pipeline funding from Calpine for their share of the pipeline to the Metcalf Energy Center. This allocation is anticipated to fund future recycled water projects.

FY initiated:

Ongoing

Redevelopment Area:

N/A

Initial Project Budget:

SNI Area:

N/A

Appn. #:

2007-2011 Proposed Capital Improvement Program **Detail of Capital Projects**

11. 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:

Revised Completion Date:

Location:

Water Pollution Control Plant

Description:

This project provides for the replacement and rehabilitation of WPCP 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.

				XPENDIT	URE SCH	EDULE (0	00'S)				
Cost Elements	Prioг Years	2005-06 Appn.	2005-06 Estimate	2006-07	2007-08	2008-09	2009-10	2010-11	5-Year Total	Beyond 5-Year	Project Total
Equipment		2,505	2,505	1,525	1,525	1,525	1,525	1,525	7,625		
TOTAL		2,505	2,505	1,525	1,525	1,525	1,525	1,525	7,625		
	S 8 1 1		FUN	IDING SO	URCE SCI	HEDULE (000'S))	4.1.1
San José-Santa Clara Treatment Plant Capital Fund		2,505	2,505	1,525	1,525	1,525	1,525	1,525	7,625	-	
TOTAL		2,505	2,505	1,525	1,525	1,525	1,525	1,525	7,625		
			ANNUA	AL OPERA	TING BUI	GET IMP	ACT (000)	S)	(Parties)		EN-1970 (*)

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:

SNI Area:

N/A

Initial Project Budget:

N/A

Appn. #:

2007-2011 Proposed Capital Improvement Program **Detail of Capital Projects**

12. Plant Infrastructure Improvements

CSA:

Environmental and Utility Services

CSA Outcome:

Reliable Utility Infrastructure

Initial Start Date:

Ongoing

Department:

Revised Start Date: Initial Completion Date:

Council District:

Environmental Services

Revised Completion Date:

Ongoing

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.

公司总统 (1)	. 57 W. 100 G			XPENDIT	URE SCH	EDULE (0	00'S)				
Cost Elements	Prior Years		2005-06 Estimate	2006-07	2007-08	2008-09	2009-10	2010-11	5-Year Total	Beyond 5-Year	Project Total
Construction		9,681	9,681	5,827	6,232	6,251	6,338	7,390	32,038		
TOTAL		9,681	9,681	5, 827	6,232	6,251	6,338	7,390	32,038		
			Sa FUN	DING SOL	JRCE SCH	HEDULE (000'S)			edistinsk (†	\$1.5 K. \$
San José-Santa Clara Trealment Plant Capital Fund		9,681	9,681	5,827	6,232	6,251	6,338	7,390	32,038		
TOTAL		9,681	9,681	5,827	6,232	6,251	6,338	7,390	32,038	· <u> </u>	
None		10 M 10 M	ANNUA	L OPERA	TING BUD	GET IMPA	ACT (000':	5)			

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. #:

2007-2011 Proposed Capital Improvement Program **Detail of Capital Projects**

13. 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:

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.

Cost Elements	Priог Years	2005-06 Appn.	2005-06 Estimate	2006-07	2007-08	2008-09	2009-10	2010-11	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	Since Since	un Tyangga Paga
		· 1 -34.405.4	FUN	DING SO	URCE SCI	HEDULE (000'S)				545 (1939)
San José-Santa Clara Treatment Plant Capital		332	332	250	250	250	250	250	1,250	•	
Fund											
TOTAL		332	332	250	250	250	250	250	1,250		

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. #:

2007-2011 Proposed Capital Improvement Program **Detail of Capital Projects**

14. Payment for Clean Water Financing Authority Trustee

CSA:

Environmental and Utility Services

Reliable Utility Infrastructure

Initial Start Date:

Ongoing

CSA Outcome: Department:

Environmental Services

Revised Start Date: Initial Completion Date:

Council District:

Revised Completion Date:

Ongoing

Location:

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.

Cost Elements	Prior Years	2005-06 Appn.	2005-06 Estimate	2006-07	2007-08	2008-09	2009-10	2010-11	5-Year Totai	Beyond 5-Year	Project Total
Program Management		70	70	82	82	82	82	82	410		····
TOTAL		70		82	82	82	82	82	410		
			FUN	DING SOL	JRCE SCH	IEDULE (000'S)		N. e. Visit		
San José-Santa Clara Treatment Plant Capital Fund		70	70	82	82	82	82	82	410	estrá est presidentes com à siste	end taxas frances fr
· · · · · · · · · · · · · · · · · · ·						-					ž
TOTAL		70	70	8 2	82	82	82	82	410		

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. #;

2007-2011 Proposed Capital Improvement Program Detail of Capital Projects

15. State Revolving Fund Loan Repayment

CSA:

Environmental and Utility Services

Initial Start Date: 3rd Qtr. 1998

Healthy Streams, Rivers, Marsh and Bay

Revised Start Date:

CSA Outcome:

Environmental Services

Initial Completion Date: 2nd Qtr. 2019

Department:

Revised Completion Date:

Council District:

Water Pollution Control Plant

Description:

Location:

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.

			. E	XPENDIT	URE SCH	EDULE (0	0 0 'S)				
Cost Elements	Prior Years	2005-06 Appn.	2005-06 Estimate	2006-07	2007-08	2008-09	2009-10	2010-11	5-Year Total	Beyond 5-Year	Project Total
Debt Service	27,993	4,464	4,464	4,464	4,464	4,464	4,464	4.464	22,320	31,248	86,025
TOTAL	27,993	4,464	4,464	4,464	4,464	4,464	4,464	4,464	22,320	31,248	
			FUN	DING SO	URCE SC	HEDULE (000'S)	#14512 N	1000	e.c.,	2 W.
San José-Santa Clara Treatment Plant Capital Fund	27,993	4,464	4,464	4,464	4,464	4,464	4,464	4,464	22,320	31,248	86,025
TOTAL	27,993	4,464	4,464	4,464	4,464	4,464	4,464	4,464	22,320	31,248	86,025
			ANNUA	L OPERA	TING BUI	OGET IMP	ACT (000	S)			

Major Changes in Project Cost:

None

None

Notes:

FY Initiated:

1998-1999

Redevelopment Area:

N/A

Initial Project Budget:

\$87,533,000

SNI Area:

N/A

Appn. #:

2007-2011 Proposed Capital Improvement Program Detail of Capital Projects

16. 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 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.

Cost Elements	Prior Years	2005-06 Appn.	2005-06 Estimate	2006-07	2007-08	2008-09	2009-10	2010-11	5-Year Total	Beyond 5-Year	Project Total
Debt Service	7,893	1,697	1,697	6,806	7,007	7,023	9,433	11,716	41,985	58,409	109,98
TOTAL	7,893	1,697	1,697	6,806	7,007	7,023	9,433	11,716	41,985	58,409	109,984
		Name of the	FUN	DING SOL	IRCE SCH	(EDULE	000'S)	كريد يشدرو بغر			
San José-Santa Clara Treatment Plant Capital Fund	7,892	1,697	1,697	6,806	7,007	7,023		11,716	41,985	58,409	109,983
TOTAL	7,892	1,697	1,697	6.806	7.007	7,023	9,433	11,716	41.985	58,409	109.983

Major Changes in Project Cost:

2007-2011 CIP - Increase of \$73 million. This reflects a number of actions: 1) Beginning 2006-2007, the San Jose 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 Storm 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 2008-2009, the amount includes a forecast of additional bond debt of \$50 million for the Electrical Reliability Project.

Notes:

FY Initiated:

2001-2002

Redevelopment Area:

N/A

Initial Project Budget:

\$34,851,000

SNI Area:

N/A

Appn. #:

2007-2011 Proposed Capital Improvement Program **Detail of Capital Projects**

17. 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:

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.

Cost Elements	Prior Years	2005-06 Appn	2005-06 Estimate	2006-07	2007-08	2008-09	2009-10	2010-11	5-Year Total	Beyond 5-Year	Project Total
Reserve	· · · · · · · · · · · · · · · · · · ·	5,000		5,000					5,000		
TOTAL	 -	5,000		5,000					5,000		Sures - 12 Kin 2 198
na najagrani kandini			FUN	IDING SO	JRCE SCI	HEDULE (000'S)				
San José-Santa Clara Treatment Plant Capital Fund		5,000	-	5,000				• .	5,000		
TOTAL		5,000	· · · · · · · · · · · · · · · · · · ·	5,000	<u> </u>	·			5,000		

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. #:

2007-2011 Proposed Capital Improvement Program Detail of Capital Projects

18. 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 Qfr. 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) Prior 2005-06 2005-06 2006-07 2007-08 2008-09 2009-10 2010-11 5-Year Cost Elements Beyond Project Years Appn. Estimate Total 5-Year Total Reserve 1,500 1,000 1,000 1,000 TOTAL 1,500 1,000 1.000 1,000 FUNDING SOURCE SCHEDULE (000'S) San José-Santa Clara 1,500 1,000 1,000 1.000 Treatment Plant Capital Fund

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

TOTAL

Major Changes in Project Cost:

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

1,000

Notes:

FY Initiated:

2002-2003

1,500

Redevelopment Area:

N/A

1,000

1,000

Initial Project Budget:

\$2,300,000

SNI Area:

Ν/Δ

Appn. #:

2007-2011 Proposed Capital Improvement Program Detail of Capital Projects

19. 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:

4

Revised Completion Date:

Location:

4

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.

			XPENDIT	URE SCH	EDULE (0	00'S) :	\$ \psi \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Association		
Prior Years	2005-06 Appn.	2005-06 Estimate	2006-07	2007-08	2008-09	2009-10	2010-11	5-Year Total	Beyond 5-Year	Project Total
	200		200					200		
	200		200					200		
		FUN	DING SO	JRCE SCI	HEDULE (000'S) 🦙				V
	200		200	·				200		
	200		200					200		
	• •	200 200 200	Prior 2005-06 2005-06 Years Appn. Estimate 200	Prior Years 2005-06 Appn. 2005-06 Estimate 2006-07 200 200 200 200 200 FUNDING SO 200 200 200	Prior Years 2005-06 Appn. 2005-06 Estimate 2006-07 2007-08 200 200 200 200 200 FUNDING SOURCE SCI 200	Prior Years 2005-06 Appn. 2005-06 Estimate 2006-07 2007-08 2008-09 200 200 200 200 FUNDING SOURCE SCHEDULE (200 200	Prior Years 2005-06 Appn. 2005-06 Estimate 2006-07 2007-08 2008-09 2009-10 200<	Prior Years 2005-06 Appn. 2005-06 Estimate 2006-07 2007-08 2008-09 2009-10 2010-11 200 200 200 200 FUNDING SOURCE SCHEDULE (000'S) 200 200	Prior Years 2005-06 Appn. 2005-06 Estimate 2006-07 2007-08 2008-09 2009-10 2010-11 5-Year Total 200 200 200 200 200 200 200 200 FUNDING SOURCE SCHEDULE (000/S) 200	Years Appn. Estimate Total 5-Year 200 200 200 200 FUNDING SOURCE SCHEDULE (000'S) 200 200

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. #:

-

Water Pollution Control Plant

2007-2011 Proposed Capital Improvement Program Summary of Projects that Start after 2006-2007

Project Name: DAF Pressure Tank & Valves

Council District: 4

5-Year CIP Budget: \$804,000

Estimated Start Date: 2nd Otr. 2005

Total Budget: \$1,607,000

Estimated End Date: 4th Otr. 2016

Description: This project will replace 15 of the 16 pressurized tanks and valves in the sludge processing area.

Council District: 4

Project Name: Filtration Action Plan - Valve replacement 5-Year CIP Budget: \$6,006,000

Estimated Start Date: 4th Qtr. 2007

Total Budget: \$8,600,000

Estimated End Date: 2nd Qtr. 2013

Description: This project will replace 112 valves, plus related couplings, actuators, and piping in the Filtration building. These valves are no longer able to provide adequate water seal when in closed position, and the piping, actuators, and couplings have aged from exposure to chlorine over years of operation. As a result, system reliability is compromised

Project Name: Warehousing Facility Additions

Council District: 4

5-Year CIP Budget: \$500,000

Estimated Start Date: 2nd Qtr. 2008

Total Budget: \$500,000

Estimated End Date: 4th Qtr. 2009

Description: The plant maintains a substantial investment in spare equipment, parts and materials for emergency use or failure of critical equipment items. These items are retained onsite because of the long-lead time in procurement, or for quick installation in an emergency. This project will provide covered storage that will protect the Plant's investment in these items from damage or deteriorate from exposure to the elements.