

SAN JOSE/SANTA CLARA TREATMENT PLANT ADVISORY COMMITTEE

CHUCK REED, CHAIR BOB LIVENGOOD, VICE-CHAIR KEVIN MOORE, MEMBER PATRICIA MAHAN, MEMBER MADISON NGUYEN, MEMBER KEN YEAGER, MEMBER JOHN GATTO, MEMBER ED SHIKADA, MEMBER NORA CAMPOS, MEMBER

AGENDA

4:30 p.m. May 14, 2009 Room T-1047

- 1. ROLL CALL
- 2. MINUTES
 - A. Minutes of April 9, 2009
- 3. <u>UNFINISHED BUSINESS</u>
- 4. <u>CORRESPONDENCE</u>
 - A. Plant Master Plan Community Workshop Notice
 - B. Plant Master Plan Community Workshop Flyer
- 5. <u>REPORTS</u>
 - A. Open Purchase Orders Greater Than \$100,000
 The attached monthly Procurement and Contract Activity Report summarizes the purchase and contracting of goods with an estimated value between \$100,000 and \$1 million and of services between \$100,000 and \$250,000.
 - B. TPAC Proposed Capital Improvement Program 2010-2014
 - C. TPAC Proposed Operating and Maintenance Budget 2009-2010
- 6. <u>AGREEMENTS</u>
 - A. <u>Technical Committee Recommendation (Handout)</u>
 - B. Action Item TPAC Recommendation for Approval Requested

The following item is scheduled for consideration by the San Jose City Council on May 5, 2009, and adoption on May 19, 2009:

1. Approve an ordinance amending Chapter 15.14 of Title 15 of the San Jose Municipal Code to limit the discharge of dental amalgam into the sanitary

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sewer system and to require the installation of dental amalgam separators in certain dental offices.

2. Approve an ordinance amending Chapter 15.14 of Title 15 of the San Jose Municipal Code to revise provisions related to the discharge of grease into the sanitary sewer system, to establish requirements for food service establishments related to installation or upgrade of grease control devices, and to establish maintenance and recordkeeping requirements for grease control devices.

C. <u>Action Item – TPAC Recommendation for Approval Requested</u>

The following item is scheduled to be approved by the San Jose City Council on May 19, 2009:

- 1. Approve the first amendment to the agreement with David J. Powers & Associates for environmental consultant services for various Environmental Services Department (ESD) projects by increasing the total compensation by \$250,000, from \$250,000 to an amount not to exceed \$500,000.
- D. Informational Item TPAC Item Previously Recommended for Approval

The following items were approved by the San Jose City Council on April 21, 2009.

- 1. Report on bids and award of one-year construction contract for New Construction of Various Equipment, to the low bidder, Anderson Pacific Engineering Construction, Inc., in an amount not to exceed \$450,930. The contract includes an option to extend the contract for two additional one year terms in an amount not to exceed \$500,000 per option term, for a total contract amount of up to \$1,450,930, subject to appropriation; and
- 2. Adoption of a resolution authorizing the Director of Environmental Services to exercise the option to extend the term of the contract for two additional one year terms, subject to appropriation.

7. MISCELLANEOUS

A. The next TPAC meeting will be Thursday, June 11, 2009, at 4:30 p.m. City Hall, Environmental Services, 10th Floor, Room 1047.

8. <u>OPEN FORUM</u>

9. ADJOURNMENT

NOTE: If you have any changes or questions, please contact Monica Perras, Environmental Services, 408-975-2515.

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To request an accommodation or alternative format for City-sponsored meetings, events or printed materials, please call Monica Perras at (408) 975-2515 or (408) 294-9337 (TTY) as soon as possible, but at least three business days before the meeting/event.

Availability of Public Records. All public records relating to an open session item on this agenda, which are not exempt from disclosure pursuant to the California Public Records Act, that are distributed to a majority of the legislative body will be available for public inspection at San Jose City Hall, 200 East Santa Clara Street, 10th Floor, Environmental Services at the same time that the public records are distributed or made available to the legislative body.

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MINUTES OF THE SAN JOSÉ/SANTA CLARA

TREATMENT PLANT ADVISORY COMMITTEE

City Hall, Environmental Services, 10th Floor, Room 1047 Thursday, April 9, 2009 at 4:30 p.m.

1. ROLL CALL

Minutes of the Treatment Plant Advisory Committee convened this date at 4:30 p.m. Roll call was then taken, with the following members in attendance:

Committee members: Chuck Reed (Chair), Bob Livengood, Patricia Mahan, Kevin Moore, Madison Nguyen, Ed Shikada, Ken Yeager, John Gatto, Nora Campos.

Staff present: Monica Perras, Dale Ihrke, Mollie Dent.

Others present: Jeff Janssen, (City of San Jose) Bob Wilson, (City of Santa Clara), Robert Reid (West Valley Sanitation), Steve Machida, (Cupertino Sanitary District), David Wall (San José City Resident).

2. APPROVAL OF MINUTES

Minutes of March 12, 2009.

Motion by Committee member Gatto and Second by Committee member Livengood to accept the minutes of January 08, 2009. Committee Member Nguyen was not present.

3. <u>UNFINISHED BUSINESS</u>

4. <u>CORRESPONDENCE</u>

REPORTS

A. Open Purchase Orders Greater Than \$100,000

The attached monthly Procurement and Contract Activity Report summarizes the purchase and contracting of goods with an estimated value between \$100,000 and \$1 million and of services between \$100,000 and \$250,000.

No activity to report.

6. <u>AGREEMENTS</u>

A. Technical Committee Recommendation (Handout)

Motion by Committee Member Mahan and seconded by Committee Member Nguyen to accept the Technical Committee Recommendation.

B. Action Item – TPAC Recommendation for Approval Requested

The following was approved by the Transportation and Environment Committee on:

- 1. Report on bids and award of one-year construction contract for New Construction of Various Equipment, to the low bidder, Anderson Pacific Engineering Construction, Inc., in an amount not to exceed \$450,930. The contract includes an option to extend the contract for two additional one year terms in an amount not to exceed \$500,000 per option term, for a total contract amount of up to \$1,450,930, subject to appropriation; and
- 2. Adoption of a resolution authorizing the Director of Environmental Services to exercise the option to extend the term of the contract for two additional one year terms, subject to appropriation.

Items 6.B.1&2 were approved by unanimous vote.

C. <u>Informational Item – TPAC Item Previously Recommended for Approval</u>

The following items were approved by the San Jose City Council on March 2, 2009.

- 1. Accept this progress report highlighting activities since September 2008 on the Master Plan for the San Jose/Santa Clara Water Pollution Control Plant (Plant).
- D. Informational Item TPAC Item Previously Recommended for Approval

The following item was dropped by the San Jose City Council on February 24, 2009, to be rescheduled for council action after March 12, 2009

1. Amend Resolution No. 68900 to apply the Living Wage Policy to contracts issued for the San Jose Santa Clara Water Pollution Control Plant.

Items 6.C 1 & 6.D.1 were approved by unanimous vote.

7. MISCELLANEOUS

A. The next TPAC meeting will be Thursday, May 14, 2009, at 4:30 p.m. City Hall, Environmental Services, 10th Floor, Room 1047.

PUBLIC COMMENT

David Wall spoke about the 33% increase of sewer service and use charge and the ESD necessary regulatory documents and the general fund.

10. ADJOURNMENT

A. The Treatment Plant Advisory Committee adjourned at 4:35 p.m.

Chuck Reed, Chair Treatment Plant Advisory Committee

NOTICE OF

Informational Briefing at Community Meeting San Jose/Santa Clara Water Pollution Control Plant Master Plan

Notice is hereby given that the San José City Council and members of the San José Santa Clara Treatment Plant Advisory Committee and their staffs may participate in a community meeting concerning the San Jose/Santa Clara Water Pollution Control Plant Master Plan.

Date: Saturday, May 16th, 2009 from 2:00 p.m. until 5:00 p.m. Location: San Jose/Santa Clara Water Pollution Control Plant 700 Los Esteros Road, San Jose (near Alviso) **BRIEFING AGENDA** 1. Introductions 2. Presentation 3. Public Comment 4. Adjourn STATE OF CALIFORNIA AFFIDAVIT OF POSTING COUNTY OF SANTA CLARA) ss. CITY OF SAN JOSE I, Lee Price, being duly sworn, deposes and says: That she is the duly appointed and qualified City Clerk of the City of San Jose and that on April 28, 2009 she caused the above Notice to be posted at San Jose City Hall, San Jose, California.

Lee Price, MMC City Clerk

New technologies...







New opportunities...







Plan the future of your South Bay shoreline and wastewater facility

Do you know where your water goes after showering, washing dishes, or flushing a toilet? No matter the answer, aren't you glad you can rely on your wastewater system?

A three-year master plan process has been launched to make sure you can rely on your wastewater treatment facility for years to come.

The San Jose/Santa Clara Water Pollution Control Plant Master Plan addresses how to best rebuild the 53-year-old wastewater treatment facility and use the 2,600-acre property. Implementing new treatment technologies creates the opportunity to envision new land uses, such as jobs-based development, a clean tech center, expanded habitat protection areas, and community amenities such as trails.



SAN JOSE/ SANTA CLARA WATER POLLUTION CONTROL PLANT



Attend a community workshop

Saturday, May 16, 2:00 - 5:00 p.m.

- **Tour** the wastewater treatment facility by bus. 1:30 – 2:00 p.m. (optional)
- **Meet** the project staff at an open house. 2:00 – 2:30 p.m.
- Learn about your wastewater treatment facility, why it needs improvements, and the master planning process.
 2:30 – 3:30 p.m.
- **Submit** your ideas to shape the master plan. 3:30 5:00 p.m.

Location:

San Jose/Santa Clara Water Pollution Control Plant 700 Los Esteros Road, San Jose (near Alviso)

Workshop and bus tour reservations:

Call 408-975-2556 or visit www.sanjoseca.gov/esd/plantmasterplan by Wednesday, May 13, 2009.

Spanish, Vietnamese and Chinese-language services will be available at this event. To request accommodations under the Americans with Disabilities Act for City-sponsored events or printed materials, please call 408-975-2606 no later than three business days before the event.



City Manager's Contract Approval Summary For Procurement and Contract Activity between \$100,000 and \$1 Million for Goods and \$100,000 and \$250,000 for Services

March 20, 2009 - April 27, 2009

| Description of Contract Activity ¹ | Fiscal Year | Req#/ RFP# | PO# | Vendor/Consultant | Original \$ Amount | Start Date | End Date | Additional \$ Amount | Total \$ Amount |
|---|-------------|---------------|---------|--------------------------|-----------------------|---------------|----------|-------------------------|-----------------|
| | | | | | | | | | |
| ABB DCS Training & Service | FY08-09 | 09693 | | ABB Automatic | \$216,500 | | | | |
| | FY09-10 | 09734 | | Badger Meter | \$400,000 | | | | |
| LIQ Sodium Hypochlorite | FY09-10 | 09727 | | Olin Corporation | \$500,000 | | | | |
| 400 TONS O F IND'L GRD 19% AQUA AMMONIA | FY09-10 | 09554 | | Hills Bros Corp | \$150,000 | | | | |
| Bulk Liquid Chlorine | FY09-10 | 09555 | | Olin Corporation | \$450,000 | | | | |
| 25% Sodium Bisulfite | FY09-10 | 09728 | | Basic Chemical Solution | \$100,000 | | | | |
| Fuel & Petroleum | FY09-10 | 09645 | | Western States Oil Co | \$275,000 | | | | |
| Fuel & Petroleum | FY09-10 | 09650 | | Valley Oil Company | \$150,000 | | | | |
| Repair Joints / Cracked Concrete | FY09-10 | 09657 | | Tucker Construction | \$150,000 | | | | |
| Electrical Parts/ Supplies | FY09-10 | 09663 | | Buckles Smith Electric | \$180,000 | | | | |
| Electrical Parts/ Supplies | FY09-10 | 09667 | | Graybar Electric Company | \$130,000 | | | | |
| Test Repair/ Parts Equipment | FY09-10 | 09684 | | Koffler Electrical Inc | \$120,000 | | | | |
| Paintings and Sand Blasting Project | FY09-10 | 10283 | | Redwood Painting Company | \$200,000 | | | | |
| Fuel & Petroleum | FY09-10 | 09679 | | Coast Oil Company | \$140,000 | | | | |
| New & Repaired Replacement Hardware | FY09-10 | 09552 | OP42892 | ABB Automatic | \$250,000 | | | | |

¹ This report captures in process contract activity (Requisition Number or RFP Number) and completed contract activity (Purchase Order Number, Contract Term, and Contract Amount)

PROPOSED

SAN JOSE / SANTA CLARA WATER POLLUTION CONTROL PLANT

700 Los Esteros Road San Jose, California 95134

Five-Year 2010-2014 Capital Improvement Program

Submitted by

John Stufflebean, Director

Environmental Services Department

City of San Jose

TO: Treatment Plant Advisory Committee

Chuck Reed (Chair) Mayor, City of San Jose
Nora Campos Councilmember, City of San Jose
John M. Gatto Boardmember, Cupertino Sanitary District

Bob Livengood (Vice Chair) Mayor, City of Milpitas

Patricia Mahan Mayor, City of Santa Clara

Ken Yeager Boardmember, West Valley Sanitation District

Kevin Moore Councilmember, City of Santa Clara

Madison Nguyen Councilmember, City of San Jose

Ed Shikada Deputy City Manager, City of San Jose

2010-2014 Proposed Capital Improvement Program

Overview

Introduction

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

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

A revenue program is prepared annually by each Agency to establish its sewer service and use charge rates. Rates are adopted by ordinance, or resolution, of the governing body of each Agency. The Agencies' revenue programs, ordinances and resolutions are submitted to the City of San José, as the administering agency, for review to determine conformance with State Water Resources Control Board (SWRCB) revenue program guidelines and are then submitted by San José to the SWRCB for review and certification.

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

Program Priorities and Objectives

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

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

Sources of Funding

The 2010-2014 Proposed CIP provides funding of \$355.1 .million, of which \$87.7 million is allocated in 2009-2010.

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

2010-2014 Proposed Capital Improvement Program

Overview

Sources of Funding (Cont'd.)

(\$210.0 million) and the Sewage Treatment Plant Connection Fee Fund (\$15.4 million); Interest Earnings (\$6.3 million); Calpine Metcalf Energy Center Facilities Repayments (\$1.9 million); and federal grants from the US Bureau of Reclamation (\$0.5 million). In addition, \$34.4 million in available fund balance is programmed to support projects identified in this five-year program.

Contributions from the City of Santa Clara and other agencies are determined by agreements with the participating agencies, financing plans, anticipated expenditures for the Plant and the amount and characteristics of flows to the treatment plant. contributions reimburse the City for actual project expenditures. In this Proposed CIP, these contributions from the City of Santa Clara and the other agencies total \$86.6 million, which represents a \$17.1 million (24.6%) increase compared to the 2009-2013 Adopted CIP. This increase results from the revised capital investment plan proposed, including additional funding for the Plant Electrical Reliability project, the Plant Infrastructure Improvements project, and the Equipment Replacement Program.

The Sewer Service and Use Charge Fund is an operating fund that derives its revenues from fees imposed on San José's residential, commercial, and industrial users of the sanitary sewer system and represents the largest source of funding for this capital program. Transfers from the Sewer Service and Use Charge Fund to the Water Pollution Control Capital Improvement Program reflect a \$55.8 million (36.2%) increase compared to the 2009-2013 Adopted CIP. The increased transfer assumes a 15% rate increase in Sewer Service and Use Charge fees in 2009-2010, as

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

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

Program Highlights

Plant Electrical Reliability Project

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

Plant Master Plan Project

The Plant recently initiated a Plant Master Planning project and hired a consultant to develop the Plan in 2007. The Plant Master Plan will be the blue print for the Plant's development over the next 30 years, covering expected wastewater flows and loads to the Plant, rates, staffing, Plant infrastructure, use of the buffer lands, bio-solids processing, and many other items. Once the future needs have been identified in the Master Plan, City staff will work with the consultant to develop a financing plan.

Four key conditions drive the need for the

2010-2014 Proposed Capital Improvement Program

Overview

Program Highlights (Cont'd.)

Plant Master Plan Project (Cont'd.)

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

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

The Master Plan will coordinate the many complex projects required for the Plant due to aging infrastructure and future regulations, and serve as a tool to identify and prioritize near-term CIP projects for upgrades and replacements. Public outreach and stakeholder involvement will be a major component of this process.

South Bay Action Plan

A South Bay Action Plan (SBAP) has been a requirement of the Plant's National Pollution Discharge Elimination System (NPDES) permit since 1991 and includes projects necessary to reduce average dry weather effluent flow from the Plant to below the 120 million gallons per day (mgd) flow trigger, or to levels that protect salt marsh habitat for endangered species in the South Bay. The

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

Plant Infrastructure Needs Improvements

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

Other Projects

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

2010-2014 Proposed Capital Improvement Program

Overview

Program Highlights (Cont'd.)

Other Projects (Cont'd.)

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

Reserve for Equipment Replacement

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

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

- Compliance with the SWRCB's policy is a requirement of State Revolving Fund Loan Agreements. Equipment replacement of \$9.6 million and a million are reserve of \$5.0 included the 2010-2014 in Proposed CIP to satisfy this requirement.
- Clean The 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 plant the treatment when other insurance and funds budgeted for such purposes are exhausted, or are insufficient to meet the need.
- Agreements Master The Wastewater Treatment between City of San José, the City of Santa Clara, and Tributary Agencies established a replacement fund for deposit of annual contributions for the replacement major oftreatment plant equipment. The Master Agreements also require that each agency pay its proportionate share annual of the replacement contribution.

2010-2014 Proposed Capital Improvement Program

Overview

Major Changes from the 2009-2013 Adopted CIP

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

- Additional revenue in the amount of \$17.1 million from transfers from City of Santa Clara and Other Agencies for those Agencies' proportionate costs for CIP projects.
- Additional revenue in the amount of \$55.8 million transferred from the Sewer Service and Use Charge Fund for City of San José's CIP project costs.
- New funding for a Headworks Enhancement Project (\$4.0 million), scheduled to begin in 2009-2010, and to be completed in 2010-2011.

- Additional funding of \$12.0 million for Plant Infrastructure Improvements. The 2010-2014 CIP includes funding of \$60.3 million, compared to \$48.3 million in the 2009-2013 CIP. This is an ongoing project.
- Additional funding of \$11.5 million for Digester Rehabilitation. The 2010-2014 CIP includes funding of \$98.1 million, compared to \$86.6 million in the 2009-2013 CIP. Project construction has been deferred from 2008-2009 to 2010-2011

Operating Budget Impact

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

SOURCE AND USE OF FUNDS SUMMARY

| | Estimate S | OURCE AND | SOURCE AND USE OF FUNDS SUMMARY | SSUMMARY | | | | 5-YEAR |
|---|-------------|-----------------------|---------------------------------|--------------|------------|---|---------------------------------------|-------------|
| SOURCE OF FUNDS | 1000 | t corporate Corporate | ****** | to to the | 1 | *************************************** | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | |
| SJ/SC TREATMENT PLANT CAPITAL FUND(512) | | | | | | | | |
| Beginning Fund Balance | | | 34,434,907 | 24,143,907 | 7,339,907 | 19,607,907 | 32,008,907 | 34,434,907 |
| Keserve for Encumbrances | 3/,5/1,081 | |)) | , | , | , | , |) |
| Interest Income | 4,126,000 | | 1,310,000 | 1,092,000 | 1,061,000 | 1,145,000 | 1,677,000 | 6,285,000 |
| 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 | 8,775,000 | | 11,991,000 | 18,114,000 | 12,401,000 | 14,060,000 | 13,982,000 | 70,548,000 |
| 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 | 1,215,000 | | 1,234,000 | 1,233,000 | 1,229,000 | 1,227,000 | 1,228,000 | 6,151,000 |
| 2009 Bond Repayment Contributions | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Inter-Fund Transfers: | | | | | | | | |
| SJ-Equip. Replacement from Fd 541 | 1,072,000 | | 1,072,000 | 1,072,000 | 1,072,000 | 1,072,000 | 1,072,000 | 5,360,000 |
| Capital Project Cost from Fund (541) | 12,928,000 | | 18,928,000 | 23,000,000 | 37,000,000 | 45,000,000 | 45,000,000 | 168,928,000 |
| 2009 Bond Deposit from Fund 541 | 0 | | 7,000,000 | 0 | 0 | 0 | 0 | 7,000,000 |
| Debt Service Payment from Fund (541) | 5,161,000 | | 5,747,000 | 5,744,000 | 5,727,000 | 5,720,000 | 5,724,000 | 28,662,000 |
| 2009 Bond Payment from Fund 541 | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| SRF Loan Repayment from Fund (539) | 3,080,000 | | 3,080,000 | 3,080,000 | 3,080,000 | 3,080,000 | 3,080,000 | 15,400,000 |
| Miscellaneous Revenue | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Gain/Loss on Investments | 0 | | | | | | | |
| 2006 Bond Sale Proceeds | 0 | | 0 | 0 | 0 | 0 | 0 | 0 |
| Calpine MEC Facilities Repayment ITSBP Grant (SBV) D) | 500,000 | | 500,000 | 389,000 0 | 389,000 | 389,000 | 389,000 | 1,945,000 |
| | | | , | | | | | |
| TOTAL SOURCE OF FUNDS | 130,650,907 | Û | 87,660,907 | /9,842,90/ | /1,2/3,90/ | 106'5/7'56 | 106,135,907 | 355,088,907 |
| USE OF FUNDS Water Pollution Control Managed Projects | | | | | | | | |
| Computer & Inst. Improvements | 0 | | | | | | | |
| Headworks Redundancy Modifications | 0 | ٠ | | | | | | |
| Land Acquisition & Improvements | 0 | | 250,000 | 0 | 0 | . 0 | 0 | 250,000 |
| Technical Services Building | 2,000 | | | | | | | |
| Public Art Reserve | 521,000 | 0 | 138,000 | 557,000 | 377,000 | 425,000 | 423,000 | 1,920,000 |
| Headworks Enhancement | 0 | 0 | 500,000 | 3,500,000 | 0 | 0 | 0 | 4,000,000 |
| Alternative Disinfection | 10,185,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Digester Gas Line Replacement | 0 | | 0 | 10,120,000 | 180,000 | | 0 | 10,300,000 |
| DAF Pressure Retention Tank & Valves | 650,000 | 0 | 0 | 0 | 0 | 1,100,000 | 0 | 1,100,000 |
| ESB Building Rehabilitation | 6,000,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Filtration Action Plan | 0 | 0 | 0 | 1,000,000 | 1,000,000 | 2,500,000 | 2,500,000 | 7,000,000 |
| Fire Line Replacement | 0 | 0 | 0 | 200,000 | 200,000 | 400,000 | 0 | 800,000 |
| Inactive Lagoons Bio-Solids Removal | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| M5, Ring Buss & Cable replacement | 9,796,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Plant Electrical Reliability | 5,186,000 | . 0 | 20,500,000 | 20,000,000 | 9,000,000 | 6,000,000 | 4,600,000 | 60,100,000 |
| SBWR Reservoir Facility | | 0 | 6,000,000 | 0 | 0 | 0 | 0 | 6,000,000 |
| | | | | | | | | |

SOURCE AND USE OF FUNDS SUMMARY

| | Estimate | | *************************************** | | | | | 5-YEAR |
|--|-------------|----------|---|------------|---|------------|-------------|-------------|
| USE OF FUNDS (Cont'd.) | 2000-2009 | Nebuaget | 2002-2010 | 2010-2011 | 2011-2012 | 2012-2013 | 2013-2014 | TWICH |
| Water Pollution Control Managed Projects (Cont'd) | | | | | | | | |
| Digester Rehabilitation | 700,000 | 0 | 2,000,000 | 9,500,000 | 10,000,000 | 10,000,000 | 10,000,000 | 41,500,000 |
| Sec. & Nitrif Clarifier Upgrade Project | 0 | 0 | 1,000,000 | 2,000,000 | 4,000,000 | 4,000,000 | 4,000,000 | 15,000,000 |
| Warehousing Facility Additions | 0 | 0 | 0 | 130,000 | 1,100,000 | 0 | 0 | 1,230,000 |
| WPCP Reliability Improvements | 1,476,000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Plant Reliability Improvements Phase 2 | 0 | 0 | 0 | 0 | 0 | 5,000,000 | 0 | 5,000,000 |
| WSP Managed Projects | | | | | | | | |
| ESD MIS Improvements | 247,000 | 0 | | | | | | |
| Lab Information Management System Replaceme | 88,000 | 0 | | | | | | |
| Salt Marsh Restoration | 63,000 | 0 | | | | | | |
| South Bay Water Recycling Program | 0 | 0 | 0 | | | | | 0 |
| Revised SBAP - SBWR Extension | 20,783,000 | 0 | 389,000 | 389,000 | 389,000 | 389,000 | 389,000 | 1,945,000 |
| Construction Projects Total | 55,697,000 | 0 | 30,777,000 | 47,396,000 | 26,246,000 | 29,814,000 | 21,912,000 | 156,145,000 |
| Recurring Projects | | | | | | | | |
| Equipment Replacement | 7,031,000 | 0 | 2,380,000 | 2,150,000 | 1,925,000 | 1,660,000 | 1,525,000 | 9,640,000 |
| Plant Infrastructure Improvements | 11,927,000 | > | 5,738,000 | 8,840,000 | 11,800,000 | 13,110,000 | 20,770,000 | 60,258,000 |
| and the second s | j | | 100 | | *************************************** | 1,000 | 1 | 290000 |
| Total Construction | 74,987,000 | 0 | 39,145,000 | 58,636,000 | 40,221,000 | 44,834,000 | 44,457,000 | 227,293,000 |
| Non-Construction | | | | | | | | |
| 2009 Bond Deposit | 7,102,000 | 0 | | | | | | |
| Payment for CWFA Trustee | 82,000 | 0 | 5,000 | 5,000 | 5,000 | 5,000 | 5,000 | 25,000 |
| Plant Master Plan (see Reserve Below) | 4,828,000 | 0 | 2,400,000 | 2,400,000 | 0 | 0 | 0 | 4,800,000 |
| SRF Loan Repayment (Apprn 6590) | 4,464,000 | 0 | 4,464,000 | 4,464,000 | 4,464,000 | 4,464,000 | 4,464,000 | 22,320,000 |
| Transfer to CWFA Debt Service Fund | 10,723,000 | 0 | 6,981,000 | 6,977,000 | 6,956,000 | 6,947,000 | 6,952,000 | 34,813,000 |
| Transfer to CWFA Debt Service Fund | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| City Hall Debt Service | 18,000 | 0 | 12,000 | 13,000 | 14,000 | 11,000 | 12,000 | 62,000 |
| PW Capital Management Costs | 12,000 | | 5,000 | 8,000 | 6,000 | 6,000 | 6,000 | 31,000 |
| Reserve for Plant Master Plan | 0 | 0 | 0 | 0 | 0 | 5,000,000 | 5,000,000 | 10,000,000 |
| Reserve for Equipment Replacement | 0 | 0 | 5,000,000 | | | | | 5,000,000 |
| Reserve for Electrical Reliability | 0 | 0 | 5,305,000 | | | | | 5,305,000 |
| Reserve for Rate Studies | 0 | 0 | 200,000 | | | - | | 200,000 |
| Total Non-Construction | 27,229,000 | 0 | 24,372,000 | 13,867,000 | 11,445,000 | 16,433,000 | 16,439,000 | 82,556,000 |
| Total Expenditures | 102,216,000 | 0 | 63,517,000 | 72,503,000 | 51,666,000 | 61,267,000 | 60,896,000 | 309,849,000 |
| Ending Fund Balance | 34,434,907 | 0 | 24,143,907 | 7,339,907 | 19,607,907 | 32,008,907 | 45,239,907 | 45,239,907 |
| TOTAL USE OF FUNDS | 136.650.907 | 0 | 87.660.907 | 79.842.907 | 71.273.907 | 93.275.907 | 106.135.907 | 355.088.907 |
| TOTAL COR OF FORES | Toologo, | c | 01,000,301 | 12,044,501 | 11,000 | 10661760 | 100,130,307 | 202,000,707 |

2010-2014 Proposed Capital Improvement Program **Detail of Capital Projects**

1. Public Art

CSA:

Environmental and Utility Services

Initial Start Date:

Ongoing

CSA Outcome:

Reliable Utility Infrastructure

Revised Start Date:

Department:

Environmental Services

Initial Completion Date:

Ongoing

Council District:

Location:

City-wide

Revised Completion Date:

Description:

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

this funding on public art.

Justification:

This allocation is required to comply with the revisions to the Public Art Master Plan adopted by the

City Council on March 13, 2007.

| | | | Ē | XPENDIT | URE SCH | EDULE (0 | 00'S) | | | | |
|---|----------------|-----|---------------------|----------|---------|----------|---------|---------|-----------------|------------------|------------------|
| Cost Elements | Prior Years | | 2008-09 Estimate | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 5-Year Total | Beyond 5-Year | Project Total |
| Public Art | | 521 | 521 | 138 | 557 | 377 | 425 | 423 | 1,920 | | |
| TOTAL | | 521 | 521 | 138 | 557 | 377 | 425 | 423 | 1,920 | | |
| | | | FUN | IDING SO | URCE SC | HEDULE (| (000'S) | | | | |
| San José-Santa Clara Treatment Plant Capital Fund | | 521 | 521 | 138 | 557 | 377 | 425 | 423 | 1,920 | | |
| TOTAL | | 521 | 521 | 138 | 557 | 377 | 425 | 423 | 1,920 | | |

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 N/A

Initial Project Budget:

SNI Area: **USGBC LEED:**

Appn. #:

5957

2010-2014 Proposed Capital Improvement Program **Detail of Capital Projects**

2. Digester Rehabilitation

CSA:

Environmental and Utility Services

Initial Start Date: 3rd Qtr. 2006

CSA Outcome:

Healthy Streams, Rivers, Marsh and Bay

Revised Start Date: 3rd Qtr. 2008

Department:

Environmental Services

Initial Completion Date: 2nd Qtr. 2008

Council District:

Revised Completion Date: 4th Qtr. 2018

Location:

Water Pollution Control Plant

Description:

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

Justification:

Five out of 16 concrete digesters are currently non-operational due to structural damage and lack of adequate mixing capability. This project will maintain the integrity of the digesters, ensure reliability

of the digestion facility, and allow for the digestion of scum and grease.

| · : | 111 | | E | XPENDIT | URE SCH | EDULE (0 | 00'S) | | | | |
|---|----------------|------------------|---------------------|----------|---------|----------|---------|---------|-----------------|------------------|------------------------|
| Cost Elements | Prior Years | 2008-09 Appn. | 2008-09 Estimate | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 5-Year Totai | Beyond 5-Year | Project Total |
| Design Construction Master Plan/Study | | 700 | 700 | 2,000 | 9,500 | 10,000 | 10,000 | 10,000 | 2,000 39,500 | 55,900 | 2,000 95,400 700 |
| TOTAL | | 700 | 700 | 2,000 | 9,500 | 10,000 | 10,000 | 10,000 | 41,500 | 55,900 | 98,100 |
| and the second | A STATE | | FUN | IDING SO | URCE SC | HEDULE (| (000'S) | | | | |
| San José-Santa Clara Treatment Plant Capital Fund | | 700 | 700 | 2,000 | 9,500 | 10,000 | 10,000 | 10,000 | 41,500 | 55,900 | 98,100 |
| TOTAL | | 700 | 700 | 2,000 | 9,500 | 10,000 | 10,000 | 10,000 | 41,500 | 55,900 | 98,100 |

Major Changes in Project Cost:

2008-2012 CIP - increase of \$1.6 million based on revised estimates during initial study.

2009-2013 CIP - increase of \$84 million to fund construction/rehabilitation costs due to increased project scope.

2010-2014 CIP - increase of \$11.5 million due to increased project scope.

None

Replaces a formerly ongoing allocation titled "Scum Digestion".

FY Initiated:

2006-2007

Redevelopment Area:

N/A

Initial Project Budget:

\$1,000,000

SNI Area:

N/A

Appn. #:

4127

USGBC LEED:

2010-2014 Proposed Capital Improvement Program **Detail of Capital Projects**

3. Headworks Enhancement

CSA:

Environmental and Utility Services

Initial Start Date:

3rd Qtr. 2009

CSA Outcome:

Reliable Utility Infrastructure

Revised Start Date:

Environmental Services

Initial Completion Date: 4th Qtr. 2011

Department: **Council District:**

Revised Completion Date:

Location:

Water Pollution Control Plant

Description:

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

Justification:

This project will allow for the old headworks, which was built in the mid 1950s and early 1960s, to be

shutdown for maintenance and rehabilitation.

| | 1. 74 | | 1 | XPENDIT | URE SCH | EDULE (0 | 00'S) | | | | |
|---|----------------|------------------|---------------------|------------------|----------|----------|-----------|---------|--------------------|------------------|--------------------|
| Cost Elements | Prior Years | 2008-09 Appn. | 2008-09 Estimate | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 5-Year Total | Beyond 5-Year | Project Total |
| Design Bid & Award Construction | | | | 330 10 160 | 3,500 | | | | 330 10 3,660 | | 330 10 3,660 |
| TOTAL | | | | 500 | 3,500 | | | | 4,000 | | 4,000 |
| - E 1818 | 18.75 | | FUN | IDING SO | URCE SC | HEDULE (| (000'S) | | | | |
| San José-Santa Clara Treatment Plant Capital Fund | | | | 500 | 3,500 | | | | 4,000 | | 4,000 |
| TOTAL | | | | 500 | 3,500 | | | | 4,000 | | 4,000 |
| | 1.3 | | ANNUA | L OPERA | TING BUE | GET IMP | ACT (000' | S) | | | |
| None | | | | | | | | | | | |

Major Changes in Project Cost:

None

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

FY Initiated:

2009-2010

Redevelopment Area:

N/A

Initial Project Budget:

\$4,000,000

SNI Area:

N/A

Appn. #:

USGBC LEED:

2010-2014 Proposed Capital Improvement Program **Detail of Capital Projects**

4. Land Management & Improvements

CSA:

Environmental and Utility Services

Initial Start Date: 2nd Qtr. 1997

CSA Outcome:

Healthy Streams, Rivers, Marsh and Bay

Revised Start Date:

Department:

Environmental Services

Initial Completion Date: 1st Qtr. 2007

Council District:

Revised Completion Date: 2nd Qtr. 2010

Location:

Water Pollution Control Plant

Description:

This project provides resources for the environmental planning and review of technical issues related to the development and evaluation of possible alternative uses of salt pond A-18 and the San

José/Santa Clara Water Pollution Control Plant buffer lands.

Justification:

The department purchased salt pond A-18 in 2003. As the owner of pond A-18, the City will be required to plan for future uses of A-18. In addition, the City is also in negotiations with the State

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

| | 44.1 | | | XPENDIT | URE SCH | EDULE (0 | 00'S) | | | | |
|---|----------------|------------------|---------------------|----------|---------|----------|-----------|---------|-----------------|------------------|------------------|
| Cost Elements | Prior Years | 2008-09 Appn. | 2008-09 Estimate | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 5-Year Total | Beyond 5-Year | Project Total |
| Property & Land | 20,318 | 3 | | 250 | | | | | 250 | | 20,568 |
| TOTAL | 20,318 | | | 250 | | | | | 250 | | 20,568 |
| - Marine | | | FUN | IDING SO | URCE SC | HEDULE (| (000'S) | | | | |
| San José-Santa Clara Treatment Plant Capital Fund | 20,318 | 3 | | 250 | | | | | 250 | | 20,568 |
| TOTAL | 20,318 | } | | 250 | | | | | 250 | | 20,568 |
| | .16.11. | | ANNUA | L OPERA | TING BU | GET IMP | ACT (000' | S) | | | |
| None | | | | | | | | | | | |

Major Changes in Project Cost:

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

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

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

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

FY Initiated:

1996-1997

Redevelopment Area:

N/A

Initial Project Budget:

\$10,100,000

SNI Area:

N/A

Appn. #:

6147

USGBC LEED:

2010-2014 Proposed Capital Improvement Program **Detail of Capital Projects**

5. Plant Electrical Reliability

CSA:

Environmental and Utility Services

Initial Start Date: 3rd Qtr. 2003

CSA Outcome:

Reliable Utility Infrastructure

Revised Start Date: 3rd Qtr. 2008

Department:

Environmental Services

Initial Completion Date: 2nd Qtr. 2015

Council District:

Revised Completion Date:

Location:

Water Pollution Control Plant

Description:

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

Justification:

The current power distribution network has grown in a patched manner over the years, and many electrical system components have reached the end of their service life. This project will address

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

| 19.34 | 5/H 1 | | | XPENDIT | URE SCH | EDULE (0 | 00'S) | | | | |
|---|----------------|------------------|---------------------|----------|----------|----------|-----------|---------|-----------------|------------------|------------------|
| Cost Elements | Prior Years | 2008-09 Appn. | 2008-09 Estimate | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 5-Year Total | Beyond 5-Year | Project Total |
| Design Construction | (| 5,186 | 5,186 | 20,500 | 20,000 | 9,000 | 6,000 | 4,600 | 60,100 | 15,000 | 5,195 75,100 |
| TOTAL | | 5,186 | 5,186 | 20,500 | 20,000 | 9,000 | 6,000 | 4,600 | 60,100 | 15,000 | 80,295 |
| 全是实际的 | n (Naja | | FU | IDING SO | URCE SC | HEDULE (| (000'S) | | | | |
| San José-Santa Clara Treatment Plant Capital Fund | ę | 5,186 | 5,186 | 20,500 | 20,000 | 9,000 | 6,000 | 4,600 | 60,100 | 15,000 | 80,295 |
| TOTAL | | 5,186 | 5,186 | 20,500 | 20,000 | 9,000 | 6,000 | 4,600 | 60,100 | 15,000 | 80,295 |
| | - 1 | | ANNUA | L OPERA | TING BUL | GET IMP | ACT (000' | S) | | | |

None

Major Changes in Project Cost:

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

2007-2011 CIP - increase of \$15.6 million to fund construction/rehabilitation costs due to increased project scope.

2008-2012 CIP - increase of \$26.5 million to fund construction/rehabilitation costs due to increased project scope.

2009-2013 CIP - decrease of \$3 million to reflect a project scope change.

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

FY Initiated:

2003-2004

Redevelopment Area:

N/A

Initial Project Budget:

\$7,671,000

SNI Area: **USGBC LEED:** N/A

Appn. #:

4341

2010-2014 Proposed Capital Improvement Program **Detail of Capital Projects**

6. SBWR Reservoir Facility

CSA:

Environmental and Utility Services

Initial Start Date: 3rd Qtr. 2008

CSA Outcome:

Reliable Utility Infrastructure

Revised Start Date: 3rd Qtr. 2009

Department:

Environmental Services

Initial Completion Date: 2nd Qtr. 2010

Council District:

Revised Completion Date:

Location:

Water Pollution Control Plant

Description:

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

Justification:

Construction of the facility will improve the reliability for the production of recycled water, and

improve the recycled water quality to the level established by the SCVWD.

| | | | | XPENDIT | URE SCH | EDULE (0 | 00'S) | | | | |
|---|----------------|------------------|---------------------|----------|---------|----------|---------|---------|-----------------|------------------|------------------|
| Cost Elements | Prior Years | 2008-09 Appn. | 2008-09 Estimate | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 5-Year Total | Beyond 5-Year | Project Total |
| Construction | | 6,000 | | 6,000 | | | | | 6,000 | | 6,000 |
| TOTAL | | 6,000 | | 6,000 | | | | ,,, | 6,000 | | 6,000 |
| | 4200 | | FUN | IDING SO | URCE SC | HEDULE | (000'S) | | | | |
| San José-Santa Clara Treatment Plant Capital Fund | • | 6,000 | | 6,000 | | | | | 6,000 | | 6,000 |
| TOTAL | Sell Co | 6,000 | | 6,000 | | | | | 6,000 | - 1600 Page 100 | 6,000 |

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

None

Notes:

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

FY Initiated:

2007-2008

Redevelopment Area:

N/A

Initial Project Budget:

\$6,000,000

SNI Area:

N/A

Appn. #:

6508

USGBC LEED:

2010-2014 Proposed Capital Improvement Program **Detail of Capital Projects**

7. Secondary and Nitrification Clarifier Rehabilitation

CSA:

Environmental and Utility Services

Initial Start Date: 3rd. Qtr. 2009

CSA Outcome:

Reliable Utility Infrastructure

Revised Start Date:

Department:

Environmental Services

Initial Completion Date: 4th Qtr. 2018

Council District:

Revised Completion Date:

Location:

Water Pollution Control Plant

Description:

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

removed from the bottom of the clarifiers for further treatment.

Justification:

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

| Programme Commencer | 578411 | | = | XPENDIT | URE SCH | EDULE (0 | 00'S) | | | | |
|---|----------------|------------------|---------------------|----------|---------|----------|---------|---------|-----------------|------------------|------------------|
| Cost Elements | Prior Years | 2008-09 Appn. | 2008-09 Estimate | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 5-Year Total | Beyond 5-Year | Project Total |
| Design Construction | 5.05 | | | 1,000 | 2,000 | 4,000 | 4,000 | 4,000 | 1,000 14,000 | 20,000 | 1,000 34,000 |
| TOTAL | | | | 1,000 | 2,000 | 4,000 | 4,000 | 4,000 | 15,000 | 20,000 | 35,000 |
| 14 Y 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 45.84 | | FUN | IDING SO | URCE SC | HEDULE (| (000'S) | | | | |
| San José-Santa Clara Treatment Plant Capital Fund | | | | 1,000 | 2,000 | 4,000 | 4,000 | 4,000 | 15,000 | 20,000 | 35,000 |
| TOTAL | | | | 1,000 | 2,000 | 4,000 | 4,000 | 4,000 | 15,000 | 20,000 | 35,000 |

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

None

Notes:

FY Initiated:

2009-2010

Redevelopment Area:

N/A

Initial Project Budget:

\$35,000,000

SNI Area:

N/A

Appn. #:

USGBC LEED:

2010-2014 Proposed Capital Improvement Program **Detail of Capital Projects**

8. 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

Water Pollution Control Plant

Initial Completion Date:

Ongoing

Revised Completion Date:

Council District:

Location: Description:

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

Justification:

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

| 1 | | | 2 | XPENDIT | URE SCH | EDULE (0 | 00'S) | | | | |
|--|----------------|------------------|---------------------|----------|---------|----------|---------|---------|-----------------|------------------|------------------|
| Cost Elements | Prior Years | 2008-09 Appn. | 2008-09 Estimate | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 5-Year Total | Beyond 5-Year | Project Total |
| Development Property & Land Design Construction | | 20,783 | 20,783 | 389 | 389 | 389 | 389 | 389 | 1,945 | | |
| TOTAL | | 20,783 | 20,783 | 389 | 389 | 389 | 389 | 389 | 1,945 | | |
| | 1.15% | | FUN | IDING SO | URCE SC | HEDULE (| (000'S) | | | | |
| San José-Santa Clara Treatment Plant Capital Fund | | 20,783 | 20,783 | 389 | 389 | 389 | 389 | 389 | 1,945 | | |
| TOTAL | | 20,783 | 20,783 | 389 | 389 | 389 | 389 | 389 | 1,945 | | |

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

N/A

Notes:

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

FY Initiated:

Ongoing

Redevelopment Area:

N/A

Initial Project Budget:

SNI Area:

N/A

Appn. #:

6589

USGBC LEED:

2010-2014 Proposed Capital Improvement Program **Detail of Capital Projects**

9. 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:

Description:

Revised Completion Date:

Location:

Water Pollution Control Plant

This allocation provides for the replacement and rehabilitation of Water Pollution Control Plant (WPCP) equipment. Equipment anticipated to be replaced or rehabilitated within the five-year horizon includes air compressors, tanks, pumps, motors, control systems, valves, heat exchangers, engine auxiliaries, lab instruments and other equipment as required. Existing engine-generators and

engine-blowers will be retrofitted to meet Air Quality Board emission requirements.

Justification:

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

of the Plant facilities.

| 142 May 1841 | Seg Test | | E | XPENDIT | URE SCH | EDULE (0 | 00'S) | | | | |
|---|----------------|------------------|---------------------|----------|---------|----------|---------|---------|-----------------|------------------|------------------|
| Cost Elements | Prior Years | 2008-09 Appn. | 2008-09 Estimate | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 5-Year Total | Beyond 5-Year | Project Total |
| Equipment | | 7,031 | 7,031 | 2,380 | 2,150 | 1,925 | 1,660 | 1,525 | 9,640 | | |
| TOTAL | ****** | 7,031 | 7,031 | 2,380 | 2,150 | 1,925 | 1,660 | 1,525 | 9,640 | | |
| 40,000 | er Najjije, v | | FUN | IDING SO | URCE SC | HEDULE (| (000'S) | | 1.00 | | |
| San José-Santa Clara Treatment Plant Capital Fund | | 7,031 | 7,031 | 2,380 | 2,150 | 1,925 | 1,660 | 1,525 | 9,640 | | |
| TOTAL | | 7,031 | 7,031 | 2,380 | 2,150 | 1,925 | 1,660 | 1,525 | 9,640 | | |

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:

Appn. #:

4332

SNI Area:

N/A

USGBC LEED:

2010-2014 Proposed Capital Improvement Program **Detail of Capital Projects**

10. Plant Infrastructure Improvements

CSA:

Environmental and Utility Services

Initial Start Date:

Ongoing

CSA Outcome:

Reliable Utility Infrastructure

Revised Start Date:

Department:

Environmental Services

Initial Completion Date:

Ongoing

Council District:

Revised Completion Date:

Location:

Water Pollution Control Plant

Description:

This allocation provides for improvements, rehabilitation, or replacement of existing Plant infrastructure and fixed works; process facilities; buildings, structures and supporting facilities; piping

and auxiliaries; instrumentation; and electrical generation, distribution and control systems.

Justification:

Rehabilitation, improvements, and replacement of capital infrastructure are necessary to maintain process viability and to ensure regulatory compliance, structural integrity, reliability, functionality, and

safety of Plant buildings and process facilities for intended uses.

| | EXPENDITURE SCHEDULE (000'S) | | | | | | | | | | | |
|---|------------------------------|------------------|---------------------|----------|---------|----------|---------|---------|-----------------|------------------|------------------|--|
| Cost Elements | Prior Years | 2008-09 Appn. | 2008-09 Estimate | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 5-Year Total | Beyond 5-Year | Project Total | |
| Construction | | 11,927 | 11,927 | 5,738 | 8,840 | 11,800 | 13,110 | 20,770 | 60,258 | | | |
| TOTAL | | 11,927 | 11,927 | 5,738 | 8,840 | 11,800 | 13,110 | 20,770 | 60,258 | | | |
| 网络真然 1000 | 19 | | FUN | IDING SO | URCE SC | HEDULE (| (000'S) | | | | | |
| San José-Santa Clara Treatment Plant Capital Fund | | 11,927 | 11,927 | 5,738 | 8,840 | 11,800 | 13,110 | 20,770 | 60,258 | | | |
| TOTAL | | 11,927 | 11,927 | 5,738 | 8,840 | 11,800 | 13,110 | 20,770 | 60,258 | | | |

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:

Appn. #:

Ongoing

Redevelopment Area:

N/A

Initial Project Budget:

5690

SNI Area:

USGBC LEED:

N/A N/A

2010-2014 Proposed Capital Improvement Program **Detail of Capital Projects**

11. Unanticipated/Critical Repairs

CSA:

Environmental and Utility Services

Initial Start Date:

Ongoing

CSA Outcome:

Reliable Utility Infrastructure

Revised Start Date:

Department:

Environmental Services

Initial Completion Date:

Ongoing

Council District:

Revised Completion Date:

Location:

Water Pollution Control Plant

Description:

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

Justification:

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

| rior | 2008-09 | 0000 00 | | | | | | | | |
|-------|---------|---------------------|--------------------------------------|---|--|--|--|--|--|--|
| 'ears | Appn. | 2008-09 Estimate | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 5-Year Total | Beyond 5-Year | Project Total |
| | 332 | 332 | 250 | 250 | 250 | 250 | 250 | 1,250 | | |
| | 332 | 332 | 250 | 250 | 250 | 250 | 250 | 1,250 | | |
| | | FUN | IDING SO | URCE SCI | HEDULE (| 000'S) | | | | |
| | 332 | 332 | 250 | 250 | 250 | 250 | 250 | 1,250 | | |
| | 332 | 332 | 250 | 250 | 250 | 250 | 250 | 1,250 | | |
| | | 332 332 332 | 332 332 FUN 332 332 332 332 | 332 332 250 FUNDING SO 332 332 250 332 332 250 | 332 332 250 250 FUNDING SOURGE SC 332 332 250 250 332 332 250 250 | 332 332 250 250 250 FUNDING SOURCE SCHEDULE (332 332 250 250 250 332 332 250 250 250 | 332 332 250 250 250 250 250 FUNDING SOURCE SCHEDULE (000'S) 332 332 250 250 250 250 250 250 | 332 332 250 250 250 250 250 250 FUNDING SOURCE SCHEDULE (000'S) 332 332 250 250 250 250 250 250 332 332 250 250 250 250 250 | 332 332 250 250 250 250 250 1,250 FUNDING SOURCE SCHEDULE (000'S) 332 332 250 250 250 250 250 250 1,250 332 332 250 250 250 250 250 250 1,250 | 332 332 250 250 250 250 250 1,250 FUNDING SOURCE SCHEDULE (000'S) 332 332 250 250 250 250 250 1,250 332 332 250 250 250 250 250 1,250 |

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

N/A

Notes:

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

FY Initiated:

Appn. #:

Ongoing

Redevelopment Area:

N/A

Initial Project Budget:

5691

SNI Area:

N/A

USGBC LEED:

2010-2014 Proposed Capital Improvement Program **Detail of Capital Projects**

12. Payment for Clean Water Financing Authority Trustee

CSA:

Environmental and Utility Services

Initial Start Date:

Ongoing

CSA Outcome:

Reliable Utility Infrastructure

Revised Start Date:

Department:

Environmental Services

Initial Completion Date:

Ongoing

Council District:

Revised Completion Date:

Location:

Water Pollution Control Plant

Description:

This allocation provides for administrative costs of the San José/Santa Clara Clean Water Financing Authority related to bond issues, including necessary audits, transfers, registration, investment, and

disbursement fees.

Justification:

Services from the Clean Water Financing Authority are necessary to administer financing issued for

the Plant.

| 77.7 | | = | XPENDIT | JRE SCH | EDULE (0 | 00'S) | | | | |
|----------------|------------------|---------------------------------------|---|---|---|--|--|--|---|---|
| Prior Years | 2008-09 Appn. | 2008-09 Estimate | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 5-Year Total | Beyond 5-Year | Project Total |
| | 82 | 82 | 5 | 5 | 5 | 5 | 5 | 25 | | |
| | 82 | 82 | 5 | 5 | 5 | 5 | 5 | 25 | | |
| | | FUN | IDING SO | URCE SC | HEDULE (| (000'S) | | | | |
| | 82 | 82 | 5 | 5 | 5 | 5 | 5 | 25 | | |
| | 82 | 82 | 5 | 5 | 5 | 5 | 5 | 25 | | |
| | Prior | Prior 2008-09 Years Appn. 82 82 | Prior Years 2008-09 Appn. 2008-09 Estimate 82 82 82 82 FUN 82 | Prior Years 2008-09 Appn. 2008-09 Estimate 2009-10 82 82 5 82 82 5 FUNDING SO 82 82 5 | Prior Years 2008-09 Appn. 2008-09 Estimate 2009-10 2010-11 82 82 5 5 82 82 5 5 FUNDING SOURCE SCI 82 82 5 5 | Prior Years 2008-09 Appn. 2008-09 Estimate 2009-10 2010-11 2011-12 82 82 5 5 5 82 82 5 5 5 FUNDING SOURCE SCHEDULE 82 82 5 5 5 | Prior Years 2008-09 Appn. 2008-09 Estimate 2009-10 2010-11 2011-12 2012-13 82 82 5 5 5 5 82 82 5 5 5 5 FUNDING SOURCE SCHEDULE (000'S) 82 82 5 5 5 5 | Prior Years 2008-09 Appn. 2008-09 Estimate 2009-10 2010-11 2011-12 2012-13 2013-14 82 82 5 5 5 5 5 FUNDING SOURCE SCHEDULE (000'S) 82 82 5 5 5 5 | Prior Years 2008-09 Appn. 2008-09 Estimate 2009-10 2010-11 2011-12 2012-13 2013-14 5-Year Total 82 82 5 5 5 5 5 25 FUNDING SOURCE SCHEDULE (000'S) 82 82 5 5 5 5 5 25 | Prior Years 2008-09 Appn. 2008-09 Estimate 2009-10 2010-11 2011-12 2012-13 2013-14 5-Year Total Beyond 5-Year 82 82 5 5 5 5 5 25 FUNDING SOURCE SCHEDULE (000'S) 82 82 5 5 5 5 25 |

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:

Appn. #:

6584

SNI Area:

N/A

USGBC LEED:

2010-2014 Proposed Capital Improvement Program **Detail of Capital Projects**

13. Plant Master Plan

CSA:

Environmental and Utility Services

Initial Start Date: 3rd Qtr. 2006

CSA Outcome:

Healthy Streams, Rivers, Marsh and Bay

Revised Start Date: 3rd Qtr. 2007

Department:

Environmental Services

Initial Completion Date: 2nd Qtr. 2008

Council District:

Revised Completion Date: 1st Qtr. 2011

Location:

Water Pollution Control Plant

Description:

This Plant Master Plan (PMP) would provide San José/Santa Clara Water Pollution Control Plant with a phased program of recommended wastewater treatment facilities and management programs to accommodate planned growth and to meet existing and anticipated regulatory requirements through the year 2040. The PMP will need to address both public health and environmental

protection issues while ensuring reliable service at affordable rates for area customers.

Justification:

Since the Plant is over 50 years old, major infrastructure upgrades are needed in the short- and longterm. A single Plant Master Plan will ensure the continuity and integration of major Plant facilities planning, construction, and operation for the next 30 years with a common set of goals and

objectives to meet public health, regulatory, and community objectives.

| | EXPENDITURE SCHEDULE (000'S) | | | | | | | | | | |
|---|------------------------------|------------------|---------------------|----------|----------|----------|----------|---------|-----------------|------------------|------------------|
| Cost Elements | Prior Years | 2008-09 Appn. | 2008-09 Estimate | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 5-Year Total | Beyond 5-Year | Project Total |
| Master Plan/Study | 572 | 4,828 | 4,828 | 2,400 | 2,400 | | 3,000 | | 4,800 | | 10,200 |
| TOTAL | 572 | 4,828 | 4,828 | 2,400 | 2,400 | · | | | 4,800 | | 10,200 |
| | 1.35.0 | | FUN | IDING SO | URCE SC | HEDULE (| (000'S) | | | | |
| San José-Santa Clara Treatment Plant Capital Fund | 572 | 4,828 | 4,828 | 2,400 | 2,400 | | | | 4,800 | | 10,200 |
| TOTAL | 572 | 4,828 | 4,828 | 2,400 | 2,400 | | <i>,</i> | | 4,800 | | 10,200 |
| | | | ANNUA | L OPERA | TING BUE | GET IMP | ACT (000 | S) | | | |

None

Major Changes in Project Cost:

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

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

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

FY Initiated:

2006-2007

Redevelopment Area:

N/A

Initial Project Budget:

\$1,000,000

SNI Area:

N/A

Appn. #:

4120

USGBC LEED:

2010-2014 Proposed Capital Improvement Program **Detail of Capital Projects**

14. Public Works Capital Management Costs

CSA:

Environmental and Utility Services

Initial Start Date:

Ongoing

CSA Outcome:

Reliable Utility Infrastructure

Revised Start Date:

Department:

Public Works

Initial Completion Date:

Ongoing

Council District:

Revised Completion Date:

Location:

N/A

Description:

This allocation funds the fair share of Public Works Department administrative and management

costs necessary to ensure the delivery of capital projects.

Justification:

This allocation is required to recover the actual administrative and management costs incurred when

delivering capital projects.

| 1970年代 | per el la companya de la companya d | | E | XPENDIT | URE SCH | EDULE (0 | 00'S) | | | | |
|---|--|----|---------------------|----------|-----------|----------|-----------|---------|-----------------|------------------|------------------|
| Cost Elements | Prior Years | | 2008-09 Estimate | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 5-Year Total | Beyond 5-Year | Project Total |
| Program Management | | 12 | 12 | 5 | 8 | 6 | 6 | 6 | 31 | | |
| TOTAL | | 12 | 12 | 5 | 8 | 6 | 6 | 6 | 31 | | |
| | 19-12/12 | | FUN | IDING SO | URCE SC | HEDULE (| (000'S) | | | | |
| San José-Santa Clara Treatment Plant Capital Fund | | 12 | 12 | 5 | 8 | 6 | 6 | 6 | 31 | | |
| TOTAL | | 12 | 12 | 5 | 8 | 6 | 6 | 6 | 31 | | |
| | 1975 | | AMMILA | LOPERA | TING BUIL | CET IMP | ACT (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

6000 Appn. #:

USGBC LEED:

2010-2014 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

CSA Outcome:

Healthy Streams, Rivers, Marsh and Bay

Revised Start Date:

Department:

Environmental Services

Initial Completion Date: 2nd Qtr. 2019

Council District:

4

Revised Completion Date:

Location:

N/A

Description:

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

Recycling projects.

Justification:

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

| | | | Ē | XPENDIT | JRE SCHI | EDULE (0 | 00'S) | | | | |
|---|-------------|------------------|---------------------|----------|----------|----------|-----------|---------|-----------------|------------------|------------------|
| Cost Elements | | 2008-09 Appn. | 2008-09 Estimate | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 5-Year Total | Beyond 5-Year | Project Total |
| | 41,348 | | 4,464 | 4,464 | 4,464 | 4,464 | 4,464 | 4,464 | 22,320 | 22,320 | 90,452 |
| Debt Service | | | 4,464 | 4,464 | 4,464 | 4,464 | 4,464 | 4,464 | 22,320 | 22,320 | 90,452 |
| TOTAL | 41,348 | 4,404 | | IDING SO | | | (000'S) | | | | |
| San José-Santa Clara Treatment Plant Capital | 41,348 | 4,464 | 4,464 | 4,464 | 4,464 | 4,464 | 4,464 | 4,464 | 22,320 | 22,320 | 90,452 |
| Fund TOTAL | 41,348 | 4,464 | 4,464 | 4,464 | 4,464 | 4,464 | 4,464 | 4,464 | 22,320 | 22,320 | 90,452 |
| TOTAL | · . Z. As · | | ANNU | AL OPERA | TING BU | DGET IMP | PACT (000 | 'S) | | | |

None

Major Changes in Project Cost:

None

Notes:

FY Initiated:

1998-1999

Redevelopment Area:

N/A

Initial Project Budget:

\$87,533,000

SNI Area:

N/A

Appn. #:

6590

USGBC LEED:

2010-2014 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:

Revised Completion Date:

Location:

N/A

Description:

This funding provides for the transfer of funds for the payment of the 1995 Series A and B Revenue

Bonds to the Clean Water Financing Authority Debt Service Payment Funds.

Justification:

Repayment of bonds is a requirement of the bonding agreement.

| | | EXPENDITURE SCHEDULE (000'S) | | | | | | | | | |
|---|----------------|------------------------------|---------------------|----------|---------|---------|-----------|---------|-----------------|------------------|------------------|
| Cost Elements | Prior Years | 2008-09 Appn. | 2008-09 Estimate | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 5-Year Total | Beyond 5-Year | Project Total |
| Debt Service | 14,881 | 10,723 | 10,723 | 6,981 | 6,977 | 6,956 | 6,947 | 6,952 | 34,813 | 37,131 | 97,548 |
| TOTAL | 14,881 | 10,723 | 10,723 | 6,981 | 6,977 | 6,956 | 6,947 | 6,952 | 34,813 | 37,131 | 97,548 |
| | 0.04.5 | | FUN | IDING SO | URCE SC | HEDULE | (000'S) | | | | |
| San José-Santa Clara Treatment Plant Capital Fund | 14,881 | 10,723 | 10,723 | 6,981 | 6,977 | 6,956 | 6,947 | 6,952 | 34,813 | 37,131 | 97,548 |
| TOTAL | 14,881 | 10,723 | 10,723 | 6,981 | 6,977 | 6,956 | 6,947 | 6,952 | 34,813 | 37,131 | 97,548 |
| West Wilders to the first | | 1.00 | ANNUA | L OPERA | TING BU | GET IMP | ACT (000' | 'S) | | | |
| None | | | | | | | | | | | |

Major Changes in Project Cost:

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

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

2010-2014 CIP - Increase of \$12.6 million due to an inadvertent error in prior budgets, which omitted the portion of the

Debt Service paid for by the Tributary Agencies from the totals displayed in the CIP.

Notes:

FY Initiated:

2001-2002

Redevelopment Area:

N/A

Initial Project Budget:

\$34,851,000

SNI Area:

N/A

Appn. #:

0005

USGBC LEED:

2010-2014 Proposed Capital Improvement Program **Detail of Capital Projects**

17. Reserve for Electrical Reliability Improvements Project

CSA:

Environmental and Utility Services

Initial Start Date:

N/A

CSA Outcome:

Reliable Utility Infrastructure

Revised Start Date:

Department:

Environmental Services

Initial Completion Date: Revised Completion Date: N/A

Council District:

Water Pollution Control Plant

Description:

Location:

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

Justification:

To ensure the timely delivery of funding at the lowest possible cost, ending fund balance needs to be

reserved for this priority project.

| . * * * . | EXPENDITURE SCHEDULE (000'S) | | | | | | | | | | | |
|---|------------------------------|------------------|---------------------|----------|---------|---------|---------|---------|-----------------|------------------|------------------|--|
| Cost Elements | Prior Years | 2008-09 Appn. | 2008-09 Estimate | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 5-Year Total | Beyond 5-Year | Project Total | |
| Reserve | | 5,305 | | 5,305 | | | | | 5,305 | | 5,305 | |
| TOTAL | | 5,305 | | 5,305 | | | | | 5,305 | | 5,305 | |
| ANALYSIS I | | | FUN | IDING SO | URCE SC | HEDULE | (000'S) | | | | | |
| San José-Santa Clara Treatment Plant Capital Fund | | 5,305 | | 5,305 | | | | | 5,305 | | 5,305 | |
| TOTAL | 1000 | 5,305 | | 5,305 | | | | | 5,305 | | 5,305 | |

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

None

Notes:

FY Initiated:

2008-2009

Redevelopment Area:

N/A

Initial Project Budget:

8226

SNI Area:

N/A

Appn. #:

USGBC LEED:

2010-2014 Proposed Capital Improvement Program Detail of Capital Projects

18. Reserve for Equipment Replacement

CSA:

Environmental and Utility Services

Initial Start Date:

N/A

CSA Outcome:

Reliable Utility Infrastructure

Revised Start Date:

. . . .

Department:

Environmental Services

Initial Completion Date:

N/A

Council District:

4

Revised Completion Date:

Location:

Water Pollution Control Plant

Description:

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

budgeted for such purposes.

Justification:

Provisions of the Improvement Agreement between the San José/Santa Clara Clean Water Financing Authority and bondholders, as well as the adopted Master Agreements for Wastewater

Treatment with the various tributary agencies, require that replacement funds be segregated.

| | | · | = | XPENDIT | URE SCH | EDULE (0 | 00'S) | | | | |
|---|----------------|------------------|---------------------|---------|---------|----------|---------|---------|-----------------|------------------|------------------|
| Cost Elements | Prior Years | 2008-09 Appn. | 2008-09 Estimate | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 5-Year Total | Beyond 5-Year | Project Total |
| Reserve | | 5,000 | | 5,000 | | | | | 5,000 | | 5,000 |
| TOTAL | | 5,000 | | 5,000 | | | | | 5,000 | | 5,000 |
| · 医肾髓 1.50(1) | 1100 | | FUN | DING SO | URCE SC | HEDULE (| (000'S) | | | | |
| San José-Santa Clara Treatment Plant Capital Fund | | 5,000 | | 5,000 | | | | | 5,000 | | 5,000 |
| TOTAL | | 5,000 | | 5,000 | | | | | 5,000 | | 5,000 |

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

None

Notes:

Unexpended funds are rebudgeted each year.

FY Initiated:

1982-1983

Redevelopment Area:

N/A

Initial Project Budget:

SNI Area:

N/A

Appn. #:

8908

USGBC LEED:

2010-2014 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:

Water Pollution Control Plant

Description:

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

Justification:

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

| | t Agentin | EXPENDITURE SCHEDULE (000'S) | | | | | | | | | | |
|---|----------------|------------------------------|---------------------|----------|---------|----------|---------|---------|-----------------|------------------|------------------|--|
| Cost Elements | Prior Years | 2008-09 Appn, | 2008-09 Estimate | 2009-10 | 2010-11 | 2011-12 | 2012-13 | 2013-14 | 5-Year Total | Beyond 5-Year | Project Total | |
| Reserve | | 200 | | 200 | | | | | 200 | | 200 | |
| TOTAL | | 200 | | 200 | | | | | 200 | | 200 | |
| SERVICE STATE | The Month | | FUN | IDING SO | URCE SC | HEDULE (| (000'S) | | | | | |
| San José-Santa Clara Treatment Plant Capital Fund | | · 200 | | 200 | | | | | 200 | | 200 | |
| TOTAL | | 200 | | 200 | | | w | | 200 | | 200 | |

ANNUAL OPERATING BUDGET IMPACT (000'S)

None

Major Changes in Project Cost:

None

Notes:

FY Initiated:

Appn. #:

2003-2004

Redevelopment Area:

N/A

initial Project Budget:

4674

SNI Area:

N/A

USGBC LEED:

Water Pollution Control

2010-2014 Proposed Capital Improvement Program

Summary of Projects that Start after 2009-2010

Project Name: Digester Gas Line Replacement

Council District: 4

5-Year CIP Budget:

\$10,300,000

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

Total Budget: \$10,300,000

USGBC LEED N/A

Description: This project adds digester gas lines to replace the existing main digester gas lines that

are leaking at the pipe joints. This project was originally scheduled to begin in 2007-2008, but has been delayed in order to allow time for a pre-design study to explore the suitability of digesting alternate feedstock, including fats, oil and grease, and organic

wastes.

Project Name: Dissolved Air Flotation Pressure

Retention Tank & Valves

Council District: 4

5-Year CIP Budget:

\$1,100,000

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

Total Budget:

\$2,716,866

USGBC LEED N/A

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

sludge processing area. Four tanks will be replaced every two years.

Project Name: Filtration Action Plan - Valve

Replacement

Council District: 4

5-Year CIP Budget:

\$7,000,000

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

Total Budget: \$11,000,000

USGBC LEED N/A

Description: This project will involve replacing leaking valves in the filtration building. There are a

total of 108 valves, including backwash, isolation, drain, influent, and surface wash

valves.

Project Name: Fire Line Replacement

5-Year CIP Budget:

\$800,000

Council District: 4

Total Budget:

\$1,150,000

Estimated Start Date: 3rd Qtr. 2007

Estimated End Date: 2nd Qtr. 2012

USGBC LEED N/A

Description: This project will replace a total of 14,400 ft. of ductile iron pipe, 34 fire hydrants, 34

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

Project Name: Reserve for Plant Master Plan

Improvements

Council District: 4

5-Year CIP Budget:

\$10,000,000

Estimated Start Date: N/A

Total Budget:

\$90,000,000

Estimated End Date: N/A

USGBC LEED N/A

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

project.

Water Pollution Control

2010-2014 Proposed Capital Improvement Program

Summary of Projects that Start after 2009-2010

Project Name: WPCP Reliability Improvements

Council District: 4

5-Year CIP Budget:

Phase II \$5,000,000

Estimated Start Date: 3rd Qtr. 2012

Total Budget:

\$35,000,000

Estimated End Date: 4th Qtr. 2017

USGBC LEED N/A

Description: This project will include the rehabilitation of the existing older headworks, including

coating of concrete, and rehabilitation or replacement of existing pre-treatment equipment. This project will maintain the integrity and ensure the reliability of the

existing system.

Project Name: Warehousing Facility Additions

Council District: 4

5-Year CIP Budget:

\$1,230,000

Estimated Start Date: 3rd Qtr. 2010

Total Budget: \$1,230,000 Estimated End Date: 2nd Qtr. 2012

USGBC LEED N/A

Description: This project will include an assessment of current inventory control programs and

inventory storage needs and provide for covered storage facilities for wastewater

treatment spare equipment, parts, and materials.

PROPOSED

SAN JOSE / SANTA CLARA WATER POLLUTION CONTROL PLANT

700 Los Esteros Road San Jose, California 95134

2009 - 2010

Operating & Maintenance Budget

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

TO **Treatment Plant Advisory Committee**

Chuck Reed (Chairperson) Mayor, City of San Jose

Nora Campos Councilmember, City of San Jose

John Gatto Boardmember, Cupertino Sanitary District

Bob Livengood Mayor, City of Milpitas Patricia Mahan Mayor, City of Santa Clara

Kevin Moore Councilmember, City of Santa Clara Madison, Nguyen Councilmember, City of San Jose

Kenneth Yeager Boardmember, West Valley Sanitation District

Ed Shikada Deputy City Manager, City of San Jose



Memorandum

TO: TREATMENT PLANT ADVISORY COMMITTEE

FROM: John Stufflebean

SUBJECT: 2009-2010 PROPOSED OPERATING BUDGET

DATE: May 6, 2009

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

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

IOHN STUFFLEBEAN

Birector, Environmental Services Department

SAN JOSE / SANTA CLARA WATER POLLUTION CONTROL PLANT

700 Los Esteros Road San Jose, California 95134

2009-2010

PROPOSED

Operating & Maintenance Budget

Environmental Services Department City of San Jose

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

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Environmental Services Department

BUDGET SUMMARY

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

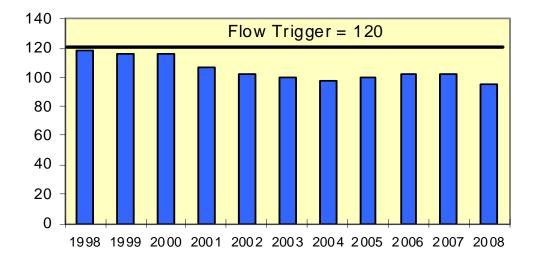
BUDGET HIGHLIGHTS 2009-2010

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

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



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



Environmental Services Department

TREATMENT PLANT OPERATING FUND BUDGET SUMMARY

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

ESTIMATED COST DISTRIBUTION

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

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

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

Environmental Services Department

OVERVIEW

| his year's TPAC Budget continues accordance with the City's Investir Environmental Services Department | to reflect the funding allocations by core service, in ng in Results Program. As previously reported, the t has six core services: |
|---|--|
| □ Manage Wastewater □ Manage Recycled Water □ Manage Urban Runoff Quality | Manage Recycling and Garbage ServicesManage Potable Water |
| Wianage Orban Kunon Quanty | ☐ 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 2009-2010 Proposed Treatment Plant Operating Fund Budget recommends an increase of 2.1% over the 2008-09 Adopted Budget. This increase represents standard cost increases within the various categories such as supplies and materials, as well as additional costs for overhead, equipment; and \$3 million in budget proposals for chemicals, equipment, and several one-time maintenance related projects.

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

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

Environmental Services Department

OVERVIEW (Cont'd.)

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

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

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

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

Environmental Services Department

OVERVIEW CONTINUED

BUDGET SUMMARY

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

Environmental Services Department

Core Service: Manage Wastewater

Core Service Purpose

| anage wastewater for suitable discharbeneficial reuse to protect the environment | ge into the South San Francisco Bay and forment and public health. |
|---|--|
| Key Operational Services: | |
| □ Source Management and Control □ Operation of Treatment System and Processes □ Maintain Equipment and Facilities | □ Regulatory Development and Compliance □ Technical Guidance □ Process Control Monitoring □ System Improvements |

Performance and Resource Overview

his core service's activities are primarily focused on providing wastewater treatment services to eight jurisdictions and 1.4 million residents in the South Bay, conducting industrial facility inspections, and activities to ensure compliance with the City's National Pollution Discharge Elimination System (NPDES) Wastewater permit. For the seventh consecutive year ending December 31, 2008, the San José/Santa Clara Water Pollution Control Plant (Plant) has achieved 100% compliance with its permit discharge requirements. This accomplishment has earned the Plant its third Platinum Peak Performance Award given by the National Association of Clean Water Agencies for 100% permit compliance for five or more consecutive years.

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

Environmental Services Department
Core Service: Manage Wastewater

Performance and Resource Overview (Cont'd.)

The second program recently undertaken is the Enhanced Preventive Maintenance Program. The Program's objective is to develop a systematic approach that ensures all assets are sufficiently maintained to meet or exceed expected life cycles. As part of this effort, dedicated personnel were added in recent years to ensure a more thorough and timely maintenance cycle for all major assets. To date, this team has completed an exhaustive inventory and begun a more aggressive preventative maintenance schedule, and early indications demonstrate declines in emergency repair of critical assets. As this effort is incorporated with the Asset Management Program, the future data will better quantify the benefits and give future direction to this program.

For the remainder of the measures in this core service, the Department is projected to meet or exceed the majority of its performance targets in 2008-2009. The performance measure "Million gallons per day discharged to the Bay during average dry weather season" is slightly below the targeted level due to an overall decline of flows to the Plant and continued recycled water flows to customers. This measure continues to sufficiently meet the Regional Water Quality Control Board's permit requirements and flow trigger of 120 million gallons per day (mgd). This is of critical importance because if average discharges from the Plant were to exceed this level during the May through October dry-weather season, the Board has the authority to order a number of more stringent measures, such as a building moratorium, that could threaten the area's long-term economic environment.

| | Manage Wastewater Performance Summary | 2007-2008 Actual | 2008-2009 Target | 2008-2009 Estimated | 2009-2010 Target |
|----------|--|---------------------|---------------------|------------------------|---------------------|
| <u>©</u> | Millions of gallons per day discharged to the Bay during average dry weather season State order: 120 mgd or less* | 95 | 105 | 94 | 95 |
| 6 | % of time pollutant discharge requirements are met or surpassed | 100% | 100% | 100% | 100% |
| © | % of suspended solids removed | 99% | 99% | 99% | 99% |
| • | % of scheduled industrial inspections completed on time | 99% | 95% | 95% | 95% |
| \$ | Cost per million gallons treated | \$969 | \$985 | \$999 | \$1020 |
| R | % of customers (permitted dischargers) satisfied or very satisfied with service, based on reliability and pre-treatment services | 86% | N/A** | N/A** | 90% |

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

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

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

Environmental Services Department Core Service: Manage Wastewater

Performance and Resource Overview (Cont'd.)

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

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

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

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

Environmental Services Department
Core Service: Manage Wastewater

Budget Changes By Core Service

| | | Treatment Plant |
|-------------------------------|-----------|-----------------|
| Proposed Core Service Changes | Positions | Appropriations |

1. Treatment Plant Bufferland Structure Demolition

600,000

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

Performance Results:

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

2. Alternative Wastewater Disinfection Chemicals Costs

500,000

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

Performance Results:

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

3. Treatment Plant Building Exterior Maintenance

500,000

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

Performance Results:

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

Environmental Services Department
Core Service: Manage Wastewater

Budget Changes By Core Service

| | | Treatment Plant |
|-------------------------------|-----------|-----------------|
| Proposed Core Service Changes | Positions | Appropriations |

4. Environmental Enforcement Data System Upgrade

200,000

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

Performance Results:

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

5. Watershed Division Office Space

247,500

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

Performance Results:

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

6. Biosolids Program GPS Equipment

260,000

This proposal provides one-time funding for the installation of global positioning system (GPS) equipment on two pieces of heavy machinery used during the biosolids solar drying process at the

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

Performance Results:

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

Environmental Services Department

Core Service: Manage Wastewater

Budget Changes By Core Service (Cont'd.)

Proposed Core Service Changes Positions Treatment Plant Appropriations

7. Treatment Plant Diffuser Replacement

150,000

This proposal provides funding for the replacement of fine bubble diffusers within the Plant's aeration tanks, as recommended by the manufacturer's replacement schedule. In the wastewater treatment process, aeration introduces air into the liquid that is being treated to support the organisms that metabolize organic waste matter. Pumping air into the tanks uses a significant amount of energy. In order to cut down on energy consumption, the Water Pollution Control Plant converted half of its aeration tanks from coarse bubble aeration to fine bubble diffusers. The expected useful life of the diffusers is three years. These funds would allow ESD to replace five of the Plant's 15 fine bubble diffusers each year on an ongoing basis, at a cost of \$30,000 for the materials and installation of each diffuser. (Ongoing costs: \$150,000)

Performance Results:

Cost This proposal would reduce the "Cost Per Million Gallons Treated" performance measure by reducing total energy costs.

8. Wastewater Treatment Laboratory Staffing

1.00

117,363

This proposal would fund 1.0 Microbiologist position to address the increased demands for laboratory analyses in the wastewater and watershed programs. The workload at the laboratory serving the Water Pollution Control Plant has steadily risen from approximately 53,000 analyses in 2006 to 60,000 in 2008. This increased workload is largely driven by collaborative efforts between Plant Engineers and laboratory staff, aimed at troubleshooting and optimizing treatment processes. In addition to this, recent expansion of surveillance and enforcement activities by the Watershed Protection Inspection staff has significantly increased the workload of the laboratory. (Ongoing costs: \$126,535)

Performance Results:

Cycle Time This proposal would improve the timeliness of laboratory tests that support expanded surveillance and enforcement activities.

9. Plant Master Plan Support

103,037

This proposal provides one-time temporary staffing support for community outreach efforts for the Plant Master Plan. Changes to the Water Pollution Control Plant's land use, as well as possible rate implications of major infrastructure changes that are part of the Plant Master Plan, require the support of the neighboring communities, and the public at large. This funding would support outreach to neighboring communities, especially with regard to public safety and the Plant's environmental functions; public education about the importance of a healthy watershed; and the Plant Tour Program, which is seen as a crucial outreach and education tool. The funding may also be used to support outreach to stakeholder groups such as environmental organizations, business groups, and developers. (Ongoing costs: \$0)

Environmental Services Department

Budget Changes By Core Service (Cont'd.)

| | | Treatment Plant |
|-------------------------------|-----------|-----------------|
| Proposed Core Service Changes | Positions | Appropriations |
| | | |

10. Vehicle Maintenance Staffing

(25,237)

This proposal generates city-wide vehicle maintenance and operations cost savings totaling \$373,687 (\$312,687 in the General Fund), resulting from the elimination of 3.5 positions (0.50 Assistant to the Director, 1.0 Mechanic, 1.0 Senior Office Specialist, and 1.0 Equipment Maintenance Supervisor) in the General Services Department. The cost savings in the Environmental Services Department's Treatment Plant Operating Fund is \$25,237. The elimination of these positions will reduce administrative and management oversight, as well as preventative maintenance activities performed by the Fleet and Equipment Services Division. Every effort would be made to minimize service level impacts, and priority would be given to the public safety fleet. (Ongoing savings: \$25,237)

Performance Results:

Quality, Customer Service This proposal would reduce the percentage of vehicles that are available for use by Departments when needed. Customer satisfaction with the timeliness of work order completion may also decrease. It should be noted that public safety fleet will be given priority.

| 2009-2010 Proposed Core Service Changes Total | 1.00 | 2,652,663 |
|---|------|-----------|
| | | |

Environmental Services Department
Core Service: Manage Recycled Water

Core Service Purpose

| evelop, operate, and maintain a recycle provides a reliable and high quality alter | ed water system that reduces effluent to the Bay and ernative water supply. |
|--|--|
| Key Operational Services: | |
| ☐ System Operations and Maintenance ☐ Regulatory Compliance ☐ Customer Connection Services | Education and MarketingSystem Expansion and Development |

Performance and Resource Overview

he City's investment in South Bay Water Recycling (SBWR) supports the City's economic development goals by keeping the San José/Santa Clara Water Pollution Control Plant's discharges to South San Francisco Bay below the discharge flow trigger of 120 million gallons per day (mgd) set by the Regional Water Quality Control Board. By further developing recycled water use by businesses and institutions in San José and its tributary partners, the City helps protect endangered species habitat in the South Bay and provides an alternate supply of high-quality water for a variety of uses, thereby preserving our limited drinking water supplies. South Bay Water Recycling strives to achieve the City's Green Vision, which calls for 100% beneficial reuse of water, and also supports the Santa Clara Valley Water District's recent call for a mandatory 15% reduction in drinking water use.

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

Environmental Services Department

Core Service: Manage Recycled Water

Performance and Resource Overview (Cont'd.)

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

| | Manage Recycled Water Performance Summary | 2007-2008 Actual | 2008-2009 Target | 2008-2009 Estimated | 2009-2010 Target |
|----------|---|---------------------|---------------------|------------------------|---------------------|
| © | Millions of gallons per day diverted from flow to the Bay for beneficial purposes during the dry weather period* | 14.4 | 16 | 14.7 | 15 |
| 6 | Millions of gallons of recycled water delivered annually | 3,384 | 3,500 | 3,400 | 3,450 |
| © | % of time recycled water quality standards are met or surpassed | 100% | 100% | 100% | 100% |
| © | % of wastewater influent recycled for beneficial purposes during the dry weather period* | 13% | 14% | 14% | 15% |
| 8 | Cost per million gallons of recycled water delivered | \$952 | \$1,100 | \$1,100 | \$1,075 |
| R | % of recycled water customers rating service as good or excellent, based on reliability, water quality, and responsiveness | 81%** | 75%** | 81%** | 85%** |

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

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

| Activity & Workload Highlights | 2007-2008 | 2008-2009 | 2008-2009 | 2009-2010 |
|---|-----------|-----------|-----------|-----------|
| | Actual | Forecast | Estimated | Forecast |
| Total number of South Bay Water Recycling customers | 556 | 600 | 600 | 630 |

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

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

Environmental Services Department

Core Service: Manage Recycled Water

Performance and Resource Overview (Cont'd.)

| Manage Recycled Water Resource Summary | 2 | 007-2008 Actual 1 | _ | 008-2009 Adopted 2 | _ | 009-2010 Forecast 3 | 2009-2010 Proposed 4 | % Change (2 to 4) |
|---|----|-------------------------|----|--------------------------|----|---------------------------|----------------------------|-------------------------|
| Core Service Budget * | | | | | | | | |
| Personal Services | \$ | 1,825,826 | \$ | 2,068,546 | \$ | 2,075,733 | \$ 2,178,721 | 5.3% |
| Non-Personal/Equipment | | 987,078 | | 2,014,611 | | 1,792,790 | 2,065,132 | 2.5% |
| Total | \$ | 2,812,904 | \$ | 4,083,157 | \$ | 3,868,523 | \$ 4,243,853 | 3.9% |
| Authorized Positions | | 16.63 | | 16.70 | | 16.59 | 17.59 | 5.3% |

Budget Changes By Core Service

| Proposed Core Service Changes | Positions | Treatment Plant Appropriations |
|-------------------------------|-----------|--------------------------------|
| • | | |

1. Recycled Water Salinity Management

250,000

This proposal provides one-time funding for a consultant to perform a salinity characterization assessment of the San José/Santa Clara Water Pollution Control Plant tributary areas and implement the most cost-effective strategies to control salinity. Without proper controls, the concentration of salt in recycled water distributed by South Bay Water Recycling (SBWR) could increase to a point that it becomes less suitable for landscape and industrial agricultural irrigation, as well as industrial use. Industrial processes and residential and commercial water softening all add dissolved solids to recycled water, as do water conservation measures implemented to mitigate the effect of the recent drought. Managing salinity levels in recycled water is necessary to ensure the water distributed by SBWR remains acceptable for all its intended uses. Because ESD lacks expertise in salinity management, these funds would allow the Department to utilize the services of a consultant for this purpose. (Ongoing costs: \$0)

Performance Results:

Quality This proposal would ensure that the quality of recycled water remains acceptable for all its intended uses. The availability of a reliable supply of high quality recycled water provides an alternative to the increasingly limited potable water supply, supporting the City's Green Vision Goal #6.

2. Recycled Water Customer Expansion Program

1.00

125,330

This proposal provides ongoing funding for the addition of 1.0 Environmental Services Specialist position to support the goal of connecting approximately 200-300 new recycled water customers over the next five years. Connecting this many customers is expected to generate approximately \$1 million a year in additional revenue from the sale of recycled water to landscape and industrial customers. In order to increase South Bay Water Recycling revenues enough to cover operating costs and meet the Green Vision goal of "20 million gallons per day by 2022", anywhere from 20 large to 50 smaller customers must be added to the system each year. Experience has shown that

Environmental Services Department

Core Service: Manage Recycled Water

Performance and Resource Overview (Cont'd.)

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

Performance Results:

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

2009-2010 Proposed Core Service Changes Total

1.00

375,330

Environmental Services Department

Core Service: Protect Natural and Energy Resources

Core Service Purpose

| romote enhanced air quality, environ water and energy resources. | nmentally responsible land use, and conservation of |
|--|---|
| Key Operational Services: ☐ Protect and Monitor Groundwater Quality ☐ NPDES Permits Development | ☐ Habitat Protection☐ Water Conservation |
| Performance and | d 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, direct services are more limited and the focus is on practicing leadership through policy development, education, influence, finding supporting grants, and coordination.

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

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

Environmental Services Department

Core Service: Protect Natural and Energy Resources

Performance and Resource Overview (Cont'd.)

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

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

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

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

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

| Protect Natural and Energy Resources Resource Summary | 007-2008 Actual 1 | _ | 008-2009 Adopted 2 | _ | 009-2010 Forecast 3 | _ | 009-2010 Proposed 4 | % Change (2 to 4) |
|---|-----------------------------|----|--------------------------|----|---------------------------|----|---------------------------|-------------------------|
| Core Service Budget * | | | | | | | | |
| Personal Services Non-Personal/Equipment | \$ 239,762 535,645 | \$ | 224,691 1,682,287 | \$ | 196,844 942,817 | \$ | 196,844 942,817 | (12.4%) (44.0%) |
| Total | \$ 775,407 | \$ | 1,906,978 | \$ | 1,139,661 | \$ | 1,139,661 | (40.2%) |
| Authorized Positions | 1.25 | | 1.63 | | 1.22 | | 1.22 | (25.2%) |

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

Environmental Services Department

Core Service: Protect Natural and Energy Resources

Budget Changes By Core Service

| Proposed Core Service Changes | Positions | Treatment Plant Appropriations |
|---|-----------|-----------------------------------|
| None | | |
| 2009-2010 Proposed Core Service Changes Total | 0 | 0 |

Environmental Services Department
Strategic Support

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

Key Operational Services:

| □ Public Education | Employee Services |
|-----------------------------------|------------------------|
| □ Long Range Planning | Facility Management |
| ☐ Financial Management | ☐ Clerical Support |
| ☐ Information Technology Services | ☐ 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.

Costs for these programs are allocated to the Treatment Plant Operating Fund based on a measure of the units of service provided. The following table shows the percentage of support program resources allocated to the Treatment Plant Operating Fund for FY 2008-2009 and FY 2009-2010.

Allocated Support from the Treatment Plant Operating Fund

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

¹ Previously the Policy and Planning Group

² Previously included within the Support Services Group

Environmental Services Department

Strategic Support

Performance and Resource Overview (Cont'd.)

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

Strategic Support Budget Changes

| Proposed Changes | Positions | Treatment Plant Appropriations | |
|---|-----------|-----------------------------------|--|
| Technical Services Staffing Adjustments | .45 | 54,055 | |

This proposal eliminates one vacant Information Systems Analyst position and adds two Systems Applications Programmers. ESD manages and maintains approximately 20 databases that are critical to potable water delivery, sewage treatment, garbage hauler communication, and meeting regulatory reporting requirements. The Information Systems Analyst position, which became vacant in November 2008, had developed and initiated some of the more complex databases over the past several years. More recently, the Information Systems group has had less demand for complex database development, but has been facing an increasing backlog of routine maintenance issues. This has led the Department to reevaluate its staffing requirements. Two Systems Applications Programmers would now meet the group's needs better than the higher-level Information Systems Analyst position. (Ongoing costs: \$51,824)

Performance Results:

Cost, Cycle Time Proper preventative maintenance of the systems by ESD staff would minimize the use of outside consulting services, which typically cost more. Staff would also be better able to respond to critical requests in a timely manner.

|--|

COUNCIL AGENDA: 5-5-09

ITEM: 2.3a & 2.3b



Memorandum

TO: HONORABLE MAYOR

AND CITY COUNCIL

FROM: Richard Doyle

City Attorney

SUBJECT: Ordinances Related to Dental

Amalgam and Grease

Discharges to Sanitary Sewer

System

DATE: April 23, 2009

RECOMMENDATION

- (a) Approve an ordinance amending Chapter 15.14 of Title 15 of the San José Municipal Code to limit the discharge of dental amalgam into the sanitary sewer system and to require the installation of dental amalgam separators in certain dental offices.
- (b) Approve an ordinance amending Chapter 15.14 of Title 15 of the San José Municipal Code to revise provisions related to the discharge of grease into the sanitary sewer system, to establish requirements for food service establishments related to installation or upgrade of grease control devices, and to establish maintenance and recordkeeping requirements for grease control devices.

OUTCOME, BACKGROUND AND ANALYSIS

On February 24, 2009, the City Council directed the City Attorney's Office to draft the above ordinances to: limit the discharge of dental amalgam into the sanitary sewer system and to require the installation of dental amalgam separators in certain dental offices; and to revise provisions related to the discharge of grease into the sanitary sewer system and establish requirements related to grease control devices. A copy of the staff recommendation concerning the proposed ordinances is attached.

PUBLIC OUTREACH/INTEREST

This memorandum and both ordinances are posted on the City's website for the May 5, 2009 Council Agenda.

HONORABLE MAYOR AND CITY COUNCIL

April 23, 2009

Subject: Sanitary Sewer System Ordinances

Page 2

CEQA

Dental Amalgam Ordinance: Exempt, File No. PP09-084
Discharge of Grease Ordinance: Exempt, File No. PP09-094

RICHARD DOYLE
City Attorney

Mollie Dent

Sr. Deputy City Attorney

cc: Debra Figone

For legal questions regarding this matter, please contact Mollie Dent at 408-535-1905; for questions regarding the dental program, please contact Sharon Newton, Supervising Environmental Services Specialist, at 408-277-5695; for questions regarding the grease control program, please contact John Mukhar, Senior Engineer, at 408-277-5696





Memorandum

TO: HONORABLE MAYOR AND

CITY COUNCIL

FROM: Lee Price, MMC

City Clerk

SUBJECT: SEE BELOW

DATE: 02-24-09

SUBJECT: ORDINANCE REVISIONS FOR DENTAL MERCURY AND FATS, OILS

AND GREASE PROGRAMS.

RECOMMENDATION

As referred by the Transportation and Environment Committee of February 2, 2009, and outlined in the attached memo previously submitted to the Transportation and Environment Committee, accept the following recommendations:

- (a) Approve proposed Dental Amalgam program and direct the City Attorney to draft an ordinance amending Chapter 15.14 of the San José Municipal Code to regulate dental practices under a Dental Wastewater Permit and require the installation of amalgam separators and implementation of Best Management Practices.
- (b) Direct the City Attorney to draft an ordinance amending Chapter 15.14 of the San José Municipal Code to implement the enhanced Fats, Oils and Grease Control Program.



T&E AGENDA: 02-02-09 ITEM: 6.



Memorandum

TO: TRANSPORTATION AND ENVIRONMENT COMMITTEE

SUBJECT: DENTAL AMALGAM PROGRAM

FROM: John Stufflebean

ENVIRONMENT COMMITTEE

DATE: 12-15-08

Approved

Obsistence & Shippey

Date 12-22-08

RECOMMENDATION

Accept this report and recommend that Council:

1. Approve the proposed Dental Amalgam Program; and

2. Direct the City Attorney's Office to draft an ordinance amending Chapter 15.14 of the San José Municipal Code to regulate dental practices under a Dental Wastewater Permit and require the installation of amalgam separators and implementation of Best Management Practices.

OUTCOME

The City Attorney's Office will return with an ordinance amending Municipal Code Chapter 15.14 requiring dental practices to obtain a Wastewater Discharge Permit and to control mercury amalgam discharges to the sanitary sewer system. The approved dental amalgam program will reduce mercury in wastewater discharged from dental offices and further reduce mercury in the effluent discharged to the Bay from the San Jose/Santa Clara Water Pollution Control Plant (Plant), as well as mercury in the Plant's biosolids.

BACKGROUND

The California Regional Water Quality Control Board (Regional Board) released Order No. R2-2007-007 — Waste Discharge Requirements for Municipal and Industrial Wastewater Discharges of Mercury to San Francisco Bay — for the purpose of implementing the San Francisco Bay Mercury Total Maximum Daily Load (TMDL) wasteload allocations. The Order stipulates implementation of a mercury reduction program by all Municipal and Industrial Wastewater Dischargers to San Francisco Bay and establishes a target to achieve an 85% participation rate among applicable dental offices within 5 years of the effective date of the Order. The requirement became effective February 2008 and will be included in the upcoming renewal of the Plant's National Pollutant Discharge Elimination System (NPDES) Permit.

Sources of mercury amalgam in dental wastewater include the placement of and removal of amalgam fillings (restorations). Of the dental amalgam constituents, mercury is of greatest concern to human

TRANSPORTATION AND ENVIRONMENT COMMITTEE December 15, 2008

Subject: Dental Amalgam Program

Page 2

health because it is a persistent bioaccumulative toxic chemical. The major route for human exposure to mercury in wastewater discharges is through the consumption of mercury-contaminated fish. Fish advisories have been issued for the San Francisco Bay and a study conducted by the San Francisco Estuary Institute found several types of fish to have levels of mercury that is of concern.

Agencies administering wastewater pretreatment programs at several Publically Owned Treatment Works (POTWs) in the Bay Area have implemented dental amalgam reduction programs similar to the program proposed by staff. These agencies include the San Francisco Public Utilities Commission, East Bay Municipal Utilities District, Regional Water Quality Control Plant in Palo Alto, Union Sanitary District, and the Central Contra Costa Sanitary District. Results from these programs show reductions of mercury in their influent and sizeable reductions of amalgam particulates in their sludge.

<u>ANALYSIS</u>

Although the amount of mercury used by dentists has decreased significantly during the past ten years, there is still a substantial legacy of amalgam fillings that will remain in the environment for the next several decades. The Environmental Protection Agency (EPA) report "Health Services Industry Detailed Study – Dental Amalgam, August 2008" states that while mercury used in dental offices accounts for only a small percentage of the total mercury discharged to air and waste each year, mercury in the form of dental amalgam is among the largest sources of mercury found in wastewater influent reaching POTWs. From late 2006 into early 2007, the Environmental Services Department collected wastewater samples as part of a sector loading study at residential, commercial, dental, and industrial dischargers. Samples were tested for total mercury and findings concluded that 61% of the mercury found was discharged from dental offices located in the Plant's tributary area.

The Plant is very effective at treating and removing pollutants from wastewater. It removes 99% of mercury from the wastewater before discharge to the Bay. However, virtually all the amalgam particulate received by the Plant in wastewater ends up in the biosolids. Studies have demonstrated that amalgam separator technology can remove 95% or more of the mercury amalgam particulates in dental process wastewater. Requiring amalgam separators at dental offices will further reduce the presence of mercury in the Plant's effluent and biosolids.

To meet the requirements of the Regional Board's Order, staff proposes that dental practices located within the Plant's treatment area be regulated under a five-year Dental Wastewater Discharge Permit. The Permit effective date for practices located within the City of San José is estimated to be September 2009 and April 2010 for those located within the other tributary cities. The proposed Dental Permit would have two primary requirements:

- 1. Equipment
 - Install an amalgam separator device by December 31, 2010.
- 2. Best Management Practices (BMPs)
 - Implement BMPs for Dentists, as suggested by the American Dental Association, within 90 days of the effective date of their permit.

TRANSPORTATION AND ENVIRONMENT COMMITTEE

December 15, 2008

Subject: Dental Amalgam Program

Page 3

An exemption would be established for practices that place or remove dental amalgam fillings three days or fewer in a calendar year and specialties that do not remove or place amalgam fillings such as orthodontics, periodontics, and oral and maxillofacial surgery. There are approximately 1,500 licensed dentists in the Plant's service area with an estimated 500 dental practices. Through the permitting application process, staff will determine the actual number of dental practices that will be required to obtain a dental wastewater discharge permit.

Pending adoption of the proposed ordinance, staff would send a permit application packet to dental practices, beginning with those located in San José in July 2009. Packets would be sent to the balance of the practices in the Plant's tributary cities in January 2010. The following is the proposed permit application timeline:

| Application packet sent to San José dentists | 7/1/09 |
|--|---------|
| San José Dental Permits Issued | 9/1/09 |
| BMPs certification due | 12/1/09 |
| Proof of installation for San José practices | 3/1/10 |
| Application packet sent to Tributary Area dentists | 1/1/10 |
| Tributary Area Dental Permits Issued | 4/1/10 |
| BMPs certification due | 7/1/10 |
| Proof of installation due | 10/1/10 |

City of San José Environmental Inspectors would inspect permitted dental practices no less than once during the five-year permit term. Scheduled inspections would be conducted to verify that a certified amalgam separator is installed correctly, proper maintenance and record keeping is occurring, and that BMPs are implemented.

An Enforcement Response Plan that outlines the procedures to be followed by the Dental Program inspection staff to identify, document, and respond to all program violations would be developed. Incorporated into the enforcement plan would be specific criteria by which staff can determine the enforcement action most appropriate to the nature of the violation. Enforcement actions would include verbal warnings, warning notices, notices of violation, administrative citations, and compliance meetings. Oversight of any enforcement action will be conducted by the supervisory staff.

Staff estimates that implementation of the required inspections will require one FTE, which will be managed within existing staffing in the Environmental Services Department. Additionally, staff is exploring whether the required inspections can be integrated into work already done by the City of San José Fire Safety group or the Santa Clara County Department of Environmental Health (SCCDEH). While it is possible that coordinating these inspections with an existing inspection program could be considered a more efficient approach for the City and the dental practices, constraints on how those entities operate may actually increase costs and limit the City's ability to manage program activities.

Estimated costs to dental offices include \$750-\$1,000 for the initial purchase and installation of an amalgam separator, and \$300 annually for maintenance and disposal of the amalgam. These estimated costs are based on averages from similar dental programs implemented by jurisdictions located in the Bay Area.

TRANSPORTATION AND ENVIRONMENT COMMITTEE December 15, 2008

Subject: Dental Amalgam Program

Page 4

EVALUATION AND FOLLOW-UP

The Attorney's Office will return to Council in April 2009 with a draft ordinance amending Chap.15.14 of the Municipal Code. Staff will work concurrently with Treatment Plant Advisory Committee (TPAC) and tributary agencies on amendments to their ordinance and operational codes. Once the City approves the pretreatment program changes, existing inter-agency agreements require that they must also be adopted by all agencies discharging to the Plant. Results and progress will also be reported annually to the Regional Water Board as part of the Pollution Prevention Annual Report.

POLICY ALTERNATIVES

Alternative #1: Augment the recommendation by providing a financial incentive in the form of rebates to the first 100 dental practices to complete installation of an amalgam separator in San José; provide financial incentives in the form of rebates to first 100 dental practices to complete installation of amalgam separator in other tributary cities. This suggestion was offered by the Santa Clara Valley Dental Society to assist dentists with the financial burdens of meeting the new requirements.

Pros: Helps alleviate the costs to the dentists for the purchase and installation of an amalgam separator. Provides an incentive to comply with the permit requirements early.

Con: Extra cost to the City. No financial incentives for those practices that installed an amalgam separator prior to the program.

Reason for not recommending: In addition to the cost for the rebates themselves, the City would incur additional administrative costs to manage the rebates. The City and County of San Francisco has been the only jurisdiction in California to offer financial incentives for early adopters to their program. They gave \$200 to the first 100 dental practices to install separators as "early adopters" and \$400 to about 15 dental practices that provide free dental services to low-income populations as part of community service. Funding for the rebates came from a \$20,000 Source Reduction Grant from EPA Region 9 and from their operating budget.

PUBLIC OUTREACH/INTEREST

Staff has used direct correspondence and coordination through the Santa Clara County Dental Society to outreach to local dental practices. On August 29, 2008, staff conducted a general stakeholder workshop at City Hall attended by more than 50 dentists. This workshop was promoted via direct mail to all area dentists and through the Dental Society. Additional coordination with the Dental Society included two meetings with their Board of Directors to discuss the proposed program requirements and active participation in two general membership dinner meetings in September and October 2008.

Response from the dental community has been generally supportive. They are aware of the concerns of mercury in the environment and understand the regulatory issues driving the need to implement a dental amalgam program. However, they expressed concern about the costs the program is asking them to bear for the purchase, installation and maintenance of the separator units. They have asked that the City explore the feasibility of rebates to help offset these costs.

TRANSPORTATION AND ENVIRONMENT COMMITTEE December 15, 2008

Subject: Dental Amalgam Program

Page 5

A minimum of two workshops with vendor fairs are planned for Spring 2009. These workshops would include a review of the program requirements, training on the permit process, and guidance on the purchase and maintenance of an appropriate amalgam separator. Amalgam separator manufacturers and distributors would be invited to display their products as part of a vendor fair at the workshops.

| | Criteria 1: Requires Council action on the use of public funds equal to \$1 million or greater. (Required: Website Posting) |
|-------------------------|---|
| $\overline{\mathbf{V}}$ | Criteria 2: Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. (Required: E-mail and Website Posting) |
| | Criteria 3: Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. (Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers) |

This recommendation meets Criteria #2: This memorandum will be posted on the City's website for the January 2009 Transportation and Environment Committee Agenda.

COORDINATION

This memorandum has been coordinated with Mollie Dent, Senior Deputy City Attorney, City Attorney's Office and the City Manager's Budget Office.

FISCAL/POLICY ALIGNMENT

Not applicable

COST SUMMARY/IMPLICATIONS

Start-up of the program will continue until December 2010 and covers development and mailing of permit application packets, development of the database, processing of permits, and data entry. Nonpersonal start-up costs are estimated to not exceed \$50,000.

Ongoing program costs include inspections of dental practices, maintenance of the data base, enforcement, permitting new practices, and outreach.

Ongoing project costs and staffing for program operation are included within the existing staffing levels and base budget for the Pollution Prevention Program.

TRANSPORTATION AND ENVIRONMENT COMMITTEE December 15, 2008

Subject: Dental Amalgam Program

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BUDGET REFERENCE

| Fund # | Appn # | Appn. Name | RC # | Total Appn | Amt. for Recommendation | 2008-09 Proposed Operating Budget (Page) | Last Budget Action (Date, Ord. No.) |
|-----------|-----------|--------------------------|---------|---------------|----------------------------|--|---|
| Rema | ining Pr | oject Costs | | • | , | • | |
| 513 | 0762 | NP/Equip – Env. Svcs. | 700725 | \$32,009,421 | \$50,000 | VIII - 38 | 10/21/08, 28422 |
| Total | l Fundir | ig for Project | s | | , | | |

<u>CEQA</u>

Not a project.

JOHN STUFFLEBEAN
Director, Environmental Services

For questions please contact Elaine Marshall, Environmental Services Program Manager, at 408-277-5697.



Memorandum

TO: TRANSPORTATION AND ENVIRONMENT COMMITTEE

FROM John Stufflebean

SUBJECT: FATS, OILS, AND GREASE CONTROL PROGRAM ORDINANCE REVISIONS

DATE 12-19-08

Approved

arritine & Shippey

Date

12/22/08

RECOMMENDATION

Accept this report and recommend that it be placed on the Council Agenda for discussion, with the following recommendation:

• Direct the City Attorney's Office to draft an ordinance amending Chapter 15.14 of the San José Municipal Code to implement the enhanced FOG Control Program.

OUTCOME

The Municipal Code revisions will update the FOG Control Program and enable staff to more effectively administer the Program requirements. By making FOG requirements more explicit and enforceable, this recommendation will result in improved inspection efficiency and help to mitigate the impacts of grease on wastewater management, including reducing blockages in the sanitary sewer system, sanitary sewer overflows, collection system maintenance costs, and grease-related removal and disposal costs at the San Jose/Santa Clara Water Pollution Control Plant (Plant).

BACKGROUND

The US Environmental Protection Agency (EPA) has identified grease as a leading cause of blockages in sanitary sewer systems. These blockages can cause sanitary sewer overflows and endanger public health and pollute local rivers, creeks, and the South San Francisco Bay. The California State Water Resources Control Board released requirements for Sanitary Sewer Systems Water Quality Order No. 2006-0003, on May 2, 2006. This order requires collection systems to:

- 1. Develop and implement Sewer System Management Plans (SSMP), and
- 2. Report all sanitary sewer overflows to the State database.

TRANSPORTATION AND ENVIRONMENT COMMITTEE

December 19, 2008

Subject: Fats, Oils, and Grease Ordinance Revisions

Page 2

The City Council approved the current SSMP on August 26, 2008. The FOG Control Program is element #7 of the SSMP and includes building design and construction standards, facility inspections, sewer investigations, and outreach.

There are approximately 4,500 food service establishments (FSEs) in San Jose and the tributary area to the Plant which prepare and/or sell food for consumption either on or off the premises or wash utensils or dishes on premises that would contribute grease to the sewer system. These establishments include but are not limited to restaurants, sandwich shops, delicatessens, bakeries, pizzerias, cafeterias, markets, bed and breakfast inns, motels, hotels, meeting halls, caterers, retirement, and nursing homes.

The City began FSE inspections in San Jose approximately six years ago focusing on compliance with stormwater permit requirements. Two years ago, the program was enhanced to also emphasize indoor inspection in order to comply with the State's SSMP requirements and to minimize FOG impacts on the collection system. A new inspection unit was created to expand the stormwater inspections of FSEs to include inspections of grease traps, interceptors, and maintenance records. These inspections have been heavily focused on educating these facilities on how to minimize their impacts on the storm and sanitary sewers by using Best Managements Practices (BMPs). Facilities are inspected on a one- to three-year rotation based on issues identified at the facility. The program is currently being geographically expanded into the Plant's tributary area.

For the 2007 calendar year the City reported 189 sanitary sewer overflows to the State database. Of these 160 or 85% were caused by grease and the remainder by root intrusion. For the same year, the Plant removed and disposed of 639.5 tons of at a cost of \$24,978.

ANALYSIS

During development of the SSMP, staff evaluated the service area and inspection program performance and identified several opportunities to improve the program's effectiveness. U.S. EPA studies have shown that a strong FOG control program translates to less grease in the sewer system which results in lower maintenance costs and fewer sanitary system overflows. Specific opportunities for improvement identified include:

- 1. Codifying existing BMPs,
- 2. Clarifying and formalizing grease control requirements,
- 3. Additional outreach to FSEs, and
- 4. Additional focus on "hot spots" in the sanitary sewer system.

TRANSPORTATION AND ENVIRONMENT COMMITTEE

December 19, 2008

Subject: Fats, Oils, and Grease Ordinance Revisions

Page 3

This recommendation addresses items 1 and 2 listed above. Outreach and hot spots are being addressed through program implementation. Current Municipal Code provisions related to FOG control are set forth in Attachment 1. These requirements have not been updated in approximately 20 years. Staff is proposing updates to the Code to clarify program requirements and formalize existing best practices.

Compliance with the FOG control program has been achieved predominately through education and training of FSE personnel through the use of BMPs. For FY 2007-08, the City issued 903 verbal warnings issued and identified 1,414 site issues at the 1,344 facilities inspected. Staff experience in the field has shown that formalization of these BMP requirements in Municipal Code would further clarify program requirements for the businesses thereby improving overall program compliance. For example, staff is proposing that cleaning frequencies for grease control devices, based on the BMP, be specified in the Municipal Code.

Several of the proposed changes would improve inspection efficiency. It is common that a single facility be visited multiple times to complete the inspection. Of the 1,344 facilities inspected, approximately 1,100 facilities required two or less inspections while 240 facilities required three or more inspections for completion. Modifying the Code provision to specify that maintenance documents must be kept on site would reduce some instances of required follow-up inspections. A full list of the proposed enhanced FOG Control Program modifications and additional requirements for implementation of BMPs is shown in Attachment 2.

Enforcement for the FOG Program will continue to follow the model of the City's other Environmental Enforcement programs. Staff employs a tiered, progressive enforcement response, depending on the severity and persistence of a violation. Education is used as a first tool; businesses are provided educational materials, which are routinely available in multiple languages, and given an opportunity to comply.

EVALUATION AND FOLLOW-UP

The Attorney's Office will return to Council in April 2009 with a draft ordinance amending Chapter 15.14 of the Municipal Code. San José will work concurrently with Treatment Plant Advisory Committee (TPAC) and tributary agencies on amendments to their ordinance and operational codes. Once San José approves the pretreatment changes, existing inter-agency agreements require that they must also be adopted by all agencies discharging to the Plant.

PUBLIC OUTREACH/INTEREST

Staff has used direct correspondence and coordination through business organizations such as the California Restaurant Association (CRA) to outreach to local restaurants. On November 6, 2008, staff conducted a general stakeholder workshop at City Hall attended by approximately 70 stakeholder representatives. A CRA representative provided opening remarks. Outreach for this

TRANSPORTATION AND ENVIRONMENT COMMITTEE

December 19, 2008

Subject: Fats, Oils, and Grease Ordinance Revisions

Page 4

workshop was conducted via direct mail to approximately 4,500 facilities in the tributary area using the City's enforcement database. Workshop information was available in English, Spanish, and Vietnamese. Staff received minimal comments on the proposed ordinance changes, and provided clarifications to questions. The presentation, workshop questions, and answers were posted on the ESD web site.

| | Criteria 1: Requires Council action on the use of public funds equal to \$1 million or greater. |
|---|---|
| | (Required: Website Posting) |
| V | Criteria 2: Adoption of a new or revised policy that may have implications for public health, safety, quality of life, or financial/economic vitality of the City. (Required: E-mail and Website Posting) |
| | Criteria 3: Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach. (Required: E-mail, Website Posting, Community Meetings, Notice in appropriate newspapers) |

This recommendation meets Criteria #2: This memorandum will be posted on the City's website for the January 2009 Transportation and Environment Committee Agenda.

COORDINATION

This memorandum has been coordinated with the City Attorney's Office, the Redevelopment Agency, and the Office of Economic Development, and is scheduled to be considered at the January 8, 2009 meeting of the Treatment Plant Advisory Committee.

CEQA

Not a project.

OHN STUFFLEBEAN

Director, Environmental Services

For questions please contact John Mukhar, Environmental Services Program Manager, at 408-277-5696.

Attachments 1, 2

Attachment 1 Current Municipal Code Provisions Related to FOG Control

| Municipal Code Section | Summary |
|---------------------------|---|
| 15.14.305 | Defines dispersed and floatable grease. |
| 15.14. 535 | Requires property owners to take measures to prevent accidental discharges, reduce objectionable characteristics, contents or rate of discharge into the sanitary sewer system to prevent damage or interference with the system. |
| 15,14.540 | Allows ESD Director to require any user to install wastewater monitoring facilities. |
| 15.14.550 | Prohibits the direct or indirect discharge into the sanitary sewer system of substances that tend to obstruct or injure the sewer system or interfere with its proper operation and maintenance. |
| 15.14.565 | Prohibits the discharge of liquid or waste containing fats, oil or grease in excess of 150 parts per million by weight. |
| 15.16.625 | Requires food waste from homes, restaurants and eating establishments to be processed through a grinder or garbage disposal before discharge into sewer system. |
| 15.14.630 | Establishes requirements for grease removal devices at businesses or establishments where grease may be discharged into sewer, including maintenance requirements and record keeping. |

Attachment 2 Summary of Proposed Modification of Existing Code Provisions and New Requirements on FSEs for implementation of BMPs

| Application of | Summary of Proposed Changes |
|-------------------------|---|
| Requirement | |
| Food Service Facilities | Required to pump out, clean and maintain the interceptor on at least a |
| with an interceptor | quarterly basis, and any time more than 25% of the interceptor's functional |
| | capacity is taken up by solids and grease |
| Food Service Facilities | Required to pump out, clean and maintain the trap on a monthly basis |
| with a grease trap | |
| All Food Service | Required to collect yellow grease for recycling and prohibit the discharge of |
| Facilities | yellow grease to the sewer system |
| All Food Service | Required to keep pumping and maintenance records on site for a three year |
| Facilities | period |
| All Food Service | Required to install or upgrade a grease removal device where FOG has caused |
| Facilities | or contributed to a sanitary sewer overflow, or a 25% or greater loss of sewer |
| | line capacity, in a line downstream of the facility, |
| All Food Service | Allowed to apply for and obtain alternative schedule for pumping and |
| Facilities | cleaning interceptors and grease traps upon showing, that an alternative |
| <u> </u> | schedule can maintain at least 75% the interceptor or trap functional capacity, |
| | based on the FSE's historic, current and planned operations. |
| All Food Service | All food grinders shall be removed from an existing FSE upon: (i) operational |
| Facilities | change to FSE resulting in a required plan check process; or (ii) any |
| | remodeling or construction valued at \$500 or more. |
| Property owner with a | Will be required to operate and maintain this interceptor. |
| shared interceptor by | |
| multiple food service | |
| establishments | |

ORDINANCE NO.

AN ORDINANCE OF THE CITY OF SAN JOSE AMENDING CHAPTER 15.14 OF TITLE 15 OF THE SAN JOSE MUNICIPAL CODE TO LIMIT THE DISCHARGE OF DENTAL AMALGAM INTO THE SANITARY SEWER SYSTEM AND TO REQUIRE THE INSTALLATION OF DENTAL AMALGAM SEPARATORS IN CERTAIN DENTAL OFFICES

WHEREAS, on April 15, 2009 this Ordinance was found to be categorically exempt from environmental review per the provisions of Section 15061(b)(3) of the California Environmental Quality Act of 1970, as amended, under File No. PP09-084;

NOW, **THEREFORE**, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF SAN JOSE:

<u>SECTION 1.</u> Chapter 15.14 of Title 15 of the San José Municipal Code is amended by adding a Section to be numbered, entitled, and to read as follows:

15.14.207 Amalgam Separator

"Amalgam Separator" means a device that: employs filtration, settlement, centrifugation, or ion exchange to remove Dental Amalgam and its metal constituents from a dental office vacuum system before it discharges to the sanitary sewer; has been certified under the International Organization for Standardization's standard for amalgam separators as capable of removing a minimum of ninety-five percent (95%) of Dental Amalgam at flow rates comparable to the flow rate of the actual vacuum suction system in operation; and does not have any automatic flow bypass.

RD:MD1:MD1 4/21/09

SECTION 2. Chapter 15.14 of Title 15 of the San José Municipal Code is amended by

adding a Section to be numbered, entitled, and to read as follows:

15.14.209 Amalgam Waste

"Amalgam Waste" means and includes non-contact Dental Amalgam (Dental Amalgam

scrap that has not been in contact with the patient); contact Dental Amalgam (including,

but not limited to, extracted teeth containing amalgam); Dental Amalgam sludge

captured by chairside traps, vacuum pump filters, screens, and other Dental Amalgam

trapping devices; and used, leaking or unusable capsules containing Dental Amalgam.

SECTION 3. Chapter 15.14 of Title 15 of the San José Municipal Code is amended by

adding a Section to be numbered, entitled, and to read as follows:

15.14.267 Dental Amalgam

"Dental Amalgam" means an alloy of mercury with another metal, used by dentists to fill

cavities in teeth.

SECTION 4. Chapter 15.14 of Title 15 of the San José Municipal Code is amended by

adding a Section to be numbered, entitled, and to read as follows:

15.14.269 Fixer Solution

"Fixer Solution" means a solution containing silver used in the photographic processing

of dental x-rays, x-rays and photographs.

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Council Agenda: 5-5-0 tem No.: 2.3a

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RD:MD1:MD1 4/21/09

SECTION 5. Chapter 15.14 of Title 15 of the San José Municipal Code is amended by

adding a Section to be numbered, entitled, and to read as follows:

15.14.640 Fixer Solution Prohibition

No person shall discharge, cause, allow, or permit Fixer Solution to be discharged into

the sanitary sewer system without prior pretreatment to meet all applicable limits.

SECTION 6. Chapter 15.14 of Title 15 of the San José Municipal Code is amended by

adding a Section to be numbered, entitled, and to read as follows:

15.14. 645 Installation and Maintenance of Amalgam Separators

Α. Except as provided in subsections B. and C. below, no person shall discharge.

cause, allow or permit any discharge to the sanitary sewer system from a dental

vacuum system, unless such discharge has first been processed through an

Amalgam Separator.

B. For each dental vacuum system installed prior to July 1, 2009, an Amalgam

Separator shall be installed on or before December 31, 2010. No dental vacuum

system shall be installed on or after July 1, 2009 without an Amalgam Separator.

Proof of certification and installation records shall be submitted to the Director

within thirty (30) days of installation.

C. A dental vacuum system may be operated without an Amalgam Separator

provided that the system is not used in connection with the removal or placement

of fillings that contain Dental Amalgam more than three (3) days per calendar

year and the system is used exclusively by the following types of dental

practices: (1) Orthodontics; (2) Periodontics; (3) Oral and maxillofacial surgery;

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- (4) Radiology; (5) Oral pathology or oral medicine; (6) Endodontistry and prosthodontistry.
- D. Amalgam Separators shall be maintained in accordance with manufacturer recommendations. Installation, certification, and maintenance records shall be maintained for minimum of five (5) years and available for immediate inspection upon request therefore by the Director or designee during normal business hours.

| following vote: | of title this | day of | , 20 | 09, by the |
|------------------------------|---------------|------------|----------------|------------|
| AYES: | .* | | | |
| NOES: | • | | | |
| ABSENT: | | | | |
| DISQUALIFIED: | | | • | |
| ATTEST: | | CHI May | JCK REED or | |
| LEE PRICE, MMC City Clerk | | | | |

DRAFT

ORDINANCE NO.

AN ORDINANCE OF THE CITY OF SAN JOSE AMENDING CHAPTER 15.14 OF TITLE 15 OF THE SAN JOSE MUNICIPAL CODE TO REVISE PROVISIONS RELATED TO THE DISCHARGE OF GREASE INTO THE SANITARY SEWER SYSTEM. TO ESTABLISH REQUIREMENTS FOR **ESTABLISHMENTS** FOOD SERVICE RELATED INSTALLATION OR UPGRADE OF GREASE CONTROL DEVICES AND TO ESTABLISH MAINTENANCE AND REQUIREMENTS FOR GREASE RECORD KEEPING **CONTROL DEVICES**

WHEREAS, on April 21, 2009 this Ordinance was found to be categorically exempt from environmental review per the provisions of Section 15061(b)(3) of the California Environmental Quality Act of 1970, as amended, under File No. PP09-091:

NOW THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF SAN JOSE:

SECTION 1. Chapter 15.14 of Title 15 of the San José Municipal Code is amended by adding a Section to be numbered, entitled, and to read as follows:

15.14.292 Food Service Establishment

"Food Service Establishment" means a user that prepares and/or sells food for consumption either on or off the premises or washes utensils or dishes on premises that may contribute Grease to the sewer system, including, but not limited to, restaurants, sandwich shops, delicatessens, bakeries, cafeterias, markets, bed and breakfast inns, motels, hotels, meeting halls, caterers, retirement and nursing homes or pizzerias. The term, as used in this Chapter, does not refer to food stores or establishments that do not prepare food on premises and do not process food in a manner which may contribute

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Grease to the sewer system. A Food Service Establishment shall be deemed to be contributing Grease to the sanitary sewer system where a Sanitary Sewer Overflow has occurred due to Grease, or there has been a loss of twenty five percent (25%) or more of sewer line capacity due to Grease, downstream of the Food Service Establishment.

<u>SECTION 2.</u> Section 15.14.305 of Chapter 15.14 of Title 15 of the San José Municipal Code is amended to read as follows:

15.14.305 Grease

"Grease" means n-hexane soluble matter, and shall include each of the following two types:

A. Dispersed grease, which means grease that is not floatable grease.

B. Floatable grease, which means grease that floats on the surface of quiescent sewage water or other liquid or which floats when mixed or added to water.

Iiquid or other waste containing floatable and /or dispersed grease, vegetable oil, petroleum oil, non-biodegradable cutting oil, or fat, oil or grease products of animal, vegetable or mineral origin which is detectable and measurable using analytical test procedures established in the United States Code of Federal Regulations, 40 CFR 136.

<u>SECTION 3.</u> Chapter 15.14 of Title 15 of the San José Municipal Code is amended by adding a Section to be numbered, entitled, and to read as follows:

15.14.306 Grease Control Device

"Grease Control Device" means a Grease Interceptor, Grease Trap, Mechanical Grease

Removal Device or other device approved for use by the Director.

<u>SECTION 4.</u> Chapter 15.14 of Title 15 of the San José Municipal Code is amended by

adding a Section to be numbered, entitled, and to read as follows:

15.14.307 Grease Interceptor

"Grease Interceptor" means a large tank installed underground and designed to collect

and control solid-food wastes and floating-grease from wastewater prior to discharge into

the sanitary sewer collection system. Grease interceptors are normally installed outside

the building & use gravity to separate Grease from the wastewater as it moves from one

compartment of the interceptor to the next.

SECTION 5. Chapter 15.14 of Title 15 of the San José Municipal Code is amended by

adding a Section to be numbered, entitled, and to read as follows:

15.14.308 Grease Trap

"Grease Trap" means a device placed under or in close proximity to sinks or other fixtures

likely to discharge grease in an attempt to separate, trap and hold oil and grease

substances

SECTION 6. Chapter 15.14 of Title 15 of the San José Municipal Code is amended by

adding a Section to be numbered, entitled, and to read as follows:

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Item No.: 2.3b

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3

document.

15.14.332 Mechanical Grease Removal Device

"Mechanical Grease Removal Device" means a power operated device or combination of

devices using electrical equipment to heat, filter, siphon, skim or otherwise separate and

retain floating grease and solid food waste prior to the wastewater exiting the trap and

entering the sanitary sewer collection system.

SECTION 7. Chapter 15.14 of Title 15 of the San José Municipal Code is amended by

adding a Section to be numbered, entitled, and to read as follows:

15.14.394 Sanitary Sewer Overflow

"Sanitary Sewer Overflow" is any overflow, spill, release, discharge or diversion of

untreated or partially treated wastewater from a sanitary sewer system, including overflows

or releases that reach waters of the United States, overflows or releases that do not reach

water of the United States, and backups into buildings and/or private property caused by

conditions within the publicly owned portion of the sewer system.

SECTION 8. Chapter 15.14 of Title 15 of the San José Municipal Code is amended by

adding a Section to be numbered, entitled, and to read as follows:

15.14.457 <u>Yellow Grease</u>

"Yellow Grease" means Grease which is associated with food preparation or processing,

which has not been contaminated with wash water or chemicals, or by being spilled or

otherwise fouled.

SECTION 9. Section 15.14.565 of Chapter 15.14 of Title 15 of the San José Municipal

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Code is amended to be entitled and to read as follows:

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document.

15.14.565 Grease, oils and fats

- A. No person shall discharge, cause, allow, or permit to be discharged into the sanitary sewer system any liquid or other waste containing floatable and/or dispersed Ggrease, vegetable oil, petroleum oil, nonbiodegradable cutting oil, or fat, oil, or grease or products of animal, vegetable or mineral origin, in excess of one hundred fifty (150) parts per million by weight.
- B. No person shall discharge, cause, allow, or permit any Grease discharge from a

 Food Service Establishment into the sanitary sewer system, unless such discharge
 has first been processed through an approved Grease Control Device.
- C. No person shall discharge, cause, allow, or permit to be discharged any Yellow

 Grease, or any waste or material mixed with Yellow Grease, into the sanitary sewer
 system from a Food Service Establishment. No Yellow Grease from a Food Service

 Establishment shall be mixed with Grease Trap or Grease Interceptor waste.

SECTION 10. Section 15.14.630 of Chapter 15.14 of Title 15 of the San José Municipal Code is amended to be entitled and to read as follows:

15.14.630 Installation of Oil and G-grease Control removal Ddevices

- A. Any <u>Food Service Establishment</u>, or other type of business or establishment where <u>Ggrease</u> or other <u>viscous</u>, <u>obstructing or</u> objectionable materials may be discharged into a public or private sewage main or disposal system, shall have a <u>Ggrease Control removal Ddevice and related plumbing</u> of a size and design approved by the <u>Ddirector</u>.
 - Grease Interceptors shall meet the following minimum requirements:

- Designed retention time of no less than thirty minutes.
- b. The effluent from the device must flow through an approved sample box.
- Installed per manufacturer's specifications.
- d. At least two manholes, situated so all standpipes can be fully
 observed, and all internal surfaces can be reached, without confined
 space entry.
- e. Double-sweep clean-outs, on the interceptor inlet, and sample box outlet.
- f. Shall meet the specifications and be constructed in accordance with the applicable provisions of Chapter 24.04.
- Grease Traps shall meet the following minimum requirements:
 - No injection ports for chemicals or bacteria.
 - b.. Installed per manufacturer's specifications.
 - Appropriate flow restrictors, whether integral or external to the device,
 must be installed.
 - d. Shall meet the specifications and be constructed in accordance with the applicable provisions of Chapter 24.04.

- 3. Mechanical Grease Removal Devices shall be installed in accordance with manufacturers 'specifications.
- B. Each <u>G</u>grease <u>removal Control D</u>device shall be so installed and connected that it shall be at all times easily accessible for <u>visual</u> inspection, <u>sampling</u>, cleaning and removal of <u>G</u>grease, <u>and other matter from all surfaces</u>.
- C. The A Ggrease removal Control Ddevice shallould be situated on the discharger's premises except but when such a location would be impractical or cause undue hardship on the discharger, the City may issue an encroachment permit to allow the Grease Control Ddevice to be installed in the public street or sidewalk area and located so that it will not be obstructed by landscaping or parked vehicles.
- Device if when approved by the Delirector provided, however, that toilets, urinals, wash basins, and other fixtures containing fecal material shall not flow through the Ggrease removal control Delevice.
- D.
- E. Grease removal devices shall be maintained in efficient operating condition by periodic removal of the accumulated grease. The use of chemicals to dissolve grease is specifically prohibited. No accumulated grease shall be introduced into any drainage piping or public or private sewer. Users with oil and grease removal devices must maintain them in good operating condition at all times.

- F. The discharger must develop and maintain a record of periodic maintenance and pumping of the removal device, which records are to be retained for a period of not less than three years.
- G. Pumping must be sufficiently frequent to prevent objectionable odors, surcharge of the removal device, or interference with the operation of the sanitary sewer system.
- H. Abandoned grease removal devices shall be emptied and filled as required for abandoned septic tanks.

<u>SECTION 11.</u> Chapter 15.14 of Title 15 of the San José Municipal Code is amended by adding a Section to be numbered, entitled, and to read as follows:

15.14.640 Maintenance and Operation of Grease Control Devices

- A. Grease Control Devices shall be maintained in efficient operating condition by periodic removal of the accumulated Grease. The use of chemicals bacteria, enzymes, or other additives that have the effect of emulsifying or dissolving Grease is prohibited unless specifically authorized by the Director in writing. No accumulated Grease shall be introduced into any drainage piping or public or private sewer.
- B. Grease Control Devices shall be cleaned on a sufficient frequency to prevent objectionable odors, surcharge of the Grease Control Device, or interference with the operation of the sanitary sewer system.
 - 1. Grease Traps shall be cleaned at least once every thirty (30) days.
 - 2. Grease Interceptors shall be cleaned once every ninety (90) days.

- 3. Mechanical Grease Removal Devices must be maintained in a manner and frequency consistent with manufacturer specifications and guidance.
- 4. Grease Control Devices shall be cleaned when their last chamber is filled to twenty five percent (25%) or more of capacity with Grease or settled solids. Grease Interceptors with a sample box shall be shall be cleaned immediately when grease is evident in the sample box.
- 5. Grease Control Devices shall be cleaned by being pumped dry and all accumulated sludge on all surfaces shall be removed by washing down the sides, baffles and tees. No water removed from the device during cleaning shall be returned to the Grease Control Device.
- C. The Director may grant an exception to the requirements of subsections B.1 and B.2 where the Director finds, based on evidence presented by the discharger that a less frequent cleaning schedule will be sufficient to assure that not more than twenty five percent (25%) of the capacity of the Grease Control Device will be filled with Grease or settled solids.
- D. All dischargers shall implement Best Management Practices in their operations to minimize the discharge of Grease to the sanitary sewer system
- E. Dischargers shall maintain records on site for a period of at least three years as follows:
 - Dischargers with an installed Grease Control Device shall maintain records 1. showing that the Grease Control Device has been properly maintained and cleaned as required by subsections A and B;

- Food Service Establishments shall maintain records showing the following related to all Grease hauled off site: date and time material removed off site; volume removed; hauler name; truck license number, type of Grease removed and final destination of material collected.
- F. Abandoned Grease Control Devices shall be emptied and filled as required for abandoned septic tanks.

| PASSED FOR PUBLICATION of title this day following vote: | of, 2009, by the |
|--|---------------------|
| AYES: | |
| NOES: | |
| ABSENT: | |
| DISQUALIFIED: | |
| A-T | CHUCK REED Mayor |
| ATTEST: | |
| LEE PRICE, MMC City Clerk | |

21109



Memorandum

TO: HONORABLE MAYOR

AND CITY COUNCIL

FROM: John Stufflebean

SUBJECT: SEE BELOW

DATE: 04-21-09

Date Approved

COUNCIL DISTRICT: City-Wide

SUBJECT: FIRST AMENDMENT TO MASTER AGREEMENT WITH DAVID J.

POWERS & ASSOCIATES FOR ENVIRONMENTAL CONSULTANT

SERVICES

RECOMMENDATION

Approve the first amendment to the agreement with David J. Powers & Associates for environmental consultant services for various Environmental Services Department (ESD) projects by increasing the total compensation by \$250,000, from \$250,000 to an amount not to exceed \$500,000.

OUTCOME

Approval of the first amendment to the agreement with David J. Powers & Associates would allow ESD to execute additional service orders for environmental consultant services required for projects potentially eligible for federal funding under the American Recovery and Reinvestment Act of 2009.

BACKGROUND

On February 17, 2009, President Barack Obama signed into law the American Recovery and Reinvestment Act of 2009 ("ARRA" or "Federal Economic Stimulus Package"). One of the stated purposes of the ARRA is to invest in environmental protection and other infrastructure that would provide long-term economic benefits. ESD has identified several candidate projects that could qualify for federal funding. Attachment A provides a list of potential projects as described in a March 13, 2009 Information Memo from the City Manager to the City Council entitled "Update on the American Recovery and Reinvestment Act (Federal Economic

HONORABLE MAYOR AND CITY COUNCIL

04-21-09

Subject: First Amendment to Master Agreement with David J. Powers & Associates.

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Stimulus)". David J. Powers & Associates was selected in July 2008 to provide environmental consulting services for ESD through a competitive Request for Qualifications ("RFQ") process, for a term from September 19, 2008 through June 30, 2011. The City received proposals from eight firms in this RFQ process. David J. Powers & Associates was selected as the most qualified firm by an evaluation panel comprised of two ESD and one Planning staff.

ANALYSIS

When ESD developed the scope of environmental consultant services, staff budgeted the agreement to complete the anticipated projects for the remainder of the 2008-2009 fiscal year. With the passage of ARRA, the City has an unprecedented opportunity to secure federal funding for various candidate projects in Integrated Waste Management and Water Resources Divisions of ESD. These projects, however, must first complete the environmental review and documentation required by the National Environmental Protection Act (NEPA).

The agreement with David J. Powers & Associates was executed on September 19, 2008 for a term through June 30, 2011. The original maximum compensation is \$250,000. To date, three services orders have been issued to David J. Powers & Associates for various Integrated Waste Management projects for a total of \$59,152, leaving a balance of \$190,848. One of the service orders issued was for a NEPA study for construction of the Household Hazardous Waste Facility ("Las Plumas Phase II"). ESD is preparing three additional service orders, and two of these will be for NEPA studies for candidate projects in the Water Resources Division of ESD.

The Administration recommends amending the environmental consultant agreement with David J. Powers & Associates to increase the total compensation by \$250,000 to a maximum compensation of \$500,000. These additional funds would enable the City to pay for the preparation of Federal environmental documents for additional projects that are eligible for the ARRA. The qualifications of David J. Powers & Associates would also satisfy the expertise required to complete the NEPA review for these new projects. Alternatively, ESD could initiate another request for qualifications process, but this delay would not be in the public's best interest because it would compromise the City's ability to meet the accelerated timetable set by the Federal government.

EVALUATION AND FOLLOW-UP

This action does not address any performance measures.

PUBLIC OUTREACH/INTEREST

| Criteria 1: Requires Council action on the use of public funds equal to \$1 million or |
|--|
| greater. |
| Criteria 2: Adoption of a new or revised policy that may have implications for public |
| health, safety, quality of life, or financial/economic vitality of the City. |

HONORABLE MAYOR AND CITY COUNCIL

04-21-09

Subject: First Amendment to Master Agreement with David J. Powers & Associates.

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Criteria 3: Consideration of proposed changes to service delivery, programs, staffing that may have impacts to community services and have been identified by staff, Council or a Community group that requires special outreach.

This recommendation does not meet any of the criteria listed above. This memorandum will be posted on the City's Internet website for the May 19, 2009 Council agenda.

COORDINATION

This memorandum has been coordinated with the City Attorney and City Manager's Budget Offices. This memo is scheduled to be considered at the Treatment Plant Advisory Committee meeting on May 14, 2009.

COST SUMMARY/IMPLICATIONS

This recommendation would increase the compensation to David J. Powers & Associates for environmental consulting services for various ESD projects by increasing the total compensation by \$250,000, from \$250,000 to an amount not to exceed \$500,000. The funding will come from the non-personal operating budgets of the following funds:

Integrated Waste Management Fund (423): \$100,000

San Jose-Santa Clara Treatment Plant Operating Fund (513): \$100,000

Water Utility Fund (515): \$50,000

BUDGET REFERENCE

| Fund | Appn | Appn. Name | Total Appn | Amt. of | Adopted | Last Budget |
|----------------------|--------------------------------|--------------------|--------------|----------------|---------|----------------|
| # | # | | | Recommendation | Budget | Action (Date, |
| | | | | | Page | Ord. No.) |
| Total Recommendation | | | | \$250,000 | | |
| 423 | 0762 | Non- | \$5,739,092 | \$100,000 | XI-47 | 02/10/2009, |
| | | Personal/Equipment | | | | Ord. No. 28492 |
| 513 | 0762 | Non- | \$33,145,831 | \$100,000 | XI-78 | 02/10/2009, |
| | | Personal/Equipment | | | | Ord. No. 28492 |
| 515 | 0762 | Non- | \$19,231,517 | \$50,000 | XI-90 | 10/21/2008, |
| • | · | Personal/Equipment | | | | Ord. No. 28422 |
| Total F | Total Funding Available | | \$58,116,440 | | | • |
| | | | | | | |

HONORABLE MAYOR AND CITY COUNCIL

04-27-09

Subject: First Amendment to Master Agreement with David J. Powers & Associates.

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CEQA

Not a project.

JOHN STUFFLEBEAN

Director, Environmental Services

For questions please contact Jo Zientek, Deputy Director, Integrated Waste Management Division, at (408) 535-8557.

Attachment A: Candidate Project List

Attachment A Candidate Project List

| Program Area | Project Name | Project Description | Total Cost Estimate |
|-----------------|---|---|------------------------|
| AIRPORT | Airport – Installation of Solar Paneling on the Consolidated Rental Car Garage | This project would implement a renewable energy source by providing an estimated 1 million watts (1MW) of renewable solar panels installed on the roof of the new consolidated rental car garage. The garage is currently under construction. The roof should be constructed and available in the 2 nd quarter of 2009. The project will reduce grid energy use and associated emissions, resulting in reduced utility costs as well. | \$10,000,000 |
| WATER | Enhanced Biogas Production Facility | This program will expand and enhance the existing anaerobic digestion biogas production facility at the San Jose/Santa Clara Water Pollution Control Plant. This program consists of 3 projects: Enhanced digestion improvements (\$60 M); FOG receiving/processing improvements (\$15 M); and Food waste receiving/processing improvements (\$30 M). | \$105,000,000 |
| ENERGY | Energy Efficiency Retrofits of City Facilities | Capital construction projects to retrofit existing buildings to improve energy efficiency: Construct upgrades at existing city buildings and other city facilities with the goal to reduce heat gain/loss and other measures to reduce energy consumption | \$10,000,000 |
| ENERGY | Energy Efficiency 1B2 Programmable LED Streetlights (Clean Tech) | The City has established the goal to reduce per capita energy consumption by half and to obtain all of its electrical power from renewable sources by 2022. In a parallel and complementary effort, the city has also committed to converting all of its streetlights to smart, zero emissions (powered entirely by renewable energy) streetlights. Converting the City's streetlights to programmable, highly energy efficient lights would be the first step in that process. This funding would jump start that process. | \$20,000,000 |
| ENERGY | Solar Energy Systems Installation on City Facilities | Install solar energy systems (photovoltaic panels generating electric power) on existing City facilities using the following purchase options: Utilize Power Purchase Agreements with private enterprises to design, install and maintain their systems on city building and structures; or Design and procure the installation of solar energy systems on city buildings and structures. | \$10,000,000 |
| WATER | South Bay Water Recycling Phase 1B | South Bay Water Recycling (SBWR) Phase 1B consists of sixty (60) miles of recycled water pipe as well as storage and reliability improvements. SWBR serves nearly 600 customers in the cities of Milpitas, Santa Clara and San Jose, conserving enough drinking water to supply 20,000 families. Stimulus funds used will completely fund the \$20 million authorized federal share (25%) and will be immediately reinvested to construct additional SBWR water recycling projects with an estimated job creation impact of 200 jobs during the first year alone. | \$80,000,000 |
| WATER | Storm Sewer Rehabilitation Project | Project would indicate rehabilitation of aging storm sewer pump stations, cleaning and rehabilitation of sewer mains, reconstructing storm sewer outfalls in rivers and streams, decreasing neighborhood flooding and ponding, risk analysis of critical components of the system and rehabilitation of the system with trenchless technology and traditional rehabilitation method. | \$20,000,000 |
| WATER | WPCP Electrical Reliability Improvements | This program includes design and construction of new equipment and modification of the Plant's existing electrical distribution system. The electrical infrastructure design will include redundant power feed to the switchgear to mitigate common mode failures such earthquake and fire | \$80,000,000 |
| WATER | Water Main Replacement | Replace aging drinking water distribution infrastructure with new water mains to enhance water quality and improve water system reliability | \$15,000,000 |

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| WATER | Diesel Pump Replacement at Muni and Public Works | Replace antiquated diesel pumps with efficient, new generation diesel engines/pumps in portable water systems storm water pump stations. | \$9,000,000 |
|---------|---|--|--------------|
| ENERGY | Las Plumas Environmental Innovation Center | This project establishes a Santa Clara County center providing residential and conditionally exempt small quantity generators (CESQG) household hazardous waste drop-offs and other environmental services, including job training (on green building construction practices), Green Building Certification Training Area, an energy management demonstration and education area, and a recycled / re-use of construction materials retail operation. | \$16,000,000 |
| AIRPORT | Airport - Terminal A Solar | This project would install a 280 kilowatt solar power system on the roofs of Terminal A and the Federal Inspection Service (FIS). The project includes the re-roofing of Terminal A prior to placement of the solar panels. The project will reduce the Airport's energy costs and will reduce demand on the power grid by utilizing a green power alternative. | \$3,700,000 |
| WATER | Engine Generator Replacement Project | This project will include installation of two 3 megawatt (MW) engine generators or gas turbine generators to replace the electrical generation capacity of four 40-year old generators at the Plant. | \$20,000,000 |
| WATER | Clean Biogas Fuel Cell Program | This program consists of 2 projects: installation of biogas cleaning facilities (\$8 M) and installation of 3 megawatts of fuel cells utilizing renewable biogas as the fuel (\$20 M) to replace existing low efficiency reciprocating engine generators. | \$30,000.000 |
| ENERGY | Energy Efficiency 1B3: Electric vehicle infrastructure | A number of major auto manufacturers have announced they will be releasing plug-in electric vehicles in 2009 and 2010. But if the infrastructure is not in place for people to charge their cars when they are on the road, consumers will be reluctant to purchase these greener vehicles. The City would like to expand the number of charging stations installed in the city to help advance electric vehicles and the charging infrastructure necessary to support them. | \$70,000 |
| ENERGY | Energy Efficiency 1A— Traffic Signal retrofits | The City has determined that it needs to redesign or install five new traffic signals but does not have the funds to do so. The City has completed the design work for two of the signals and can proceed to construction immediately. Construction would take four months. The remaining three signals must be designed before constructed. These three signals could be completed in one year. | \$2,000,000 |
| WATER | South Bay Water Recycling Santa Clara Central Park | South Bay Water Recycling (SBWR) Santa Clara Central Park Extension provides recycled water to Santa Clara Central Park and additional schools and parks. Project consists of 12,000 LF of 8-in, 12-in and 16-in pipe. The project has been designed and approved for construction and is awaiting receipt of bids. | \$4,400,000 |
| WATER | South Bay Water Recycling Airport Extension | South Bay Water Recycling (SBWR) Airport Extension provides recycled water to the Mineta-San Jose International Airport for landscape irrigation, industrial cooling and indoor use including car washing and toilet flushing. The project consists of two miles of 10-in and 12-inch diameter pipe both inside the airport loop and outside the airport to connect the pipeline to the SBWR system. Both segments of the pipeline have been designed and are ready for bid and construction. | \$4,400,000 |
| WATER | South Bay Water Recycling Advanced Recycled Water Treatment Facility | The SBWR Advanced Recycled Water Treatment Facility (ARWTF) provides for design and construction of an advanced technology water treatment facility to produce 8 million gallons per day (mgd) of portable quality water standards through the use of innovative technologies including microfiltration (MF), reverse osmosis (RO), ultraviolet disinfection (UV) and advanced chemical oxidation (AOX). The water will be used to improve the quality of water distributed through the South Bay Water Recycling system to nearly 600 customers in the Silicon Valley area. | \$55,000,000 |

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| WATER | South Bay Water Recycling Milpitas Extensions | Four-mile extension of SBWR distribution system to provide recycled water to City of Milpitas schools, parks and industry. Project would be expedited through issuance of design/build (DB) contract. | \$12,000,000 |
|---------|--|--|--------------|
| WATER | South Bay Water Recycling Santa Clara Extensions | This six-mile extension of the SBWR distribution system will provide recycled water to City of Santa Clara schools, parks and industry, including four (4) data centers to support Silicon Valley high tech development. While the pipeline alignment conceptual design and environmental permitting are complete, the project would be expedited through issuance of design/build (DB) contracts for final design and project construction. | \$8,000,000 |
| WATER | South Bay Water Recycling San Jose Extensions | The project consists of 25-miles of recycled water pipeline ranging between 24-inches to 6-inches in diameter to provide recycled water to schools, parks and industry in the City of San Jose. The project would provide up to 4000 acre-feet of water per year, or about 8 million gallons per day during the dry-weather period. | \$80,000,000 |
| AIRPORT | Airport – Fuel Farm Clean-up | The existing fuel farm has contamination from the Chevron activity and the former, adjacent City fuel farm. Upon activation of the new fuel farm currently under construction, this fuel farm will be closed. Investigation and remediation of the comingled jet fuel plume will protect groundwater and the Guadalupe River, as well as provide opportunity for land development. This project will protect the environment and reduce emissions by cleaning up the comingled jet fuel plume at the existing fuel farm. | \$7,000,000 |
| WATER | Sanitary Sewer Rehabilitation Project | Using design-build contracts, the City could initiate a sanitary sewer rehabilitation project to address the aging condition of the City's 2,200 mile sanitary sewer collection system within the 120 and 180 days. These contracts would include remote video inspection of the system, risk analysis of critical components of the system and rehabilitation of the system with trenchless technology and traditional rehabilitation methods. Project would be implemented via Design/Build contract. | \$50,000,000 |
| WATER | Water Tank Rehabilitation | Invest in rehabilitating and upgrading drinking water tanks by restoring protective coatings, upgrading facilities, and enhancing structural integrity. | \$2,000,000 |
| ENERGY | Diesel Emissions Retrofit—EPA "Other funds" | This project would provide modifications to 83 on-road and 100 off-road diesel powered vehicles to reduce emissions to comply with the State of California Air Resources Board mandate. The estimated cost to retrofit the on-road fleet is \$1.4M and the estimated cost to retrofit the off-road fleet is \$1.5M. | \$2,900,000 |
| WATER | Water Efficiency Projects | Twelve small individual projects/initiatives with estimated total annual cost of \$4 million. | \$4,000,000 |