

**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**  
**June 11, 2009**

**4:30 p.m.**

**Room T-1047**

**1. ROLL CALL**

**2. MINUTES**

A. Minutes of May14, 2009

**3. UNFINISHED BUSINESS**

**4. CORRESPONDENCE**

**5. 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.

**6. ACTION ITEMS**

A. Technical Committee Recommendation (Handout)

B. Action Item – TPAC Recommendation for Approval Requested

**The following item is scheduled to be approved by the San Jose City Council on June 16, 2009:**

1. Adopt a resolution authorizing the City Manager to negotiate and execute a Memorandum of Understanding between the City of San Jose and Zero Waste Energy Development Company, Inc., regarding their intent to develop lease terms for use of approximately 40 acres of a closed landfill site located on San Jose/Santa Clara Water Pollution Control Plant bufferlands, for a biogas facility and the process for bringing the lease forward for Council and other required approvals and any amendments to the master agreement with the tributary agencies, if needed.

2. Report on bids and award of construction contract for the project entitled “San José/Santa Clara Water Pollution Control Plant, FY 2008-2009 Capital Improvement Program, Waste Heat Recovery Boiler A-1 Replacement,” to the low bidder, Bay City Boiler & Engineering Co. Inc., in the amount of \$ 136,000, and approval of a 10% contingency in the amount of \$13,600.
3. Report on bids and award of construction contract for the project entitled “San José/Santa Clara Water Pollution Control Plant, FY 2008-2009 Capital Improvement Program, Nitrification Gate and Channel Aeration Improvements Project,” to the low bidder, Pacific Infrastructure, in the amount of \$1,684,000, and approval of a 15% contingency in the amount of \$253,000.

C. Action Item – TPAC Recommendation for Approval Requested

**The following items are scheduled to be approved by the San Jose City Council on June 23, 2009:**

1. Proposed Capital Improvement Program – 2010-2014
2. Proposed Operating and Maintenance Budget – 2009-2010
3. Adopt a resolution authorizing the City Manager to negotiate and execute an amendment to the Agreement with International Disposal Corporation of California, Inc. to:
  - a. Provide for the disposal of grease, grit, and screening, and the beneficial reuse of biosolids from the Water Pollution Control Plant, at an estimated annual expenditure of \$1,614,520 for Fiscal Year 2009-2010.
  - b. Reflect changes to the residential and commercial solid waste management program including, but not limited to, enabling the exclusive commercial franchisees to use the City’s disposal capacity at the Newby Island Landfill at the City’s rate, clarifying the compensation for baled residential recycling residue, providing for the processing of certain waste generated from the performance of municipal services, and redefining the basis for reimbursement of regulatory costs.
4. Direction to staff to explore feasibility, options and terms and conditions for an agreement that would allow International Disposal Corporation of California, Inc., to deliver leachate from Newby Island Sanitary Landfill to the San José/Santa Clara Water Pollution Control Plant and for the delivery of recycled water from the Plant to Newby using existing pipelines.
5. Adoption of a resolution authorizing the Director of Public Works to negotiate and execute Contract Change Order No. 6 with Zolman Construction and Development, Inc. for the Environmental Services Building Repair Project in an amount not to exceed \$325,000 to replace the existing damaged vinyl floor

in the laboratory area of the building with ceramic floor tile and to install new, upgraded data/voice cabling and a security system.

6. Increase the project funding by \$325,000, and contingency authorization from 15% to 24% for a total project contingency of \$865,000.
7. Increase the project delivery funding by \$50,000 for a total project delivery cost of \$1,094,000.

D. Informational Item – TPAC Item Previously Recommended for Approval

**The following items were approved by the San Jose City Council 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 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.
3. 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.

7. MISCELLANEOUS

- A. The next TPAC meeting will be Thursday, July 9, 2009, at 4:30 p.m. City Hall, Environmental Services, 10<sup>th</sup> Floor, Room 1047.

8. OPEN FORUM

9. ADJOURNMENT

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

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, 10<sup>th</sup> Floor, Environmental Services at the same time that the public records are distributed or made available to the legislative body.

**DRAFT**  
**MINUTES OF THE**  
**SAN JOSÉ/SANTA CLARA**  
**TREATMENT PLANT ADVISORY COMMITTEE**  
City Hall, Environmental Services, 10<sup>th</sup> Floor, Room 1047  
Thursday, May 14, 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), Jamie McLeod, Kevin Moore, Madison Nguyen, Ed Shikada, Ken Yeager, John Gatto, Nora Campos.

Staff present: Monica Perras, Dale Ihrke, Mollie Dent, Bhavani Yerrapotu, John Stufflebean, Kirsten Struve, Kate Drayson, Cheryl Wessling, Kerrie Romanow, Steve Osborn, Walter Rossmann, John Mukhar, Eric Rosenblum, Melody Tovar.

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

**2. APPROVAL OF MINUTES**

Minutes of April 9, 2009.

Motion by Committee member Gatto and Second by Committee member Moore to accept the minutes of January 08, 2009. Committee Member McLeod abstained.

**3. UNFINISHED BUSINESS**

**4. CORRESPONDENCE**

- A. Plant Master Plan Community Workshop Notice
- B. Plant Master Plan Community Workshop Flyer

Item was accepted by unanimous vote.

**5. 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.
- B. TPAC – Proposed Capital Improvement Program – 2010-2014

C. TPAC – Proposed Operating and Maintenance Budget – 2009-2010

Motion by Committee Member Moore and seconded by Committee Member Gatto to accept Items 5.A, B & C.

6. **AGREEMENTS**

A. Technical Committee Recommendation (Handout)

Item was accepted by unanimous vote.

B. Action Item – TPAC Recommendation for Approval Requested

**The following item was scheduled to be approved by the San Jose City Council 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 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.

Items 6.B.1&2 were recommended for approval by unanimous vote.

C. Action Item – TPAC Recommendation for Approval Requested

**The following item was 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.

Item 6.C.1 was recommended for approval by unanimous vote.

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.

Report on Items 6.D.1&2 was accepted by unanimous vote.

**7. MISCELLANEOUS**

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

**8. PUBLIC COMMENT**

David Wall expressed concern with San Jose sewer service use charges to tributary agencies.

**10. ADJOURNMENT**

- A. The Treatment Plant Advisory Committee adjourned at 4:40 p.m.

Chuck Reed, Chair  
Treatment Plant Advisory Committee

**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**

April 27, 2009 - May 27, 2009

Description of Contract Activity <sup>1</sup>	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	03727		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				
Sand Blasting/ Painting Project	FY09-10	09859		Redwood Painting Company	\$200,000				
Fuel & Petroleum	FY09-10	09679		Coast Oil Company	\$140,000				
New & Repaired Replacement Hardware	FY09-10	09552		ABB Automatic	\$250,000				

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





# Memorandum

**TO:** HONORABLE MAYOR  
AND CITY COUNCIL

**FROM:** Paul Krutko  
John Stufflebean

**SUBJECT:** SEE BELOW

**DATE:** 05-26-09

Approved

Date

6/1/09

**COUNCIL DISTRICT:** 4

**SUBJECT: MEMORANDUM OF UNDERSTANDING BETWEEN THE CITY AND ZERO WASTE ENERGY DEVELOPMENT COMPANY, INC., FOR THE DEVELOPMENT OF LEASE TERMS FOR A BIOGAS FACILITY ON WATER POLLUTION CONTROL PLANT PROPERTY**

## RECOMMENDATION

Adopt a resolution authorizing the City Manager to negotiate and execute a Memorandum of Understanding between the City of San José and Zero Waste Energy Development Company, Inc., regarding their intent to develop lease terms for use of approximately 40 acres of a closed landfill site located on San José/Santa Clara Water Pollution Control Plant buffer-lands, for a biogas facility and the process for bringing the lease forward for Council and other required approvals and any amendments to the master agreement with the tributary agencies, if needed.

## OUTCOME

The proposed action will allow staff to work directly with Zero Waste Energy Development Company, Inc. (Zero Waste Energy) towards bringing a biogas facility to the City of San José. This project would further the Green Vision and aligns with the goals of the current San José/Santa Clara Water Pollution Control Plant ("WPCP" or the "Plant") Land Use Plan. The proposed facility would use dry anaerobic fermentation technology to generate biogas and compost. This technology is used commercially in Europe and the proposed facility would be the first such facility in the United States. The green technology that would be showcased by such a facility is consistent with the City's Green Vision goals including: #1 Create 25,000 Clean Tech Jobs; #3 Receive 100% of electrical power from renewable sources; and #5 Zero Waste to landfills and converting waste to energy; and provides additional organics recycling capacity, which is in short supply in the San Francisco Bay Area.

The proposed site for the biogas facility is a landfill that was closed in 1969 and acquired for WPCP buffer lands in 1982. Proceeding with development of lease terms and a process for bringing a lease and related project actions forward for Council and other required approvals could facilitate substantial infrastructure investment in San José.

## **BACKGROUND**

Zero Waste Energy, a subsidiary of GreenWaste Recovery, Inc, proposes to develop a 150,000-ton per year dry fermentation anaerobic digestion facility to process and recover energy from the organic portion of municipal solid waste generated by both the City and other municipalities. The proposed location is on approximately 40 acres of buffer lands of the WPCP, located on the north side of Los Esteros Road, and adjacent to Green Waste/Zanker's existing and currently proposed recyclables processing facilities. The new facility would be part of an integrated waste management system and would complement GreenWaste/Zanker's processing operations. The project is proposed to be developed in phases, with each of the three phases designed to increase capacity by 50,000 tons per year of organic materials.

The proposed facility would employ an anaerobic digestion system that would take organic materials and, using a dry fermentation system, produce two products: a biogas containing methane and a compost. The organic material feedstock would consist of a combination of primarily food waste and yard waste. The project technology sequesters carbon dioxide and methane from the organic feedstock in an airtight digester. This particular technology is proprietary and has been commercially demonstrated in Germany by Bekon Energy Technologies. Bekon built twelve facilities in Germany and Italy. Thirteen additional facilities are scheduled for construction in Europe in 2009. Although anaerobic digestion systems, which produce biogas, are common in the United States, including at the WPCP, all the existing processes currently employ wet feedstock. By contrast, the Bekon process can utilize the relatively dry organic portion of the municipal solid waste stream. This technology is designed to process additional material which is hard to recycle and currently ends up in a landfill.

In early 2008, the Environmental Services Department issued a Request for Information (RFI) for an Alternative Technology Energy Facility on WPCP lands. At that time, no feasible alternative was presented due to two significant issues: the technologies in the RFI responses were largely untested on a commercial scale and the responders required significant long-term (15 to 25 years) solid waste tonnage commitments from the City at costs which started at \$2 million annually. Anaerobic digestion is a process that the City currently uses extensively at the WPCP, and the facility currently being proposed by Zero Waste Energy would utilize an anaerobic digestion technology which has been demonstrated in several commercial-scale facilities in Europe. The new proposed technology is much more viable than that proposed in Zero Waste Energy's RFI response; in addition, the firm's proposed transaction with the City has been simplified to a ground lease. Zero Waste Energy also seeks loan guarantees for the facility from the American Recovery and Reinvestment Act for sustainable energy capitalization projects.

## ANALYSIS

### WPCP Closed Landfill Site

#### *Current Use*

166 acres of WPCP bufferlands, located at 2100 Los Esteros Road, was operated as a private landfill from approximately 1938 to 1969. Subsequently, in approximately 1982, this property was acquired to be buffer lands for the Plant.

Zanker Resource Management Company purchased and developed a 70 acre portion of the former landfill site from the City in 1982, and continues to operate that site as a landfill and recycling facility today. The remaining 96 acre site is mostly undeveloped with only a recycled water filling station fronting the site and intermittent soil management and cover maintenance activities occurring as needed. More than half of the site's 96 acres are designated as wetlands, leaving a developable area of approximately 40 acres.

Older landfills, present potential threats to groundwater from contaminants leaching from waste, landfill gas hazards as a result of decomposing waste, and structural concerns due to differential settlement of the site over time. Consequently, redevelopment of the site would require special engineering investigation and design to mitigate those issues. The Local Enforcement Agency (local authority for the California Integrated Waste Management Board) and the San Francisco Bay Regional Water Quality Control Board have regulatory authority over the operations, maintenance and redevelopment of landfill sites, assuring that public health and safety and environmental standards are met. The submittal and approval of a Post-Closure Land Use Proposal, which includes project-specific plans, would be required as a first step to redevelopment. One of the proposed terms for lease of the site is that Zero Waste Energy would complete the landfill closure process on behalf of the City and provide ongoing monitoring and mitigations required in the Post Closure Land Use Proposal, relieving the City from undertaking these activities itself. The amount of acreage necessary to complete the closure process is still to be determined, and is likely to be part of further discussions.

#### *Ownership of Proposed Facility Site*

The City of San José and the City of Santa Clara are joint owners of the Plant lands under the terms of the 1959 San José Santa Clara Joint Powers Authority Agreement (JPA) related to the operation and management of WPCP. Because San José and Santa Clara are co-owners of the Plant Lands, the Councils of both cities must approve any disposition of those lands to third parties for non-Plant purposes.

In addition, disposition of Plant lands to third parties for non-Plant purposes is subject to the 1983 wastewater treatment agreement among San José, Santa Clara, the City of Milpitas, and the sanitation districts of Cupertino, West Valley, Burbank and Sunol (Tributary Agency Agreements). Under the Tributary Agency Agreements, the Treatment Plant Advisory Committee (TPAC) advises the San José and Santa Clara city councils on matters affecting the

WPCP, including matters related to WPCP lands. The TPAC consists of representatives of the joint owners and the tributary agencies.

In order to approve a lease of the proposed facility site to Zero Waste Energy, the Santa Clara City Council would need either to execute the lease itself or execute an agreement with the City of San José authorizing such a lease. TPAC recommendation would be required for the consideration of the lease or other agreement between the two joint owners. In addition, the Milpitas City Council and the boards of the tributary agency sanitation districts may need to approve amendments to their respective Tributary Agency Agreements.

Refer to the attached Preliminary Site Layout Concept for the Zero Waste Energy facility on the proposed site.

#### Private Lease to Adjacent Property Owner

The proposed site is currently bounded by tidal marshlands and GreenWaste/Zanker Road Resource Recovery operation and landfill to the north, WPCP sludge drying beds to the east/northeast, Los Esteros Road and the WPCP facility to the south, and Artesian Slough and the GreenWaste/Zanker Material Processing Facility to the west. As such, GreenWaste is the only private property owner directly adjacent to the Nine Par site. Similar to the sale of surplus City-owned real estate to an adjacent property owner, staff recommends that this WPCP property be leased to the owner of adjacent property, at fair market value, subject to any terms and conditions provided by Council and the City of Santa Clara. Due to ever evolving technological advances in the treatment of waste water, it is difficult to predict the long term need or timing for future development of the site. At this time, the Plant does not have development plans for this property. This does not preclude potential use of the land in the future for new or improved processes for water treatment. In addition, further development of the subject site is presently encumbered with the process and expense of formally closing the former land fill prior to redevelopment.

Staff and the City Attorney's Office are presently researching whether there are any "private activity" financial issues under Internal Revenue Service regulations pertaining to the development of this site.

By offering a ground lease at fair market value to the adjacent property owner, the Plant would relinquish the ability to expand Plant processes onto this site for the term of the lease, between 20 and 30 years. This action would provide a means of closing the former landfill and redeveloping the subject site while still providing ultimate control over the future use of the property.

#### Determination of Land and Lease Value

Staff completed a Field Investigation and Site Development Feasibility Summary Report for the proposed facility site in September 2007, which detailed some of the potential development issues with this site. Staff intends to use this report and an independent commercial land appraisal to ascertain the land and lease value of the property for the purposes of the negotiations.

There are opportunities to structure a site to include terms beyond a standard flat lease rate. These might include an option for the Plant to procure gas at favorable rates for use in its daily operations and also lease consideration that takes into account the volume of waste material that flows through the biogas facility. The recommended lease that staff will bring to the San José and Santa Clara City Councils for consideration would include an evaluation of the most favorable terms for the WPCP and the Tributary Agencies.

#### Consistency with Plant Land use Plan and Integration with the WPCP Master Plan Process

The proposed project is compliant with Council Policy 6-31 "Use of San José/Santa Clara Water Pollution Control Plant Lands" adopted in November 2000. The project may contribute to the Plant's operations through the generation of biogas for Plant use and would provide lease revenue for the Cities of San José and Santa Clara and the Tributary agencies.

Any development of this facility would be closely coordinated with the ongoing Plant Master Planning effort. The Plant Master Plan will address several critical issues, including aging infrastructure, energy management, population growth, flood control, odor control, new regulations, habitat protection, and land uses. In addition to determining the most sustainable technologies for treating wastewater, the Master Plan will consider potential new uses on the Plant site, which comprise approximately 2,600 acres. Buffer-land uses currently under consideration include uses that: generate revenue, contribute to research and development of renewable energies and clean technologies, and transforms the WPCP into an energy supplier, all of which align to the Zero Waste Energy proposal.

Based on the technical and land use analysis conducted for the Plant Master Plan to date, the proposed facility site will be included in the future operational area of the Plant and has already associated with energy production for the Plant. Energy self-sufficiency is one of the objectives of the Plant Master Plan. In addition, the Plant Master Plan team has developed proposed criteria for land use projects that should proceed ahead of the Master Plan, including unique short-term opportunities that are consistent with the vision for the Plant Master Plan while providing overall environmental benefits and generating revenue. The proposed project is consistent with this criteria, which may be brought to Council prior to or at the same time as any potential lease is presented to Council for its consideration.

#### Alignment with City Green Vision

The proposed Zero Waste Energy project would promote the City's sustainable energy, Zero Waste, and climate protection goals. The Green Vision focuses on clean and green technology as an emerging industry sector and as a mechanism to transform San José's economy. The Green Vision also enables San José/Silicon Valley to continue as a place where entrepreneurs come together to innovate and to solve the world's greatest challenges. The proposed facility would build on the legacy of San José/Silicon Valley in demonstrating and adopting next-generation solutions that can serve as a model nationwide to help other communities achieve an aggressive environmental agenda, create economic prosperity, and respond to climate change.

The City has expressed interest in developing renewable energy from portions of municipal solid waste streams to realize the following Green Vision goals:

- Creating 25,000 Clean Tech jobs as the World Center of Clean Tech Innovation
- Receiving 100 percent of electrical power from clean renewable sources
- Diverting 100 percent of the waste from landfills and converting waste-to-energy

The City's Sustainable Energy Policy and Action Plan, developed in April 2008, provides the City a road map to develop sustainable energy sources. In addition, the City's Zero Waste goals also promote emerging energy conversion technologies to increase materials diversion from landfills. Further, due to increasing concerns about greenhouse gas emissions from landfills including methane, the State of California, as part of the Global Warming Solutions Act (AB32), has prioritized finding alternative ways to dispose of organic waste.

#### Burrowing Owl Habitat

The draft Santa Clara Valley Habitat Conservation Plan (HCP) lists the Western Burrowing Owls as a covered species with Plant lands considered suitable habitat. The burrowing owl has also been identified as a State species of special concern because of the decline in both local and statewide populations, and in suitable habitat and foraging areas. As part of the HCP evaluation of Plant lands, Department of Fish and Game staff presented a concept which would use the proposed site as dedicated and managed habitat specific to the burrowing owl. Issues relevant to the burrowing owl, including any impact developing this site could have on owl habitat requirements on other portions of Plant lands, will be addressed as part of the environmental process prior to presenting any proposed agreement to Council for its consideration.

#### Summary of Preliminary Terms for Memorandum of Understanding (MOU)

The proposed Zero Waste Energy project would require no financial commitment from the City, and would leverage the proximity of the existing Zanker properties to the east and west of the Nine Par site. With these project benefits, and the previously issued RFI, staff believes that it is appropriate to forward the project to the Council with a request to enter into a MOU to initiate negotiations to develop a 20 to 30 year lease with Zero Waste Energy for use of this property.

The following outlines a preliminary list of issues that would need to be addressed included in the MOU:

- Timing and process for coordination of project with the Alviso community and other stakeholders and for pursuing environmental clearance for the proposed biogas facility
- Timing and process for negotiating lease terms and conditions
- Timing and process for obtaining appraisal(s)

Staff intends that the appropriate CEQA clearance would be prepared for the proposed project before any recommended final lease would be brought back for Council consideration, and that such a proposed agreement would specify all the responsibilities of the lessee for bringing the facility on-line and for on-going operations, including:

- Site landfill closure plan and regulatory coordination

- Ongoing post closure operation, maintenance, and monitoring of the landfill for term of lease
- Construction and operational permits, including from local, regional, and state agencies
- How to address provisions for the site and facility if Zero Waste Energy dissolves or ceases to be a going concern
- Grounds for termination of lease
- Indemnification for San José, Santa Clara, and Tributary Agencies

### **EVALUATION AND FOLLOW-UP**

If the Council approves the staff recommendation, staff and Zero Waste Energy representatives will engage in MOU negotiations. If the negotiations are successful, the City Manager will execute the MOU. The MOU will not obligate the City to lease the proposed site to Zero Waste Energy, but will establish a process for pursuing lease negotiations and environmental review of the project in addition to all other required approvals. Staff will pursue returning to City Council in fall 2009 with proposed timelines for the CEQA and regulatory approval process for the proposed facility; a proposed timeline for obtaining an appraisal if it has not been previously completed; and proposed business terms and conditions for the preparation of a lease for Council consideration, once all required environmental reviews and necessary regulatory approvals are in place.

### **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.
- 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 June 16, 2009 Council Agenda.

Should the City choose to pursue this lease, Zero Waste Energy would be required to meet the community notification and meeting requirements of CEQA and of City and other permitting agencies. Staff also notified the project proponents that early outreach will be required to the Alviso Community. In addition, the City is conducting an extensive WPCP Master Plan community and stakeholder engagement process throughout which input is being sought on land use alternatives, to include clean tech and energy-producing development.

**COORDINATION**

This memorandum has been coordinated with the City Manager's Budget Office, City Attorney, Planning, Building, and Code Enforcement, and Public Works/Real Estate Departments. This report is scheduled to be considered at the Treatment Plant Advisory Committee meeting on June 11, 2009.

**COST SUMMARY/IMPLICATIONS**

Zero Waste Energy, will be responsible for all one time and ongoing costs related to the development and operation of this facility, including: City appraisal, CEQA clearance, site preparation, permitting, project design, construction, operations, maintenance, and on-going closed landfill mitigation monitoring on the Nine Par parcel related to this project.

This project would likely produce lease revenue for San José, Santa Clara and the WPCP tributary agencies. As a joint owner of the Plant lands, Santa Clara is entitled to receive a share of any income derived from the lease of Plant lands during the term of the JPA. The Master Agreements governing the relationships for the City of Milpitas and the Cupertino, West Valley, Burbank, and Sunol sanitation districts provide the agencies with "participation rights" in the Plant lands through 2031. The Master Agreements state that, if San José and Santa Clara sell or otherwise dispose of any of the lands no longer needed for Plant purposes, the agencies have the right to share in any revenue derived. The Master Agreements further provide that Santa Clara and the tributary agencies are not entitled to receive revenue from the disposition or lease of land until they have fully paid their allocable share of land costs.

It should be noted that San José is scheduled to annex the entire Sunol District over the next few years, and as a result, San José will assume all of Sunol's rights in the Plant lands. The current share of each entities allocation in the Plant lands under consideration for the Zero Waste Energy facility is listed below (recent authorization of capacity sale from Cupertino to Milpitas will result in adjustment of the values for those agencies):

San José	66.181 %
Santa Clara	16.620 %
West Valley	6.472 %
Cupertino	4.074 %
Milpitas	7.092 %
Burbank	0.248 %
Sunol	0.313 %
Total	100.000 %



HONERABLE MAYOR AND CITY COUNCIL

05-26-09

Subject: MOU Between the City and Zanker Road Biogas, LLC, for Lease of Nine Par Landfill Site

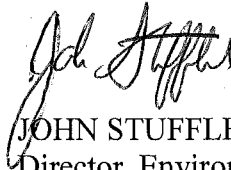
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**CEQA**

Not a Project. As described above, CEQA must be completed before the Council approves a project or the lease of a project. Related project submittals including CEQA and any lease of City property will be brought forward for subsequent Council and other public agency review and approval.



PAUL KRUTKO  
Chief Development Officer

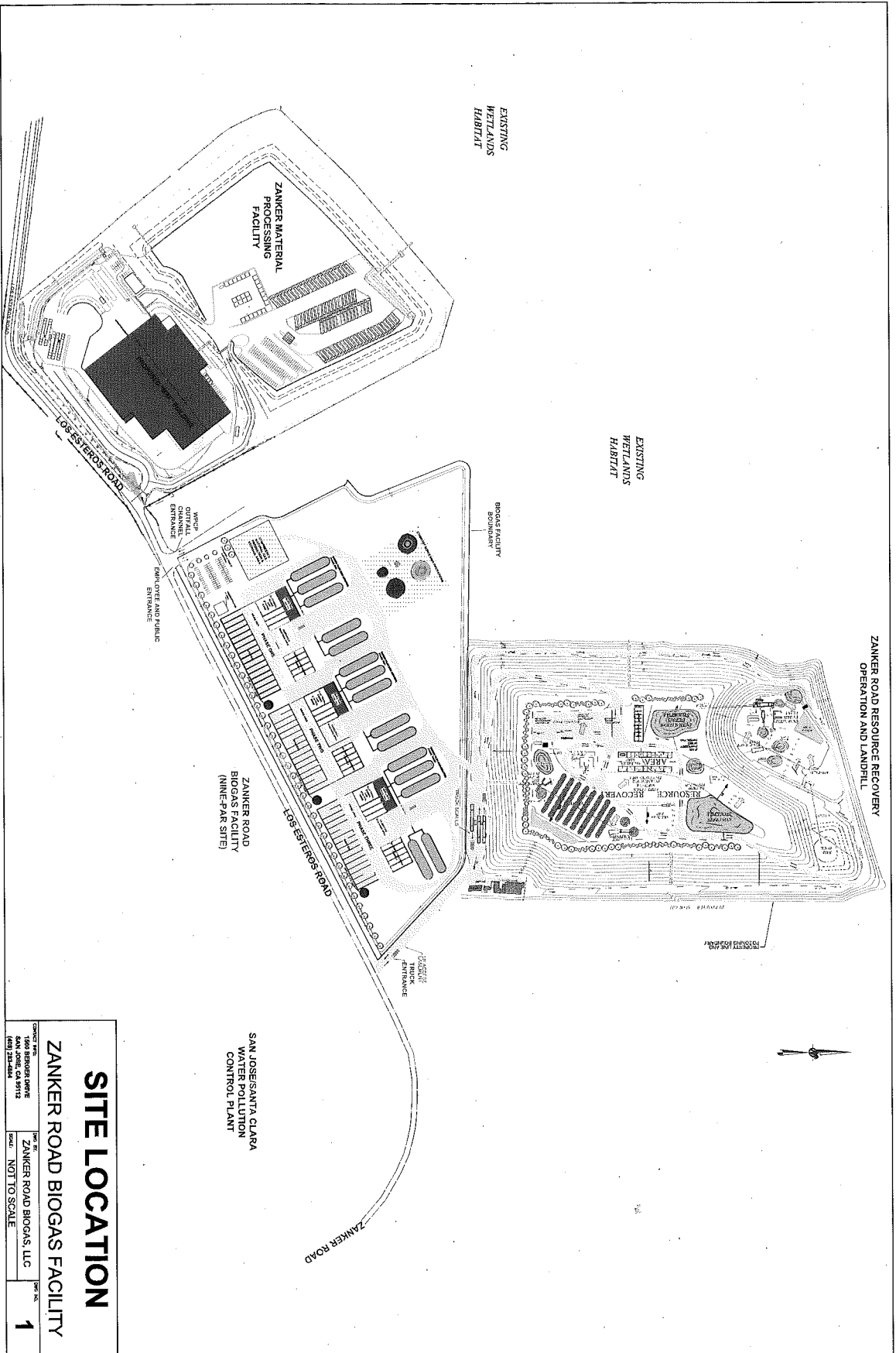


JOHN STUFFLEBEAN  
Director, Environmental Services Department

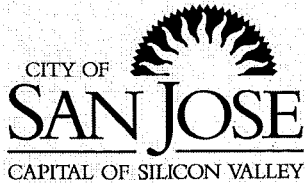
ATTACHMENT: Preliminary Proposed Site Layout Concept for Zero Waste Energy Facility

For questions please contact Kerrie Romanow, Assistant Director, Environmental Services Department, at (408) 535-8552 or Nanci Klein, Manager Corporate Outreach, Office of Economic Development, at (408) 535-8184.

ATTACHMENT: Preliminary Proposed Site Layout Concept for Zero Waste Energy Facility



<b>SITE LOCATION</b>		
<b>ZANKER ROAD BIOGAS FACILITY</b>		
PROJECT NO. 2010-001 CLIENT: ZANKER ROAD BIOGAS, LLC DATE: 08/20/10	SHEET NO. 1 TOTAL SHEETS: 1	SCALE: NOT TO SCALE



COUNCIL AGENDA: 06-16-09  
ITEM:

# Memorandum

**TO:** HONORABLE MAYOR AND  
CITY COUNCIL

**FROM:** John Stufflebean

**SUBJECT:** SEE BELOW

**DATE:** 05-26-09

Approved

*Deanna Schu*

Date

*5/26/09*

**COUNCIL DISTRICT:** City- Wide

**SUBJECT: REPORT ON BIDS AND AWARD OF CONTRACT TO THE LOW BIDDER, BAY CITY BOILER & ENGINEERING CO., INC., FOR THE SAN JOSÉ/SANTA CLARA WATER POLLUTION CONTROL PLANT, FY 2008-2009 CAPITAL IMPROVEMENT PROGRAM, WASTE HEAT RECOVERY BOILER A-1 REPLACEMENT**

## RECOMMENDATION

Report on bids and award of construction contract for the project entitled "San José/Santa Clara Water Pollution Control Plant, FY 2008-2009 Capital Improvement Program, Waste Heat Recovery Boiler A-1 Replacement," to the low bidder, Bay City Boiler & Engineering Co. Inc., in the amount of \$ 136,000, and approval of a 10% contingency in the amount of \$13,600.

## OUTCOME

Award of this construction project will allow for replacement of the existing old waste heat recovery boiler of Engine A-1 with a more efficient unit at the Secondary Blower Building and increase energy saving at the Plant.

## BACKGROUND

The Secondary Blower Building has six internal combustion engines, each of which powers a blower. The blowers supply air for secondary treatment of the wastewater. Each of the engines is equipped with a waste heat recovery boiler. These boilers recover the heat emitted by the exhaust gases which would otherwise be wasted to the atmosphere. Heat in the boilers is recovered in the form of steam which is used to heat digesters for solids processing.

Of the six waste heat recovery boilers, one was replaced in 2003 and the remaining five are over 30 years old. Due to age and corrosion, the older boilers have begun to leak, are less efficient,

and the cost to maintain them has been increasing. This project will replace one of the older waste heat recovery boilers (boiler for Engine A-1) with a more efficient unit.

### ANALYSIS

The project was advertised for bids and a total of three bids were received and opened on May 7, 2009 with the following results:

<u>Contractor</u>	<u>City</u>	<u>Bid Amount</u>	<u>Variance Over/ (Under)</u>	
			<u>Engineer's Estimate</u>	<u>Amount</u> <u>Percent</u>
O.C. McDonald Co. Inc.	San José	\$158,026	\$8,026	5%
<b>Engineer's Estimate</b>		<b>\$150,000</b>		
Environmental Systems Inc., of Northern California	Santa Clara	\$ 142,400	(\$7,600)	(5%)
Bay City Boiler Engineering Co. Inc.	South San Francisco	\$136,000	(\$14,000)	(9%)

Staff reviewed and analyzed all three bids and determined them to be responsive. Bay City Boiler & Engineering Co. Inc. is the lowest bidder with a bid price of \$136,000. This low bid is 9% below the Engineer's Estimate.

The City has contracted with Bay City Boiler & Engineering Co. Inc. in the past for installation of a City-purchased waste heat recovery boiler. They completed the installation satisfactorily. Based on the references provided, and staff's experience with this contractor, staff believes that Bay City Boiler & Engineering Co. Inc. possesses adequate knowledge and technical capabilities to implement this project.

Council Policy provides for a standard contingency of 10% on public works projects involving utilities. Staff considers the standard contingency appropriate for this project.

### EVALUATION AND FOLLOW-UP

The project is currently within budget with a projected completion date of January 2010. No additional follow up actions with the Council are expected at this time. Should additional changes to the project be required due to change orders executed beyond the appropriated contingency amount, staff will bring forward those changes for approval by the Council.

## POLICY ALTERNATIVES

### *Alternative # 1: Reject bid and drop the project.*

**Pros:** Cost saving as the project is not implemented

**Cons:** Continued use of the existing old and inefficient leaking waste heat recovery boiler will result in higher operations and maintenance costs.

**Reason for not recommending:** If the project is not implemented, the additional energy that can be captured by the new boiler will be lost and the operations and maintenance costs to operate existing boiler is expected to progressively increase every year.

## PUBLIC OUTREACH/INTEREST

- Criteria 1:** Requires Council action on the use of public funds equal to \$1 million or greater. **(Required: Website Posting)**
- 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 action does not meet any of the above criteria, however, as a common practice, a Notice-to-Contractors inviting qualified firms to submit bids was published by the City Clerk's Office in the *San José Post Record*, and by the City's Project Manager on Environmental Services Department website and Public Works Department Bid Hotline. Bid documents were also sent to the Builder's Exchanges of the surrounding Bay Area cities and counties.

This memo has been posted on the City's website for June 16, 2009 Council Agenda.

## COORDINATION

This project and memorandum have been coordinated with the Office of Risk Management, Equality Assurance, City Manager's Budget Office, and the City Attorney's Office. This item is scheduled to be heard at the June 11, 2009 Treatment Plant Advisory Committee meeting.

## FISCAL/POLICY ALIGNMENT

This project is consistent with the Council approved Budget Strategy to focus on rehabilitating aging Water Pollution Control Plant (Plant) infrastructure, improve efficiency, and reduce operating costs. This project is also consistent with the City efforts to reduce energy

consumption in the City facilities which is one of the strategies for achieving the adopted Green Vision Goals.

**COST IMPLICATIONS**

1. AMOUNT OF RECOMMENDATION/COST OF PROJECT: \$156,500
2. COST OF PROJECT
 

Construction	\$ 136,000
Contingency	\$ 13,600
<b>TOTAL PROJECT COSTS</b>	<b>\$ 149,600</b>
Prior Year Expenditures	\$0
<b>REMAINING PROJECT COSTS</b>	<b>\$ 149,600</b>
3. SOURCE OF FUNDING: 512 – San José-Santa Clara Treatment Plant Capital Fund.
4. FISCAL IMPACT: Existing funds are available for this project. No additional appropriation action is required.

**BUDGET REFERENCE**

Fund #	Appn #	Appn. Name	RC #	Total Appn.	Estimated Amount for Contract	Adopted CIP Page	Last Budget Action (Date, Ord. No.)
<b>Remaining Project Costs</b>				<b>\$149,600</b>			
Current Funding Available							
512	5332	Equipment Replacement	152555	\$6,430,000	\$149,600	V158	6/24/2008, Ord. No. 28349
<b>Total Current Funding Available</b>				<b>\$6,430,000</b>			
<b>Additional Funding Recommended</b>							
<b>Total Funding for Remaining Project Costs</b>				<b>\$6,430,000</b>			

HONORABLE MAYOR AND CITY COUNCIL

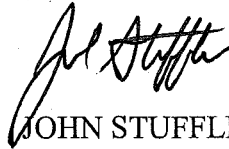
5-26-09

Subject: Waste Heat Recovery Boiler A-1 Replacement

Page 5

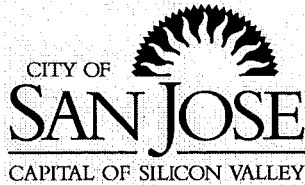
**CEQA**

Exempt: PP09-079



JOHN STUFFLEBEAN  
Director, Environmental Services

For questions please call Ting Ong, Senior Engineer, Technical Support Services, Environmental Services Department, at (408) 945- 5132.



# Memorandum

**TO:** HONORABLE MAYOR AND  
CITY COUNCIL

**FROM:** John Stufflebean

**SUBJECT:** SEE BELOW

**DATE:** 05-26-09

Approved

*Deanne Silva*

Date

*5/26/09*

**COUNCIL DISTRICT:** City-Wide

**SUBJECT: REPORT ON BIDS AND AWARD OF CONTRACT TO THE LOW BIDDER, PACIFIC INFRASTRUCTURE, FOR THE SAN JOSÉ/SANTA CLARA WATER POLLUTION CONTROL PLANT, FY 2008-2009 CAPITAL IMPROVEMENT PROGRAM, NITRIFICATION GATE AND CHANNEL AERATION IMPROVEMENTS PROJECT**

## RECOMMENDATION

Report on bids and award of construction contract for the project entitled "San José/Santa Clara Water Pollution Control Plant, FY 2008-2009 Capital Improvement Program, Nitrification Gate and Channel Aeration Improvements Project," to the low bidder, Pacific Infrastructure, in the amount of \$1,684,000, and approval of a 15% contingency in the amount of \$253,000.

## OUTCOME

Award of this construction project will provide for easier maintenance, add operational flexibility, improve maintainability and increase energy efficiency of the Nitrification treatment facilities at the Plant.

## BACKGROUND

The Nitrification treatment facilities, which provide secondary biological treatment, were built in the mid-1970s. The facilities, originally designed to allow for isolation of either Battery A or Battery B of the Nitrification treatment facilities, enabled staff to perform major system maintenance work on one battery while the other is in operation. Over the years, the concrete embedded steel frames for the isolation gates located at the influent channels to Battery A and Battery B have become severely corroded, eliminating the operational flexibility to isolate either batteries.



5-26-09

Subject: Nitrification Gate and Channel Aeration Improvements Project

Page 2

The Nitrification treatment facilities also include a coarse bubble aeration system designed to keep wastewater solid particles in the influent channels in suspension and maintain dissolved oxygen levels in the mixed liquor channels. Mixed liquor channels convey wastewater from the Nitrification aeration tanks to the Nitrification clarifiers. An existing common air header distributes air to both the influent and mixed liquor channels and balancing the air flow to the channels has been extremely difficult. In addition, the existing aeration piping components, which includes pivoting piping arms, valves, and diffusers, are badly corroded and leaking, requiring frequent repair or replacement. As a result, it is difficult to maintain uniform air flow throughout the channels.

This project will provide new gate frames at the entrance to each influent channel at Batteries A and B and a new stainless steel isolation gate. This project will also reconfigure the existing combined air system with a separate aeration system to the influent channels and the mixed liquor channels and replace existing air piping, valves, and diffusers.

### ANALYSIS

The project was advertised for bids and a total of five bids were received and opened on May 7, 2009 with the following results:

<u>Contractor</u>	<u>City</u>	<u>Bid Amount</u>	<u>Variance Over/ (Under)</u>	
			<u>Engineer's Estimate Amount</u>	<u>Percent</u>
Gantry Constructors, Inc.	Clarkdale, AZ	\$2,122,000	\$352,537	19.9 %
Monterey Mechanical Co.	Oakland	\$1,988,000	\$218,537	12.4 %
D. W. Nicholson Corp.	Hayward	\$1,890,000	\$120,537	6.8 %
<b>Engineer's Estimate</b>		<b>\$1,769,463</b>		
Anderson Pacific Engineering Construction, Inc.	Santa Clara	\$1,720,000	(\$49,463)	(2.8 %)
Pacific Infrastructure	Pleasanton	\$1,684,000	(\$85,463)	(4.8 %)

Staff received and analyzed all five submitted bids and determined all of them to be responsive. Pacific Infrastructure is the lowest bidder with a bid price of \$1,684,000. This low bid is 4.8 % below the Engineer's Estimate.

Council Policy provides for a standard contingency of 10% on public works projects involving utilities. However, staff recommends a 15% contingency because this project involves connections to existing air piping, electrical and control systems, and other utilities located inside equipment galleries and other areas that are difficult to access. In addition, while the initial condition assessment of an existing air header piping indicated that the pipe is in good condition and can be reused, portions of the pipe may need to be replaced during construction. The 15% contingency is expected to cover for any unanticipated tasks necessary for proper completion of this work.

### **EVALUATION AND FOLLOW-UP**

The project is currently within budget with a projected completion date of February 2010. No additional follow up actions with the Council are expected at this time. Should additional changes to the project be required due to change orders executed beyond the appropriated contingency amount, staff will bring forward those changes for approval by the Council.

### **POLICY ALTERNATIVES**

**Alternative #1:** Reject bid and drop the project.

**Pros:** Cost savings if the project is not implemented.

**Cons:** Isolation gate and aeration system for the Nitrification channels will not be installed or replaced.

**Reason for not recommending:** If the project is not implemented, Nitrification Batteries A and B cannot be isolated for major maintenance work and any major maintenance would require shutting down the entire Nitrification treatment facilities. In addition, continued use of existing deteriorated and leaking channel aeration piping will result in escalating energy consumption and operation and maintenance costs.

### **PUBLIC OUTREACH/INTEREST**

- Criterion 1: Requires Council action on the use of public funds equal to \$1 million or greater. (Required: **web Posting**)
- Criterion 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**)
- Criterion 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 action meets Criterion 1 above. A Notice to Contractors inviting qualified firms to submit bids was published by the City Clerk Office in the *San José Post Record*, and by the City's Project Manager on Environmental Services Department website and Public Works Department Bid Hotline. Bid documents were also sent to the Builder's Exchanges of the surrounding Bay area cities and counties.

This memo has been posted on the City's website for June 16, 2009 Council Agenda.

### **COORDINATION**

This project and memorandum have been coordinated with the Office of Risk Management, Equality Assurance, City Manager's Budget Office, and the City Attorney's Office. This item is scheduled to be heard at the June 11, 2009 Treatment Plant Advisory Committee meeting.

### **FISCAL/POLICY ALIGNMENT**

This project is consistent with the Council approved Budget Strategy to focus on rehabilitating aging Water Pollution Control Plant (Plant) infrastructure, improve efficiency, and reduce operating costs. This project is also consistent with City efforts to reduce energy consumption in City facilities, which is one of the strategies for achieving the adopted Green Vision Goals.

### **COST IMPLICATIONS**

1. AMOUNT OF RECOMMENDATION/COST OF PROJECT: \$1,937,000
2. COST OF PROJECT

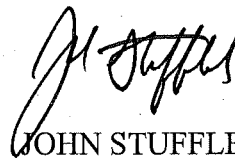
Construction	\$1,684,000
Contingency	<u>\$253,000</u>
<b>TOTAL PROJECT COSTS</b>	<b>\$1,937,000</b>
Prior Year Expenditures	\$0
<b>REMAINING PROJECT COSTS</b>	<b>\$1,937,000</b>
3. SOURCE OF FUNDING: 512 – San José-Santa Clara Treatment Plant Capital Fund.
4. FISCAL IMPACT: Existing funds are available for this project. No additional appropriation action is required.

**BUDGET REFERENCE**

Fund #	Appn #	Appn. Name	RC #	Total Appn.	Estimated Amount for Contract	Adopted CIP Page	Last Budget Action (Date, Ord. No.)
<b>Remaining Project Costs</b>				<b>\$1,937,000</b>			
<b>Current Funding Available</b>							
512	4332	Equipment Replacement	152605	\$6,430,000	\$1,937,000	V157	6/24/2008, Ord. No. 28349
<b>Total Current Funding Available</b>				<b>\$6,430,000</b>			
<b>Additional Funding Recommended</b>							
<b>Total Funding for Remaining Project Costs</b>				<b>\$6,430,000</b>			

**CEQA**

Exempt: PP09-067



JOHN STUFFLEBEAN  
Director, Environmental Services

For questions please call Ting Ong, Senior Engineer, Technical Support Services, Environmental Services Dept., at (408) 945- 5132.

**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

# Water Pollution Control Capital Program

## 2010-2014 Proposed Capital Improvement Program

### Overview

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#### Introduction

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

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

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

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

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

#### Program Priorities and Objectives

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

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

#### Sources of Funding

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

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

# Water Pollution Control Capital Program

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## 2010-2014 Proposed Capital Improvement Program

### Overview

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

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

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

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

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

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

#### Program Highlights

##### Plant Electrical Reliability Project

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

##### Plant Master Plan Project

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

Four key conditions drive the need for the

# Water Pollution Control Capital Program

## 2010-2014 Proposed Capital Improvement Program

### Overview

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

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

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

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

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

##### South Bay Action Plan

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

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

##### Plant Infrastructure Needs Improvements

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

##### Other Projects

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



# Water Pollution Control Capital Program

## 2010-2014 Proposed Capital Improvement Program

### Overview

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

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

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

#### Reserve for Equipment Replacement

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

- The State Water Resources Control Board's (SWRCB) Policy for implementing the State Revolving Fund for Construction of Wastewater

Treatment requires that annual revenue requirements include funds for the replacement of major equipment needed to maintain the capacity and performance of the treatment plant over its useful life.

- Compliance with the SWRCB's policy is a requirement of State Revolving Fund Loan Agreements. Equipment replacement of \$9.6 million and a reserve of \$5.0 million are included in the 2010-2014 Proposed CIP to satisfy this requirement.

- The Clean Water Financing Authority (CWFA) Bond Covenants require that a reserve be maintained at a minimum level of \$5.0 million to help pay the costs of extraordinary repairs and for renewal and replacement of the treatment plant when insurance and other funds budgeted for such purposes are exhausted, or are insufficient to meet the need.

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

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

**Overview**

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

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

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

**Operating Budget Impact**

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

SOURCE AND USE OF FUNDS SUMMARY

	Estimate					5-YEAR TOTAL
	2008-2009	Re-Budget	2009-20010	2010-11	2011-12	
<b>SOURCE OF FUNDS</b>						
S/SC TREATMENT PLANT CAPITAL FUND(512)						
Beginning Fund Balance	60,058,826		34,434,907	24,143,907	7,339,907	19,607,907
Reserve for Encumbrances	37,371,081				1,061,000	1,455,000
Interest Income	4,126,000		1,310,000	1,092,000	1,061,000	1,145,000
Contribution from City of Santa Clara & Agencies						
Equipment Replacement	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
SRF Loan repayment	1,384,000		1,384,000	1,384,000	1,384,000	1,384,000
2005 Bond Debt Service Repayment	1,215,000		1,234,000	1,233,000	1,229,000	1,227,000
2009 Bond Repayment Contributions	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
Capital Project Cost from Fund (541)	12,928,000		18,928,000	23,000,000	37,000,000	45,000,000
2009 Bond Deposit from Fund 541	0		7,000,000	0	0	0
Debt Service Payment from Fund (541)	5,161,000		5,747,000	5,744,000	5,727,000	5,720,000
2009 Bond Payment from Fund 541	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
Miscellaneous Revenue	0		0	0	0	0
Gain/Loss on Investments	0		0	0	0	0
2006 Bond Sale Proceeds	0		0	0	0	0
Calpine MEC Facilities Repayment	389,000		389,000	389,000	389,000	389,000
USBR Grant (SBWRP)	500,000		500,000	0	0	0
<b>TOTAL SOURCE OF FUNDS</b>	<b>136,650,907</b>	<b>0</b>	<b>87,660,907</b>	<b>79,842,907</b>	<b>71,273,907</b>	<b>93,275,907</b>
<b>USE OF FUNDS</b>						
<b>Water Pollution Control Managed Projects</b>						
Computer & Inst. Improvements	0					
Headworks Redundancy Modifications	0					
Land Acquisition & Improvements	0		250,000	0	0	0
Technical Services Building	2,000					
Public Art Reserve	521,000		138,000	557,000	377,000	425,000
Headworks Enhancement	0		500,000	3,500,000	0	0
Alternative Disinfection	10,185,000		0	0	0	0
Digester Gas Line Replacement	0		0	10,120,000	180,000	0
DAF Pressure Retention Tank & Valves	650,000		0	0	0	1,100,000
ESB Building Rehabilitation	6,000,000		0	0	0	0
Filtration Action Plan	0		0	1,000,000	1,000,000	2,500,000
Fire Line Replacement	0		0	200,000	200,000	400,000
Inactive Lagoons Bio-Solids Removal	0		0	0	0	0
M5, Ring Buss & Cable replacement	9,796,000		0	0	0	0
Plant Electrical Reliability	5,186,000		20,500,000	20,000,000	9,000,000	6,000,000
SBWR Reservoir Facility	0		6,000,000	0	0	0
<b>TOTAL USE OF FUNDS</b>	<b>136,650,907</b>	<b>0</b>	<b>87,660,907</b>	<b>79,842,907</b>	<b>71,273,907</b>	<b>93,275,907</b>
						<b>106,135,907</b>
						<b>355,088,907</b>

SOURCE AND USE OF FUNDS SUMMARY

	Estimate						5-YEAR TOTAL	
	2008-2009	ReBudget	2009-2010	2010-2011	2011-2012	2012-2013		2013-2014
<b>USE OF FUNDS (Cont'd)</b>								
<b>Water Pollution Control Managed Projects (Cont'd)</b>								
Digester Rehabilitation	700,000	0	2,000,000	9,500,000	10,000,000	10,000,000	10,000,000	41,500,000
Sec. & Nitritf. Clarifier Upgrade Project	0	0	1,000,000	2,000,000	4,000,000	4,000,000	4,000,000	15,000,000
Warehousing Facility Additions	0	0	0	130,000	1,100,000	0	0	1,230,000
WPCP Reliability Improvements	1,476,000	0	0	0	0	0	0	0
Plant Reliability Improvements Phase 2	0	0	0	0	0	5,000,000	0	5,000,000
<b>WSP Managed Projects</b>								
ESD MIS Improvements	247,000	0	0	0	0	0	0	0
Lab Information Management System Replaceme	88,000	0	0	0	0	0	0	0
Salt Marsh Restoration	63,000	0	0	0	0	0	0	0
South Bay Water Recycling Program	0	0	0	0	0	0	0	0
Revised SBAP - SBWR Extension	20,783,000	0	389,000	389,000	389,000	389,000	389,000	1,945,000
<b>Recurring Projects</b>	<b>55,697,000</b>	<b>0</b>	<b>30,777,000</b>	<b>47,396,000</b>	<b>26,246,000</b>	<b>29,814,000</b>	<b>21,912,000</b>	<b>156,145,000</b>
<b>Construction Projects Total</b>								
Equipment Replacement	7,031,000	0	2,380,000	2,150,000	1,925,000	1,660,000	1,525,000	9,640,000
Plant Infrastructure Improvements	11,927,000	0	5,738,000	8,840,000	11,800,000	13,110,000	20,770,000	60,258,000
Unanticipated/Critical Repairs	352,000	0	250,000	250,000	250,000	250,000	250,000	1,250,000
<b>Total Construction</b>	<b>74,987,000</b>	<b>0</b>	<b>39,145,000</b>	<b>58,636,000</b>	<b>40,221,000</b>	<b>44,834,000</b>	<b>44,457,000</b>	<b>227,293,000</b>
<b>Non-Construction</b>								
2009 Bond Deposit	7,102,000	0	0	0	0	0	0	25,000
Payment for CWFA Trustee	82,000	0	5,000	5,000	5,000	5,000	5,000	4,800,000
Plant Master Plan (see Reserve Below)	4,828,000	0	2,400,000	2,400,000	0	0	0	4,800,000
SRF Loan Repayment (Aprpn 6590)	4,464,000	0	4,464,000	4,464,000	4,464,000	4,464,000	4,464,000	22,330,000
Transfer to CWFA Debt Service Fund	10,723,000	0	6,981,000	6,977,000	6,956,000	6,947,000	6,952,000	34,813,000
Transfer to CWFA Debt Service Fund	0	0	0	0	0	0	0	0
City Hall Debt Service	18,000	0	12,000	13,000	14,000	11,000	12,000	62,000
PW Capital Management Costs	12,000	0	5,000	8,000	6,000	6,000	6,000	31,000
Reserve for Plant Master Plan	0	0	0	0	0	5,000,000	5,000,000	10,000,000
Reserve for Equipment Replacement	0	0	5,000,000	0	0	0	0	5,000,000
Reserve for Electrical Reliability	0	0	5,305,000	0	0	0	0	5,305,000
Reserve for Rate Studies	0	0	200,000	0	0	0	0	200,000
<b>Total Non-Construction</b>	<b>27,229,000</b>	<b>0</b>	<b>24,372,000</b>	<b>13,867,000</b>	<b>11,445,000</b>	<b>16,453,000</b>	<b>16,439,000</b>	<b>82,556,000</b>
<b>Total Expenditures</b>	<b>102,216,000</b>	<b>0</b>	<b>63,517,000</b>	<b>72,503,000</b>	<b>51,666,000</b>	<b>61,267,000</b>	<b>60,896,000</b>	<b>309,849,000</b>
Ending Fund Balance	34,434,907	0	24,143,907	7,339,907	19,607,907	32,008,907	45,239,907	45,239,907
<b>TOTAL USE OF FUNDS</b>	<b>136,650,907</b>	<b>0</b>	<b>87,660,907</b>	<b>79,842,907</b>	<b>71,273,907</b>	<b>93,275,907</b>	<b>106,135,907</b>	<b>355,088,907</b>

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

**1. Public Art**

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

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

**Justification:** This allocation is required to comply with the revisions to the Public Art Master Plan adopted by the City Council on March 13, 2007.

**EXPENDITURE SCHEDULE (000'S)**

Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Public Art		521	521	138	557	377	425	423	1,920		
<b>TOTAL</b>		<b>521</b>	<b>521</b>	<b>138</b>	<b>557</b>	<b>377</b>	<b>425</b>	<b>423</b>	<b>1,920</b>		

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

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

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

None

**Major Changes in Project Cost:**

N/A

**Notes:**

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

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

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

**2. Digester Rehabilitation**

CSA: Environmental and Utility Services Initial Start Date: 3rd Qtr. 2006  
 CSA Outcome: Healthy Streams, Rivers, Marsh and Bay Revised Start Date: 3rd Qtr. 2008  
 Department: Environmental Services Initial Completion Date: 2nd Qtr. 2008  
 Council District: 4 Revised Completion Date: 4th Qtr. 2018  
 Location: Water Pollution Control Plant

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

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

**EXPENDITURE SCHEDULE (000'S)**

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

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

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

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

None

**Major Changes in Project Cost:**

2008-2012 CIP - increase of \$1.6 million based on revised estimates during initial study.  
 2009-2013 CIP - increase of \$84 million to fund construction/rehabilitation costs due to increased project scope.  
 2010-2014 CIP - increase of \$11.5 million due to increased project scope.

**Notes:**

Replaces a formerly ongoing allocation titled "Scum Digestion".

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

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

**3. Headworks Enhancement**

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

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

**Justification:** This project will allow for the old headworks, which was built in the mid 1950s and early 1960s, to be shutdown for maintenance and rehabilitation.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Design				330					330		330
Bid & Award				10					10		10
Construction				160	3,500				3,660		3,660
<b>TOTAL</b>				<b>500</b>	<b>3,500</b>				<b>4,000</b>		<b>4,000</b>
FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund				500	3,500				4,000		4,000
<b>TOTAL</b>				<b>500</b>	<b>3,500</b>				<b>4,000</b>		<b>4,000</b>
ANNUAL OPERATING BUDGET IMPACT (000'S)											
None											

**Major Changes in Project Cost:**

None

**Notes:**

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

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

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

**4. Land Management & Improvements**

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

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

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

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

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

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

None

**Major Changes in Project Cost:**

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

**Notes:**

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

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



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

**5. Plant Electrical Reliability**

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

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

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

<b>EXPENDITURE SCHEDULE (000'S)</b>											
Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Design	9	5,186	5,186								5,195
Construction				20,500	20,000	9,000	6,000	4,600	60,100	15,000	75,100
<b>TOTAL</b>	<b>9</b>	<b>5,186</b>	<b>5,186</b>	<b>20,500</b>	<b>20,000</b>	<b>9,000</b>	<b>6,000</b>	<b>4,600</b>	<b>60,100</b>	<b>15,000</b>	<b>80,295</b>

<b>FUNDING SOURCE SCHEDULE (000'S)</b>											
San José-Santa Clara Treatment Plant Capital Fund	9	5,186	5,186	20,500	20,000	9,000	6,000	4,600	60,100	15,000	80,295
<b>TOTAL</b>	<b>9</b>	<b>5,186</b>	<b>5,186</b>	<b>20,500</b>	<b>20,000</b>	<b>9,000</b>	<b>6,000</b>	<b>4,600</b>	<b>60,100</b>	<b>15,000</b>	<b>80,295</b>

**ANNUAL OPERATING BUDGET IMPACT (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.

**Notes:**

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

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

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

**6. SBWR Reservoir Facility**

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

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

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

**EXPENDITURE SCHEDULE (000'S)**

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

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

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

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

None

**Major Changes In Project Cost:**

None

**Notes:**

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

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

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

**7. Secondary and Nitrification Clarifier Rehabilitation**

CSA: Environmental and Utility Services Initial Start Date: 3rd. Qtr. 2009  
 CSA Outcome: Reliable Utility Infrastructure Revised Start Date:  
 Department: Environmental Services Initial Completion Date: 4th Qtr. 2018  
 Council District: 4 Revised Completion Date:  
 Location: Water Pollution Control Plant

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

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

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

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

**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: N/A

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

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

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b>	Ongoing
<b>CSA Outcome:</b>	Healthy Streams, Rivers, Marsh and Bay	<b>Revised Start Date:</b>	
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b>	Ongoing
<b>Council District:</b>	4	<b>Revised Completion Date:</b>	
<b>Location:</b>	Water Pollution Control Plant		

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

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

**EXPENDITURE SCHEDULE (000'S)**

Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Development Property & Land Design Construction		20,783	20,783	389	389	389	389	389	1,945		
<b>TOTAL</b>		<b>20,783</b>	<b>20,783</b>	<b>389</b>	<b>389</b>	<b>389</b>	<b>389</b>	<b>389</b>	<b>1,945</b>		

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

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

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

None

**Major Changes In Project Cost:**

N/A

**Notes:**

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

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

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

**9. Equipment Replacement**

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

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

**Justification:** Replacement and rehabilitation of WPCP equipment is necessary as a result of wear, obsolescence or regulatory requirements. Replacement and rehabilitation will ensure continued efficient operation of the Plant facilities.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Equipment		7,031	7,031	2,380	2,150	1,925	1,660	1,525	9,640		
<b>TOTAL</b>		<b>7,031</b>	<b>7,031</b>	<b>2,380</b>	<b>2,150</b>	<b>1,925</b>	<b>1,660</b>	<b>1,525</b>	<b>9,640</b>		

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

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

None

**Major Changes in Project Cost:**

N/A

**Notes:**

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

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

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

**10. Plant Infrastructure Improvements**

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

**Description:** This allocation provides for improvements, rehabilitation, or replacement of existing Plant infrastructure and fixed works; process facilities; buildings, structures and supporting facilities; piping and auxiliaries; instrumentation; and electrical generation, distribution and control systems.

**Justification:** Rehabilitation, improvements, and replacement of capital infrastructure are necessary to maintain process viability and to ensure regulatory compliance, structural integrity, reliability, functionality, and safety of Plant buildings and process facilities for intended uses.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Construction		11,927	11,927	5,738	8,840	11,800	13,110	20,770	60,258		
<b>TOTAL</b>		<b>11,927</b>	<b>11,927</b>	<b>5,738</b>	<b>8,840</b>	<b>11,800</b>	<b>13,110</b>	<b>20,770</b>	<b>60,258</b>		

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

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

None

**Major Changes in Project Cost:**

N/A

**Notes:**

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

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

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

**11. Unanticipated/Critical Repairs**

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

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

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

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Construction		332	332	250	250	250	250	250	1,250		
<b>TOTAL</b>		<b>332</b>	<b>332</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>1,250</b>		
FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund		332	332	250	250	250	250	250	1,250		
<b>TOTAL</b>		<b>332</b>	<b>332</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>250</b>	<b>1,250</b>		
ANNUAL OPERATING BUDGET IMPACT (000'S)											
None											

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

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

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

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

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

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

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

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

**EXPENDITURE SCHEDULE (000'S)**

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

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

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

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

None

**Major Changes in Project Cost:**

N/A

**Notes:**

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

<b>FY Initiated:</b>	Ongoing	<b>Redevelopment Area:</b>	N/A
<b>Initial Project Budget:</b>		<b>SNI Area:</b>	N/A
<b>Appn. #:</b>	6584	<b>USGBC LEED:</b>	N/A



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

**13. Plant Master Plan**

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

**Description:** This Plant Master Plan (PMP) would provide San José/Santa Clara Water Pollution Control Plant with a phased program of recommended wastewater treatment facilities and management programs to accommodate planned growth and to meet existing and anticipated regulatory requirements through the year 2040. The PMP will need to address both public health and environmental protection issues while ensuring reliable service at affordable rates for area customers.

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

**EXPENDITURE SCHEDULE (000'S)**

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

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

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

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

None

**Major Changes in Project Cost:**

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

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

**Notes:**

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

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

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

**14. Public Works Capital Management Costs**

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

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

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

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Program Management		12	12	5	8	6	6	6	31		
<b>TOTAL</b>		<b>12</b>	<b>12</b>	<b>5</b>	<b>8</b>	<b>6</b>	<b>6</b>	<b>6</b>	<b>31</b>		

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

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

None

**Major Changes in Project Cost:**

N/A

**Notes:**

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

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

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

**15. State Revolving Fund Loan Repayment**

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

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

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

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Debt Service	41,348	4,464	4,464	4,464	4,464	4,464	4,464	4,464	22,320	22,320	90,452
<b>TOTAL</b>	<b>41,348</b>	<b>4,464</b>	<b>4,464</b>	<b>4,464</b>	<b>4,464</b>	<b>4,464</b>	<b>4,464</b>	<b>4,464</b>	<b>22,320</b>	<b>22,320</b>	<b>90,452</b>
FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund	41,348	4,464	4,464	4,464	4,464	4,464	4,464	4,464	22,320	22,320	90,452
<b>TOTAL</b>	<b>41,348</b>	<b>4,464</b>	<b>4,464</b>	<b>4,464</b>	<b>4,464</b>	<b>4,464</b>	<b>4,464</b>	<b>4,464</b>	<b>22,320</b>	<b>22,320</b>	<b>90,452</b>
ANNUAL OPERATING BUDGET IMPACT (000'S)											
None											

**Major Changes in Project Cost:**

None

**Notes:**

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

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

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

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

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

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

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

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

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

None

**Major Changes In Project Cost:**

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

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

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

**Notes:**

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

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

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

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

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

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

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
Reserve		5,305		5,305					5,305		5,305
<b>TOTAL</b>		<b>5,305</b>		<b>5,305</b>					<b>5,305</b>		<b>5,305</b>

FUNDING SOURCE SCHEDULE (000'S)											
Cost Elements	Prior Years	2008-09 Appn.	2008-09 Estimate	2009-10	2010-11	2011-12	2012-13	2013-14	5-Year Total	Beyond 5-Year	Project Total
San José-Santa Clara Treatment Plant Capital Fund		5,305		5,305					5,305		5,305
<b>TOTAL</b>		<b>5,305</b>		<b>5,305</b>					<b>5,305</b>		<b>5,305</b>

ANNUAL OPERATING BUDGET IMPACT (000'S)											
None											

**Major Changes in Project Cost:**

None

**Notes:**

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

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

**18. Reserve for Equipment Replacement**

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

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

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

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

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

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

None

**Major Changes in Project Cost:**

None

**Notes:**

Unexpended funds are rebudgeted each year.

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

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

**19. Reserve for Rate Studies**

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

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

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

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

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund		200		200					200		200
<b>TOTAL</b>		<b>200</b>		<b>200</b>					<b>200</b>		<b>200</b>

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

None

**Major Changes in Project Cost:**

None

**Notes:**

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

# Water Pollution Control

## 2010-2014 Proposed Capital Improvement Program

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

---

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

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

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

---

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

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

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

---

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

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

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

---

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

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

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

---

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

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

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

---



## Water Pollution Control

### 2010-2014 Proposed Capital Improvement Program

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

---

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

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

---

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

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

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**PROPOSED**

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

700 Los Esteros Road  
San Jose, California 95134

**2009 – 2010**

**Operating & Maintenance Budget**

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

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

Chuck Reed	(Chairperson)	Mayor, City of San Jose
Nora Campos		Councilmember, City of San Jose
John Gatto		Boardmember, Cupertino Sanitary District
Bob Livengood		Mayor, City of Milpitas
Patricia Mahan		Mayor, City of Santa Clara
Kevin Moore		Councilmember, City of Santa Clara
Madison, Nguyen		Councilmember, City of San Jose
Kenneth Yeager		Boardmember, West Valley Sanitation District
Ed Shikada		Deputy City Manager, City of San Jose

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

700 Los Esteros Road  
San Jose, California 95134

**2009-2010**

**P R O P O S E D**

**Operating & Maintenance Budget**

Environmental Services Department  
City of San Jose

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

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

**BUDGET SUMMARY**

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

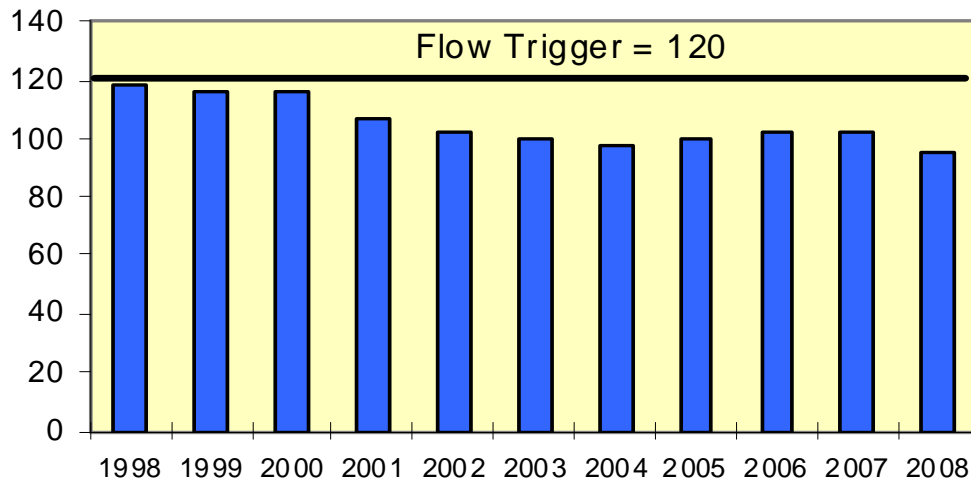
**BUDGET HIGHLIGHTS 2009-2010**

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

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



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



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

**TREATMENT PLANT OPERATING FUND  
 BUDGET SUMMARY**

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

**ESTIMATED COST DISTRIBUTION**

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

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

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

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

**OVERVIEW**

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**T**his year's TPAC Budget continues to reflect the funding allocations by core service, in accordance with the City's Investing in Results Program. As previously reported, the Environmental Services Department has six core services:

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

The three core services that receive funding from the Treatment Plant Operating Fund are Manage Wastewater, Manage Recycled Water, and Protect Natural & Energy Resources. Through the Protect Natural & Energy Resources core service, the Department's water conservation programs assist and conduct outreach to businesses and residents in an effort to promote water conservation and thereby reduce the flow of wastewater to the Water Pollution Control Plant. The Manage Recycled Water core service diverts treated Plant effluent from the Bay to agricultural, landscaping, and other uses. The Manage Wastewater core service funds all maintenance and operations functions of the Plant, as well as the Laboratory, Source Control Program, and permit development and compliance.

In addition to these three core services, the Treatment Plant Operating Fund also funds a portion of Strategic Support services which provide administrative services to all core service programs within the Department. These services include public education, long range planning, financial management, computer services, clerical support, employee services, materials management, and facility management.

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

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

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

# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

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

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

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

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

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



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

**OVERVIEW CONTINUED**

**BUDGET SUMMARY**

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

# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

## Core Service: Manage Wastewater

### Core Service Purpose

---

**M**anage wastewater for suitable discharge into the South San Francisco Bay and for beneficial reuse to protect the environment and public health.

#### Key Operational Services:

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

### Performance and Resource Overview

---

**T**his core service's activities are primarily focused on providing wastewater treatment services to eight jurisdictions and 1.4 million residents in the South Bay, conducting industrial facility inspections, and activities to ensure compliance with the City's National Pollution Discharge Elimination System (NPDES) Wastewater permit. For the seventh consecutive year ending December 31, 2008, the San José/Santa Clara Water Pollution Control Plant (Plant) has achieved 100% compliance with its permit discharge requirements. This accomplishment has earned the Plant its third Platinum Peak Performance Award given by the National Association of Clean Water Agencies for 100% permit compliance for five or more consecutive years.

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

# San Jose/Santa Clara Water Pollution Control Plant







*Environmental Services Department*

## Core Service: Manage Wastewater

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

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

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

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

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

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

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

# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

## Core Service: Manage Wastewater

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

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

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

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

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

# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

**Core Service: Manage Wastewater**

## Budget Changes By Core Service

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<b>Proposed Core Service Changes</b>	<b>Positions</b>	<b>Treatment Plant Appropriations</b>
--------------------------------------	------------------	---------------------------------------

---

**1. Treatment Plant Bufferland Structure Demolition** **600,000**

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

**Performance Results:**

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

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

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

**Performance Results:**

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

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

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

**Performance Results:**

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

# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

**Core Service: Manage Wastewater**

## Budget Changes By Core Service

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<b>Proposed Core Service Changes</b>	<b>Positions</b>	<b>Treatment Plant Appropriations</b>
--------------------------------------	------------------	---------------------------------------

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

**Performance Results:**

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

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

**Performance Results:**

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

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

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

**Performance Results:**

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

# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

## Core Service: Manage Wastewater

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

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

# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

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

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

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# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

## Core Service: Manage Recycled Water

### Core Service Purpose

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**D**evelop, operate, and maintain a recycled water system that reduces effluent to the Bay and provides a reliable and high quality alternative water supply.

#### Key Operational Services:

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

### Performance and Resource Overview

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**T**he City's investment in South Bay Water Recycling (SBWR) supports the City's economic development goals by keeping the San José/Santa Clara Water Pollution Control Plant's discharges to South San Francisco Bay below the discharge flow trigger of 120 million gallons per day (mgd) set by the Regional Water Quality Control Board. By further developing recycled water use by businesses and institutions in San José and its tributary partners, the City helps protect endangered species habitat in the South Bay and provides an alternate supply of high-quality water for a variety of uses, thereby preserving our limited drinking water supplies. South Bay Water Recycling strives to achieve the City's Green Vision, which calls for 100% beneficial reuse of water, and also supports the Santa Clara Valley Water District's recent call for a mandatory 15% reduction in drinking water use.

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







# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

## Core Service: Manage Recycled Water

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

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

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

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

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

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

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

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

# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

## Core Service: Manage Recycled Water

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

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

### Budget Changes By Core Service

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

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

**Core Service: Manage Recycled Water**

Performance and Resource Overview (Cont'd.)

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

**Performance Results:**

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

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

*Environmental Services Department*

## Core Service: Protect Natural and Energy Resources

### Core Service Purpose

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**P**romote enhanced air quality, environmentally responsible land use, and conservation of water and energy resources.

#### Key Operational Services:

- Protect and Monitor Groundwater Quality**
- NPDES Permits Development**
- Habitat Protection**
- Water Conservation**

### Performance and Resource Overview

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




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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

**Key Operational Services:**

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

Performance and Resource Overview

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**K**ey initiatives in this area include annual reporting on the Environmental Services Department's special funds and rates, legislative research and advocacy.

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

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

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

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

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



# San Jose/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

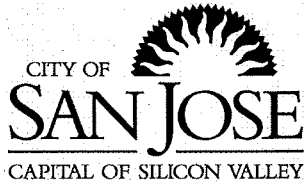
## Strategic Support

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

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

### Strategic Support Budget Changes

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



# Memorandum

**TO:** HONORABLE MAYOR  
AND CITY COUNCIL

**FROM:** John Stufflebean

**SUBJECT:** SEE BELOW

**DATE:** 06-02-09

Approved

Date

6/5/09

**COUNCIL DISTRICT:** City-Wide

**SUBJECT: AMENDMENT TO THE AGREEMENT WITH INTERNATIONAL DISPOSAL CORPORATION OF CALIFORNIA, INC., FOR DISPOSAL OF MUNICIPAL SOLID WASTE AND RELATED SERVICES**

## RECOMMENDATION

1. Adopt a resolution authorizing the City Manager to negotiate and execute an amendment to the Agreement with International Disposal Corporation of California, Inc. to:
  - a. Provide for the disposal of grease, grit, and screening, and the beneficial reuse of biosolids from the Water Pollution Control Plant, at an estimated annual expenditure of \$1,614,520 for Fiscal Year 2009-2010.
  - b. Reflect changes to the residential and commercial solid waste management program including, but not limited to, enabling the exclusive commercial franchisees to use the City's disposal capacity at the Newby Island Landfill at the City's rate, clarifying the compensation for baled residential recycling residue, providing for the processing of certain waste generated from the performance of municipal services, and redefining the basis for reimbursement of regulatory costs.
2. Direction to staff to explore feasibility, options and terms and conditions for an agreement that would allow International Disposal Corporation of California, Inc., to deliver leachate from Newby Island Sanitary Landfill to the San José/Santa Clara Water Pollution Control Plant and for the delivery of recycled water from the Plant to Newby using existing pipelines.

## **OUTCOME**

Approval of the recommendations would provide for continued disposal of grease, grit, and screenings, and beneficial reuse of biosolids from the San José/Santa Clara Water Pollution Control Plant (WPCP); update the Disposal Agreement to accommodate changes to Recycle Plus residential solid waste services and facilitate the redesign of the commercial solid waste service system; promote Green Vision and Zero Waste goals of 75% waste reduction by 2013, and zero waste by 2022; and allow staff to continue discussions with IDC for operational and administrative improvements for disposal of landfill leachate and delivery of recycled water.

## **EXECUTIVE SUMMARY**

The City entered into a long-term disposal service agreement with International Disposal Corporation of California, Inc. (IDC) in 1985 for the disposal of municipal solid waste at the Newby Island Landfill ("Disposal Agreement"). In 1995, the Disposal Agreement was amended, in part, to extend the term to December 31, 2020. The City's integrated waste management program has evolved and the Disposal Agreement must be amended to reflect changes to the Recycle Plus residential solid waste services and to implement proposed changes to the commercial solid waste service system.

The Disposal Agreement provides that the City must reimburse IDC for regulatory costs (i.e. costs which are incurred as a result of material changes to the laws or regulations). The regulatory cost is one factor in determining the total cost of disposal. The proposed amendments to the Disposal Agreement for disposal of residential and commercial solid waste are conditioned on payment of \$700,000 to IDC for the City's pro-rata share of the regulatory costs arising from laws and regulations adopted; and material changes in the enforcement or interpretation of laws or regulations on or before December 31, 2008.

Under separate agreements, WPCP also contracts with IDC for disposal of grease, grit, and screening, and with Browning-Ferris Industries of California, Inc. (BFI) for beneficial reuse of biosolids. In order to provide for uninterrupted services, new contracts for these services to WPCP must be executed by September 1, 2009. The proposal is to amend the Disposal Agreement to include services to WPCP.

The proposed amendments to the Disposal Agreement would (1) resolve outstanding claims for reimbursement of regulatory costs; (2) redefine the basis for reimbursement of regulatory cost prospectively; (3) enable the exclusive commercial solid waste franchisees to use the City's disposal capacity at the same rate offered to the City; (4) provide for recycling of certain waste from City operations; (5) make other amendments to conform with the administration and operation of the solid waste management program; and (6) continue grease and screening disposal and biosolids reuse services to WPCP. The Administration recommends amending the Disposal Agreement to advance Green Vision and Zero Waste goals, and ensure that fees and taxes from the disposal of waste remain in the City.

## **BACKGROUND**

### SERVICES TO WATER POLLUTION CONTROL PLANT

**Reuse of Biosolids.** WPCP has contracted with BFI for the removal, transportation, and beneficial reuse of biosolids since 1993. Biosolids are the solids remaining from the treatment of wastewater. The biosolids are soil-like, and BFI uses the biosolids as alternative daily cover at the Newby Island Sanitary Landfill (Newby Island) which is located immediately north of the WPCP. When the City issued a Request for Proposal for this service in 2003, only two proposals were submitted. BFI submitted the low bid of \$13.03 per ton while Synagro submitted a bid at \$37.43 per ton. Synagro's bid was much higher due to their proposal to truck the material to Merced County to use for agricultural purposes. The 2003 agreement with BFI has expired and a contract for this service must be in place by September 1, 2009, so hauling can begin at the end of the drying season. The process for removal of biosolids has changed in practice and BFI removes the biosolids directly from the solar beds as opposed to City staff placing the material in stockpiles for later removal by BFI. This practice mitigates odor complaints and saves the City staff time.

**Disposal of grease, grit, and screenings.** Since 1985, the Disposal Agreement included the disposal of grease, grit, and screenings; however, the wet material could not be disposed at Newby Island until modern liners were installed in the late 1990s. In the interim, the material was transported to sites outside Santa Clara County for disposal. On May 18, 2004, the City Council approved the execution of a one-year service order and four one-year options to renew with Allied Waste (BFI) to provide WPCP with 1) containers to store grease, grit, and screenings on-site, and 2) the hauling and disposal of these materials. A new contract for these services must be in place by September 1, 2009. The WPCP Master Plan process, which is expected to be completed in the next three years, will also consider use of the grease in WPCP anaerobic digesters to recover energy.

**Proposal for Gas Pipeline.** The City has an agreement with Gas Recovery Systems, Inc. (GRS) to provide landfill gas from Newby Island to WPCP. This arrangement provides WPCP with affordable gas to power the facility. GRS installed one main pipeline to deliver the gas and two additional pipelines to purge the main line when it was first filled with landfill gas. The additional pipelines have not been used since and IDC proposes to use the additional pipelines to pump leachate from Newby Island for treatment at WPCP. Leachate is wastewater from the bottom of the landfill which is currently transported to WPCP for treatment by truck.

### SOLID WASTE DISPOSAL SERVICES

The City contracted for disposal capacity at Newby Island in 1986 with a term through 2016. The Disposal Agreement required the City to use or pay for 395,200 tons of disposal capacity at a price significantly below market rate. Starting in 1986, the City allowed Waste Management of Santa Clara County, the exclusive collector of residential and commercial solid waste, to use all of the disposal capacity. After Recycle Plus residential services began in 1993, Waste

management retained an allocation for disposal of commercial garbage until that exclusive service ended in 1994. The City amended the Disposal Agreement in 1995, in part, to extend the term through December 31, 2020 or conditionally until Newby Island stopped receiving waste; eliminate the "put or pay" requirement as consideration for directing the disposal of residential waste to the landfill; secure a corporate guaranty from BFI, IDC's then parent company; and resolve the disputed compensation for Fiscal Years 1991-1992 through 1994-1995. The City retained the right to dispose of commercial waste collected through exclusive contracts.

#### RECENT INTEGRATED WASTE MANAGEMENT PROGRAM CHANGES IMPACTING DISPOSAL AGREEMENT

**Recycle Plus Multi-Family Recycling Service Expansion.** Beginning July 1, 2008, the City required GreenTeam of San José (GreenTeam) and GreenWaste Recovery, Inc. (GreenWaste) to process all garbage from multi-family dwellings (MFDs). The garbage from MFDs is processed at the GreenWaste material recovery facility (MRF) in San José to remove additional recyclables such as cans, bottles and paper. The remaining material consists of largely food waste is composted at the Z-Best facility in southern Santa Clara County. For the January 2009 sample period, the expansion of recycling diverted 76% of the remaining MFD garbage, raising total MFD diversion to almost 80% including single-stream recycling. It is anticipated that this new process should reduce the disposal at Newby Island by approximately 55,000 tons a year.

**Single-stream Recycling Residue Disposal.** Recycle Plus contractors are responsible for arranging for the disposal of recycling residue. When the City switched to single-stream recycling in 2002, the amount of residue increased and California Waste Solutions (CWS) and GreenTeam decided to landfill outside of San José. While CWS and GreenTeam recognized some savings in disposal cost, this arrangement resulted in the City losing almost \$14 per ton in disposal fees and taxes and generated increased congestion and air emissions. Pursuant to the amendment to the Recycle Plus agreements, CWS and GreenTeam started sending their baled residue to Newby Island beginning July 1, 2008. IDC claims baled as opposed to loose residue increases the handling cost at the disposal site. Currently, CWS is paying more for disposal than the amount the City has reserved to reimburse for disposal cost and GreenTeam has not paid for any of the disposal cost. In the interim, a compensation differential of more than \$10,000 per month accumulates. The proposal to amend the Disposal Agreement would address the proper compensation for baled residue from the residential and commercial recycling stream.

#### ANALYSIS

Environmental Services Department staff from WPCP and Integrated Waste Management Divisions, with assistance from HFH Consulting, has been negotiating with IDC since January 2009 to resolve outstanding issues and evolving City disposal needs. The proposed amendments would benefit the City in several ways:

- Secure significantly lower rates than the Bay Area market for biosolids disposal while maintaining the operational advantages of delivering this material to Newby Island Landfill
- Maintain the existing competitive rates for grease, grit, and screenings disposal for the WPCP;
- Lower contractor payment to IDC over current rates for municipal solid waste disposal; and
- Increase the Citywide overall waste diversion and secure low rates to recycle certain waste generated from the performance of municipal services (i.e. City corporation yards).

The points of negotiation and how the proposed amendments would impact the services to WPCP and disposal of garbage are detailed below.

#### SERVICES TO THE WPCP

**Beneficial Reuse of Biosolids.** IDC agrees to haul and beneficially reuse biosolids from the WPCP for \$ 22.75 per ton for the period July 1, 2009 through June 30, 2014. The City would have the option to extend the term for one-year increments up to five years. If the City exercised these options, the rates would be subject to increase consistent with the CPI provisions of the Disposal Agreement.

The closest landfill that was able to accept biosolids as Alternate Daily Cover (ADC) and that was also willing to indicate a price that it could commit to if the service was open to competition, offered a lower disposal and reuse rate for biosolids delivered to them than IDC's proposed rate of \$22.75 per ton for hauling and reuse combined. However, the total cost to use that site, including hauling by a third party, would be more than \$5 per ton higher.

The proposed amendment would maintain all practices developed over the last five years, including direct loading of biosolids from the drying beds to IDC's trucks and use of the private road connecting WPCP to Newby Island to haul the material. Since Newby Island is immediately adjacent to the biosolids drying beds, the proposed use of the private roads would further reduce the distance to haul the material and mitigate the potential for odor complaints from residential and commercial neighbors.

Finally, the proposed amendment would limit WPCP's ability to direct fully dried biosolids to any location other than Newby Island during the initial five year period. After the first year, City has the right to direct biosolids to non-landfill applications (i.e., conversion technologies, land application) but not for landfill disposal or other landfill applications. If IDC can use all of the biosolids for each year, the City would reserve the ability to direct the following percentage of biosolids to other non-landfill facilities: 0% in 2009-2010; 10% of 2010-2011; 20% in 2011-2012; 20% in 2012-2013; and 20% in 2013-2014. However, if IDC cannot use all of the material for ADC, beneficial uses or other landfill application at Newby Island that counts as "diversion"

in the State's Disposal Reporting System, due to regulatory changes or revised permit conditions, for example, WPCP will be free to divert any such waste from Newby Island. Should the City exercise the option to extend the term, the proposal is to establish any limitations on delivery of specific quantities of biosolids at that time. WPCP will explore alternate uses for biosolids as part of the WPCP Master Plan process.

**Grease, grit, and screenings.** The proposed amendment to the Disposal Agreement would maintain the current rate of \$126.85 per load for providing and hauling containers of grease, grit, and screening from WPCP, while setting the tipping fee equal to that for residential and commercial garbage, which will change the current disposal cost of \$40.35 to \$42.19 in 2010-2011. For the same reasons discussed above, the Administration recommends that IDC be permitted to haul this material to Newby Island using the private road connecting the two properties. WPCP would reserve the ability to divert all the grease for its anaerobic digesters to another reuse facility.

#### PROPOSAL FOR GAS PIPELINE

The Administration seeks Council direction to continue negotiations with IDC and other parties regarding potential use of a gas pipeline to transport leachate from Newby Island for treatment at WPCP. The benefits of using the existing pipeline as opposed to trucking the materials include, but are not limited to, a lower cost to IDC with potential saving to disposal customers, and reduced fuel consumption and odor emissions. The negotiation may also include use of the second unused pipeline to transport recycled water from WPCP to operational areas of Newby Island. The current recycled water line is on McCarthy Boulevard, more than a half mile from Newby Island's active disposal, composting, and processing areas, while the existing lines between Newby Island and the WPCP stub out in those areas.

#### PROPOSED AMENDMENTS REGARDING DISPOSAL OF RESIDENTIAL AND COMMERCIAL SOLID WASTE

The proposed amendments to the Disposal Agreement for disposal of residential and commercial solid waste are conditioned on payment of \$700,000 to IDC for the City's pro-rata share of the regulatory costs arising from laws and regulations adopted; and material changes in the enforcement or interpretation of laws or regulations on or before December 31, 2008.

**Regulatory Cost Reimbursement.** The Administration proposes the following amendments to redefine and clarify the basis for reimbursement of regulatory costs:

- Regulatory cost claims would be limited to costs attributable to adoption of laws or regulations, or material changes in the enforcement or interpretation of laws or regulations affecting Newby Island on or after January 1, 2009. IDC shall not seek reimbursement for any regulatory cost arising from the adoption of laws or regulations on or before December 31, 2008, associated with the maintenance and development of the

landfill gas removal system; or affecting use of materials as alternative daily cover at Newby Island unless these changes are imposed by the San José Municipal Code.

- Beginning January 1, 2009, the formula to determine the City's pro-rata share of regulatory costs would not include certain materials and may not exceed 25% of IDC's total regulatory cost. The proposal is to exclude from the formula cover and inert construction material (i.e. clean soil, biosolids, concrete rubble, and asphalt), and material which is recycled and removed from Newby Island.
- Through 2012, the City would reimburse for any new regulatory cost after January 1, 2009 for the construction of cells designed for approximately 12 months of capacity. The reimbursement shall be amortized over a 12 month period and payment shall begin once construction is complete. After January 1, 2012, the standard for amortization and payment would be reevaluated based on the useful life of new cells and other capital costs.

**Disposal Allocation for Commercial Solid Waste.** The Administration proposes to offer the City's disposal capacity at Newby Island to the successful exclusive franchisees providing commercial solid waste services. The City would require the exclusive commercial franchisees to pay for the disposal capacity and reserves the right to have the new exclusive commercial contractors pay IDC directly for disposal of City commercial waste. If the City exercises this option, the City would contractually require the new commercial solid waste hauler(s) to make the payments to IDC and shall include provisions for facilitating payment disputes in the exclusive commercial agreements. The City anticipates that with a 75% diversion requirement for commercial waste, the City's current allocation of 320,000 tons would be more than adequate to accommodate the additional commercial processing residue and bypass waste. The amendment would increase the allocation to 395,200 tons, which would be sufficient to handle all of the exclusive commercial waste in case processing activities are not in place when the new commercial franchisees begin service. The City would reserve the ability to direct waste to diversion programs or facilities other than landfills and would not be obliged to pay for unused capacity.

**Solid Waste Disposal Cost.** By holding the current per ton payment to IDC and the annual reimbursement for Regulatory Costs flat for one year, the total price per ton for disposal in 2009-10 will be approximately \$43.16. The estimated disposal cost for Fiscal Year 2010-2011 would be reduced by 2.2% at \$42.19 per ton (i.e., \$21.89 and minimum \$20.30 for fees and taxes). This rate is subject to changes in the disposal fees and taxes. A new payment to offset the increased cost to handle baled residential recycling residue from CWS and GreenTeam pursuant to the Recycle Plus agreements would take effect immediately, and would also apply to other baled residues delivered in the future.

Beginning July 1, 2011, the Administration proposes to adjust the disposal cost to reflect the following:



- 1) The annual adjustment, which is based on changes in two price indices, would be modified so that the Consumer Price Index receives more weight than the Producer Price Index for diesel fuel (i.e. from 80% of the CPI change plus 20% of the diesel change, to 85% CPI and 15% diesel); and
- 2) The contractual adjustment to the combined index change would be modified from 0.68 to 0.80. The first change would reduce the volatility caused by the diesel index. The second would allow IDC to recover a larger share of annual cost increases and the City would benefit from a larger share of any cost decreases.

**Disposal of City Waste.** The City currently pays IDC only the applicable fees and taxes on waste generated or collected by the City in the performance of municipal services ("City Waste"), plus a share of Regulatory Costs. For City Wastes that are disposed, IDC absorbs the first \$2.00 per ton in State and County fees. The proposed amendment would require the City to reimburse IDC for any applicable fees and taxes. A new fee would be established of \$5.00 per ton for street sweepings or other materials readily used for cover or inert construction; and \$26.50 to process material from the City corporation yards or other waste suitable for processing at Newby Island's construction and demolition material line. The City would not commit to pay to divert the material from the City corporation yards until Fiscal Year 2010-2011.

In addition, the portion of the disposal capacity reserved for City Waste would be reduced from 80,000 tons per year to 60,000 tons per year excluding the amount processed and recycled at Newby Island. Finally, the amendment may include reasonable limitations on the amount of City Waste that can be delivered each day and/or restrictions on delivering during peak hours.

#### **Additional Amendments**

The Disposal Agreement currently requires IDC to purchase a performance bond. The Administration proposes to waive the performance bond requirement in lieu of a corporate guaranty from IDC's publicly traded parent company, Republic Services, Inc., and all of the intermediate corporate parents. This provision will be conditioned on IDC demonstrating to the City's satisfaction that the corporate guaranty is superior to the bond, based on the financial stability of the guarantors.

The Disposal Agreement would also be amended to eliminate IDC's obligation to contribute to the cost of waste characterization studies and to reflect the current operating hours and require City's written approval for any changes to the operating hours.

#### **EVALUATION AND FOLLOW-UP**

ESD proposes to return to Council for approval of an agreement regarding the potential use of the pipelines. Any such agreement with IDC will require coordination and consent by GRS and environmental reviews and necessary regulatory and Tributary Agency approvals prior to consideration by Council.

## POLICY ALTERNATIVES

*Alternative #1:* Take no action on Disposal Agreement.

**Pros:** The City could potentially reduce residential garbage disposal costs in Fiscal Year 2009-2010 and future years by not implementing these recommendations and by successfully taking the Regulatory Cost dispute to arbitration.

**Cons:** The City 1) could have insufficient disposal capacity for commercial waste; 2) would lose the immediate opportunity to contract for long-term disposal of grease, grit, and screenings and for beneficial use of biosolids at a favorable rate that would directly benefit residents of San José and the Tributary Area, and must immediately prepare RFPs for these services; and 3) would lose the opportunity to increase City Waste diversion from corporation yards at a lower price than any other available diversion program. These decisions may also negatively impact City-wide diversion and Council's Green Vision goals of 75% waste diversion by 2013 and Zero Waste by 2022.

**Reason for Not Recommending:** While conducting negotiations, City staff and consultants investigated alternative costs for commercial waste disposal and for beneficial use of biosolids. No alternate facilities appear to offer costs lower than those negotiated except for some that are a significant distance from the WPCP or outside the City. Use of such sites would result in higher total costs due to the much higher costs of trucking and would increase the adverse environmental impacts associated with trucking. Use of sites outside the City would also result in substantial General Fund impacts due to loss of Disposal Facility Tax and Solid Waste Enforcement Fee revenues.

## PUBLIC OUTREACH/INTEREST

- Criteria 1:** Requires Council action on the use of public funds equal to \$1 million or greater. **(Required: Website Posting)**
- 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 item meets Criteria #1: Requires Council action on the use of public funds equal to \$1 million or greater.

**COORDINATION**

This memorandum has been coordinated with the Department of Planning Building, and Code Enforcement, the City Attorney's Office, and the City Manager's Budget Office. This report is scheduled to be considered at the Treatment Plant Advisory Committee meeting on June 11, 2009.

**FISCAL/POLICY ALIGNMENT**

The recommendations contained in this memorandum are consistent with the Mayor's March 2009 Budget Message, the 2009-2010 Proposed Operating Budget, and Green Vision Goal # 5, to divert 100% of the waste from our landfill and convert waste to energy. These recommendations also support the Zero Waste goals and Urban Environmental Accords # 4 and # 6 to reduce solid waste disposal to the landfill and establish San José as a national environmental leader. Approval of these amendments aligns with the City's Budget Balancing strategy principle to preserve core City services for both the short and long term.

**COST IMPLICATIONS**

**Resource and Funding Strategy:** The costs related to this amendment are already included in the 2009-2010 Proposed Operating Budget. The cost of residential waste disposal is recovered from Residential Recycle Plus service rates. Funds for the one-time payment are available from prior-year encumbrances retained as a reserve for the disputed Regulatory Cost claims. Some General Fund costs for City Waste disposal are proposed to be shifted to the Storm Sewer Fund (446) and the Sewer Service and Use Fund (541) in the 2009-2010 Proposed Operating Budget, to reflect the cost of disposing of wastes generated by the sewer maintenance programs in those funds.

**2009-2010 Expenditures by Fund**

	General Fund (001)	IWM Fund (423)	Storm Sewer Operating (446)	Treatment Plant Operating (513)	Sewer Service & Use (541)
<b>Expenditures</b>					
<i>Included in 2009-2010 Proposed Budget</i>					
Residential waste disposal		\$7,650,000			
City Waste disposal	\$287,040		\$42,840		\$143,520
City Waste diversion			\$5,000		
Biosolids				\$1,324,000	
Grease, Grit, and Screenings				\$147,000	
<i>Included in Prior Year Appropriations</i>					
IDC Regulatory Costs	\$87,500	\$612,500			
<b>Expenditures Total</b>	<b>\$374,540</b>	<b>\$8,262,500</b>	<b>\$47,840</b>	<b>\$1,471,000</b>	<b>\$143,520</b>

**BUDGET REFERENCE**

One-time Payment of \$700,000 from Prior Year Encumbrances:

Fund #	Appn #	AC #	Total Encumbrance as of May 29, 2009	Amt. for Contract*
001	2059	03410_41	\$87,500	\$87,500
423	2059	03410_34	\$612,500	\$612,500
<b>Total</b>				<b>\$700,000</b>

\*The allocation of these costs between the General Fund and the Integrated Waste Management Fund (423) represents the proportional share of waste delivered under this agreement from City facility operations and the residential Recycle Plus program, respectively.

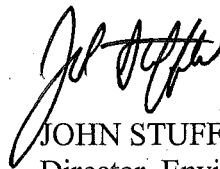
On-Going Disposal Agreement Budget for 2009-2010\*

Fund #	Appn#	Appn. Name	Total Appn	Amt. for Contract	Proposed Budget Page	Last Budget Action (Date, Ord. No.)*
001	2059	IDC Disposal Agreement	\$287,040	\$287,040	001 / IX-17	-
423	2059	IDC Disposal Agreement	\$7,650,000	\$7,650,000	423 / XI-50	-
446	New/TBD	TBD	\$47,840	\$47,840	446 / XI-86	-
513	0762	ESD NP / Equipment	\$34,507,625	\$1,471,000	513 / XI-78	-
541	New/TBD	TBD	\$143,520	\$143,520	541 / XI-83	-
<b>Total</b>				<b>\$9,599,400</b>		

\*The 2009-2010 Operating Budget is scheduled to be adopted by Council on June 23, 2009.

**CEQA**

Hauling and disposal of grease, grit, and screenings: Exempt (PP09-044)  
 Hauling and beneficial use of biosolids: Exempt (PP08-038)  
 Newby Island Sanitary Landfill, 1997 Revised Solid Waste Facility Permit (43-AN-0003):  
 Negative Declaration (H95-03-022; SCH #1997106314)



JOHN STUFFLEBEAN  
 Director, Environmental Services

For questions, please contact Jo Zientek, Deputy Director, Environmental Services Department, at (408) 535-8557.