

## SAN JOSÉ/SANTA CLARA TREATMENT PLANT ADVISORY COMMITTEE

CHUCK REED, CHAIR  
JOSE ESTEVES, MEMBER  
PAT KOLSTAD, MEMBER  
JAMIE MATTHEWS, MEMBER  
MADISON NGUYEN, MEMBER

CHUCK PAGE, MEMBER  
JOHN GATTO, MEMBER  
JENNIFER MAGUIRE, MEMBER  
KANSEN CHU, MEMBER

### AGENDA/TPAC

4:30 p.m.

May 15, 2014

Room 1734

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1. **ROLL CALL**
2. **APPROVAL OF MINUTES**
  - A. April 17, 2014
3. **UNFINISHED BUSINESS/REQUEST FOR DEFERRALS**
4. **DIRECTOR'S REPORT** (verbal)
  - A. **Directors Verbal Report**
    - Recommendation to cancel July 2014 TPAC meeting
    - Capital Improvement Program Monthly Status Report for March 2014
5. **AGREEMENTS/ACTION ITEMS**
  - A. **Report on Bids and Award of Contract for 7100 – Digester Gas Compressor Upgrade Project**

Staff Recommendation:

    - a) Report on bids and award of a construction contract for 7100 – Digester Gas Compressor Upgrade Project to the low bidder, Anderson Pacific Engineering and Construction, Inc., for the base bid in the amount of \$11,316,000, and approval of a ten percent contingency in the amount of \$1,131,600.
    - b) Adopt the following 2013-2014 Appropriation Ordinance Amendments in the San Jose-Santa Clara Treatment Plant Capital Fund:
      - 1) Decrease the Energy Generation Improvements appropriation to the Environmental Services Department in the amount of \$5,200,000; and

- 2) Increase the Combined Heat and Power Equipment Repair and Rehabilitation appropriation to the Environmental Services Department in the amount of \$5,200,000.

**Report on Bids and Award of Contract for 7100 – Digester Gas Compressor Upgrade Project is scheduled for Council consideration on May 20, 2014.**

B. Report on Bids and Award of Contract for the 7259 – Training Trailer Replacement Project

Staff Recommendation:

1. Award of a construction contract for the 7249 – Training Trailer Replacement to the low bidder, Newton Construction and Management, Inc., in the amount of \$513,874.
2. Approve a contingency in the amount of \$51,400.

**The Report on Bids and Award of Contract for the 7259 - Training Trailer Replacement is scheduled for Council consideration on May 20, 2014.**

C. Master Service Agreements with Environmental Science Associates, CH2M Hill Engineers, Inc. and David J. Powers & Associates, Inc. for Environmental Review and Permitting Services

Staff Recommendation: Approve the master agreements between the City of San Jose and the following firms for environmental review and permitting services for the San Jose-Santa Clara Regional Wastewater Facility and various other City projects and programs for a term through June 30, 2019, subject to the appropriation of funds:

1. Environmental Science Associates in an amount not to exceed \$2,125,000;
2. CH2M Hill Engineers, Inc. in an amount not to exceed \$500,000; and
3. David J. Powers & Associates, Inc. in an amount not to exceed \$375,000.

**The Master Service Agreements with Environmental Science Associates, CH2M Hill Engineers, Inc. and David J. Powers & Associates, Inc. for Environmental Review and Permitting Services is scheduled for Council consideration on May 20, 2014**

D. San Jose/Santa Clara Water Pollution Control Plant 2015-2019 Proposed Capital Improvement Program

Staff Recommendation: TPAC approval of the San Jose/Santa Clara Water Pollution Control Plant 2015-2019 Proposed Capital Improvement Program

**The San Jose/Santa Clara Water Pollution Control Plant 2015-2019 Proposed Capital Improvement Program is scheduled for consideration by the San Jose City Council on June 10, 2014, and for adoption on June 17, 2014**

E. San Jose/Santa Clara Water Pollution Control Plant 2014-2015 Proposed Operating and Maintenance Budget

Staff Recommendation: TPAC approval of the San Jose/Santa Clara Water Pollution Control Plant 2014-2015 Proposed Operating and Maintenance Budget

**The San Jose/Santa Clara Water Pollution Control Plant 2014-2015 Proposed Operating and Maintenance Budget is scheduled for consideration by the San Jose City Council on June 10, 2014, and for adoption on June 17, 2014**

6. OTHER BUSINESS/CORRESPONDENCE

7. STATUS OF ITEMS PREVIOUSLY RECOMMENDED FOR APPROVAL BY TPAC

A. Report on Bids and Award of Contract for 7157 – Digester Gas Storage Replacement Project

Report on bids and award of a construction contract for 7157 – Digester Gas Storage Replacement Project to the lowest responsive bidder, Anderson Pacific Engineering Construction Inc., for the base bid and Add Alternate No. 1 in the amount of \$1,825,100, and approval of a ten percent contingency in the amount of \$182,510.

**The Report on Bids and Award of Contract for 7157 – Digester Gas Storage Replacement Project was approved by Council on April 22, 2014.**

B. Report on Bids and Award of Contract for 6998 – Fire Main Replacement – Phase III Project

(a) Report on bids and award of construction contract for 6998 – Fire Main Replacement – Phase III Project to the lowest responsive bidder, Stoloski & Gonzalez, Inc., for the base bid in the amount of \$1,572,870, and approval of a 10 percent contingency in the amount of \$157,290.

(b) Adopt the following 2013-2014 Appropriation Ordinance Amendments in the San Jose-Santa Clara Treatment Plant Capital Fund:

1. Decrease the Plant Infrastructure Improvements appropriation to the Environmental Services Department in the amount of \$400,000; and
2. Increase the Treatment Plant Fire Main Replacement appropriation to the Environmental Services Department in the amount of \$400,000.

**The Report on Bids and Award of Contract for 6998 – Fire Main Replacement – Phase III Project was approved by Council on April 22, 2014.**

C. Report on Bids and Award of Contract for the 7407 - BNR-2 Clarifiers Guardrail Replacement

1. Award of a construction contract for the 7407 - BNR-2 Clarifiers Guardrail Replacement to the lowest responsive bidder, Tucker Construction, Inc., in the amount of \$320,792.50.
2. Approve a contingency in the amount of \$32,100.

**The Report on Bids and award of Contract for the 7407 – BNR-2 Clarifiers Guardrail Replacement was approved by Council on April 22, 2014**

D. Wholesale Recycled Water Rates for FY 2014-15

Adopt a resolution to adjust the rate discount for wholesale recycled water through the South Bay Water Recycling Program at \$215 for Industrial/Agricultural category users effective July 1, 2014, superseding Resolution No. 75430

**The Wholesale Recycled Water Rates for FY 2014-15 was approved by Council on April 29, 2014.**

E. San Jose-Santa Clara Regional Wastewater Facility Capital Improvement Program Semiannual Status Report, July – December 2013

1. Accept the Semiannual Status Report on the San José-Santa Clara Regional Wastewater Facility Capital Improvement Program for the period of July through December 2013; and
2. Cross-reference this item to the April 29, 2014 Council meeting for acceptance.

**The San Jose-Santa Clara Regional Wastewater Facility Capital Improvement Program Semiannual Status Report, July – December 2013 was approved by Council on April 29, 2014.**

8. REPORTS

A. Open Purchase Orders Greater Than \$100,000 (including Service Orders)

The attached monthly Procurement and Contract Activity Report summarizes the purchase and contracting of goods with an estimated value between \$100,000 and \$1.08 million and of services between \$100,000 and \$270,000.

9. MISCELLANEOUS

- A. The next TPAC meeting is June 12, 2014, at 4:30 p.m. City Hall, Room 1734.

10. OPEN FORUM

## 11. ADJOURNMENT

NOTE: If you have any changes or questions, please contact Jennifer Hade, Environmental Services, (408) 975-2515.

To request an accommodation or alternative format for City-sponsored meetings, events or printed materials, please contact Jennifer Hade 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.

**MINUTES OF THE  
SAN JOSE/SANTA CLARA  
TREATMENT PLANT ADVISORY COMMITTEE  
SPECIAL MEETING**  
City Hall, City Manager's Office, 17<sup>th</sup> Floor, Room 1734  
Thursday, April 17, 2014 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 taken during the preceding study session, with the following members in attendance:

Committee members: Kansen Chu, Jose Esteves, John Gatto, Jennifer Maguire, Patricia Mahan (Alternate), Jamie Matthews, Madison Nguyen

Absent: Committee Chair Chuck Reed, Committee members Pat Kolstad and Chuck Page

Committee Member Madison Nguyen acted as Chair Pro-tem

**2. APPROVAL OF MINUTES**

- A. March 13, 2014  
**Item 2.A was approved.**  
Ayes - 7  
Nays - 0  
Absent - 2

**3. UNFINISHED BUSINESS/REQUEST FOR DEFERRALS**

**4. DIRECTORS REPORT**

**A. Directors Verbal Report:**

Kerrie Romanow, Director, Environmental Services introduced John Buttz, MWH Consultants who gave a brief overview of the Capital Improvement Program Monthly Status Report for February 2014.

Committee Member Gatto requested that future Monthly Reports include the following: 1) a column with the expected project completion date in the table in the Project Performance section, and 2) a version of the Regional Wastewater Facility Treatment Process Flow Diagram showing the process flow after the Master Plan capital improvement projects are completed.

5. **AGREEMENTS/ACTION ITEMS**

A. **Report on Bids and Award of Contract for 7157 – Digester Gas Storage Replacement Project**

Staff Recommendation: Report on bids and award of a construction contract for 7157 – Digester Gas Storage Replacement Project to the lowest responsive bidder, Anderson Pacific Engineering Construction Inc., for the base bid and Add Alternate No. 1 in the amount of \$1,825,100, and approval of a ten percent contingency in the amount of \$182,510.

**The Report on Bids and Award of Contract for 7157 – Digester Gas Storage Replacement Project is scheduled for Council consideration on April 22, 2014.**

B. **Report on Bids and Award of Contract for 6998 – Fire Main Replacement – Phase III Project**

Staff Recommendation:

Report on bids and award of construction contract for 6998 – Fire Main Replacement – Phase III Project to the lowest responsive bidder, Stoloski & Gonzalez, Inc., for the base bid in the amount of \$1,572,870, and approval of a 10 percent contingency in the amount of \$157,290.

Adopt the following 2013-2014 Appropriation Ordinance Amendments in the San Jose-Santa Clara Treatment Plant Capital Fund:  
Decrease the Plant Infrastructure Improvements appropriation to the Environmental Services Department in the amount of \$400,000; and  
Increase the Treatment Plant Fire Main Replacement appropriation to the Environmental Services Department in the amount of \$400,000.

**The Report on Bids and Award of Contract for 6998 – Fire Main Replacement – Phase III Project is scheduled for Council consideration on April 22, 2014.**

C. **Report on Bids and Award of Contract for the 7407 - BNR-2 Clarifiers Guardrail Replacement**

Staff Recommendation:

Award of a construction contract for the 7407 - BNR-2 Clarifiers Guardrail Replacement to the lowest responsive bidder, Tucker Construction, Inc., in the amount of \$320,792.50.

Approve a contingency in the amount of \$32,100.

**The Report on Bids and award of Contract for the 7407 – BNR-2 Clarifiers Guardrail Replacement is scheduled for Council consideration on April 22, 2014**

D. Wholesale Recycled Water Rates for FY 2014-15

Staff Recommendation: Adopt a resolution to adjust the rate discount for wholesale recycled water through the South Bay Water Recycling Program at \$215 for Industrial/Agricultural category users effective July 1, 2014, superseding Resolution No. 75430

**The Wholesale Recycled Water Rates for FY 2014-15 is scheduled for Council consideration on April 29, 2014.**

E. San Jose-Santa Clara Regional Wastewater Facility Capital Improvement Program Semiannual Status Report, July – December 2013

Staff Recommendation:

Accept the Semiannual Status Report on the San José-Santa Clara Regional Wastewater Facility Capital Improvement Program for the period of July through December 2013; and Cross-reference this item to the April 29, 2014 Council meeting for acceptance.

**The San Jose-Santa Clara Regional Wastewater Facility Capital Improvement Program Semiannual Status Report, July – December 2013 is scheduled for Council consideration on April 29, 2014.**

Motion by Committee Member Gatto, second by Committee Member Matthews to approve items 5.A through 5.E. Items 5.A. through 5.E. were approved.

Ayes - 7

Nays – 0

Absent - 2

6. OTHER BUSINESS/CORRESPONDENCE

7. STATUS OF ITEMS PREVIOUSLY RECOMMENDED FOR APPROVAL BY TPAC

A. Gasification Demonstration Agreement with Zero Waste Energy

1. Negotiate and execute a right of entry agreement with JUM Global, LLC and Zero Waste Energy, LLC to construct and operate a small scale demonstration unit that will test gasification of local biosolids and wood waste from the residential yard trimmings collection program at the San José-Santa Clara

Regional Wastewater Facility for a term beginning April 1, 2014, through June 30, 2015, at a cost not to exceed \$1,586,688.67.

2. Execute an amendment to the Grant Agreement between the City and the California Energy Commission to change the technology provider from Harvest Power, Inc. to JUM Global, LLC and Zero Waste Energy, LLC.
3. Adopt the following 2013-2014 Appropriation Ordinance Amendments in the Integrated Waste Management Fund:
  - a) Decrease the Operations & Maintenance Reserve appropriation in the amount of \$1,600,000;
  - b) Increase the appropriation to the Environmental Services Department: California Energy Commission Grant: Biomass to Energy Technology Project, in the amount of \$1,600,000.

**The Gasification Demonstration Agreement with Zero Waste Energy was approved by Council on March 18, 2014.**

B. Master Agreements for Environmental Consulting Services

- 1 Cornerstone Earth Group from the date of execution through December 31, 2016 in an amount not to exceed \$350,000;
- 2 URS Corporation from the date of execution through December 31, 2016 in an amount not to exceed \$350,000;
- 3 Haley & Aldrich from the date of execution through December 31, 2016 in an amount not to exceed \$250,000; and
- 4 Environmental Resource Management, Inc. from the date of execution through December 31, 2016 in an amount not to exceed \$250,000.

**The Master Agreements for Environmental Consulting Services was approved by Council on March 18, 2014.**

8. REPORTS

A. Open Purchase Orders Greater Than \$100,000 (including Service Orders)

**The attached monthly Procurement and Contract Activity Report summarizes the purchase and contracting of goods with an estimated value between \$100,000 and \$1.08 million and of services between \$100,000 and \$270,000.**

**Item 8.A was approved to note and file.**

9. **MISCELLANEOUS**

A. The next TPAC meeting is May 15, 2014, at 4:30 p.m. City Hall, 1734

10. **PUBLIC COMMENT**

David Wall, Public, spoke in favor of expediting digester gas holders.

|

**11. ADJOURNMENT**

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

Chuck Reed, Chair  
Treatment Plant Advisory Committee



# Capital Improvement Program Monthly Status Report for March 2014

May 8, 2014

This report provides a summary of the progress and accomplishments of the Capital Improvement Program (CIP) for the San José-Santa Clara Regional Wastewater Facility ("Wastewater Facility") for the period of March 2014.

## Report Contents

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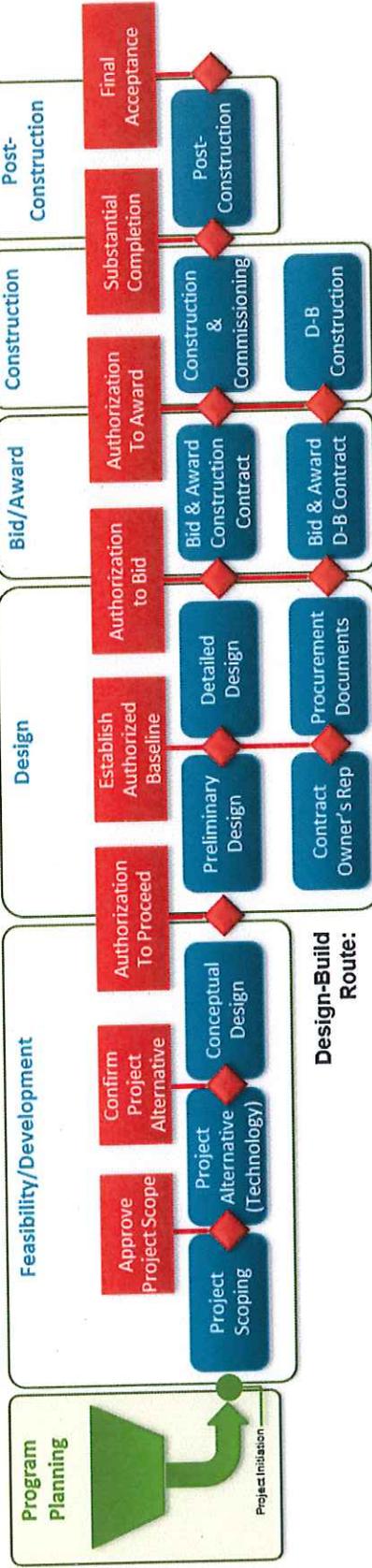


# Project Delivery Model



San José-Santa Clara  
Regional Wastewater Facility

## Project Delivery Model



### Design-Build Route:

Design-Build	Design, Bid-Build	Active Projects
Biosolids Transition Projects		
		Iron Salt Feed Station Plant Instrument Air System Upgrade
		Digester & Thickener Facilities Upgrade
		Filtration Building B2 & B3 Pipe & Valve Replacement
		Digester Gas Storage Replacement Fire Main Replacement – Phase III BNR2 Clarifiers Guartrail Replacement <i>Training Trailer Replacement</i> <i>RWF Street Treatment – Phase III</i>
		115 KV Circuit Breaker Replacement DCS Fiber Optic Network Expansion DCS Upgrade/Replacement Dissolved Air Flotation Dissolution Impr. Headworks No 2 Actuator Replacement Cooling Tower Replacement Handrail Replacement – Phase V A5-A6 Nitritification Mag. Meter & Valve Repl.
		Digester Gas Compressor Upgrade Emergency Diesel Generators

**Key**

Stage Gates (Red)

Stages (Blue)

Note: Projects shown in bold and italics have moved phase in the reporting period



## Program Summary

### March 2014

In 2008 the Wastewater Facility undertook a Plant Master Plan (PMP) effort which ultimately resulted in its adoption in November 2013. The Project Validation process held between October 2013 and January 2014 reviewed the projects identified in the Plant Master Plan in order to develop a five-year and ten-year CIP. This monthly report provides a summary of the progress and accomplishments of the CIP for the month of March 2014 within Fiscal Year 2013-2014.

In the month of March the focus was on finishing our program start-up efforts, assessing future resource needs for the CIP Program, moving forward with key programmatic studies, three of which were initiated on March 25, and continuing to work with the various groups involved in budget and rate setting, and financing discussions.

We presented updates to the Technical Advisory Committee (TAC) and to the Treatment Plant Advisory Committee (TPAC) at their regular meetings on March 10<sup>th</sup> and March 13<sup>th</sup>, respectively. Further updates and study sessions will be held with TAC and TPAC in April, as financing discussions continue.

### Look Ahead

In April, important study sessions will be held with TAC and TPAC regarding the ten-year funding strategy and the biosolids transition. We will be finalizing our detailed assessment of our future staffing needs on the program and developing a new organization structure for program delivery. We will also continue to roll out our web-based SharePoint platform (called the "CIP Portal") which contains many of our CIP team collaboration tools and processes. Training and implementation of these tools and processes will also continue.

### Program Highlight – Project Start-Up

In March, we successfully completed our program start-up activities. This effort focused on creating the tools needed for project delivery, with a focus on people, processes, and plans. It resulted in numerous key deliverables, examples of which include a health and safety plan, decision-making process, document management plan, and an operations and maintenance staff engagement plan.

The key written start-up deliverable was the Program Execution Plan (PEP), which now resides on the CIP Portal, our web-based collaboration site (see figure below). The PEP serves as the "user's manual" for CIP delivery, and will be a key training tool for new staff brought onto the program.

**Program Execution Plan (PEP)**

PEP Library  Search PEP Library

- Contents**
  - Preface
    - PEP content and use
    - Means to access CIP Portal
    - Acronyms and abbreviations
  - Section 1
    - CIP background.
    - Mission, vision and goals
    - Validation results
  - Section 2
    - Organizational structure
    - Roles and responsibilities
    - Authority matrix and contacts
  - Section 3
    - Plans and procedures for:
      - Managing the program
      - Managing individual projects
  - Project Delivery
    - Section 4
      - Project Delivery Model (PDM)
      - Design Management Guidelines
      - CM Guidelines
    - Section 5
      - Summary of system and tools
      - CIP Portal functionality
      - Program/project reporting
    - Section 6
      - Program-wide strategies
      - Plant-wide approaches
    - All PEP sections combined

Figure 1: Program Execution Plan Page on the CIP Portal



## Program Performance Summary

Seven KPIs have been established to measure the overall success of the CIP. Each KPI represents a metric which will be monitored on a regular frequency. Through the life of the CIP, KPIs will be selected and measured which best reflect the current maturity of the program. In this initial report, six of the seven KPIs have measurement data available and are reported below. The target for the "Staff Count" KPI will be established as part of the analysis of future staffing needs.

### Program Key Performance Indicators – Fiscal Year 2013-2014

KPI Description	Target	Actual	Status	Trend	Measurement
Schedule	85%	100% (1/1)			Percentage of CIP projects delivered within 2 months of approved baseline Beneficial Use Milestone. <b>Target: 85% of projects delivered within 2 months of approved baseline schedule or better.</b>
Budget	90%	100% (2/2)			Percentage of CIP projects that are completed within the approved baseline budget. <b>Target: 90% of projects total expenditures do not exceed 101% of the baseline budget.</b>
Expenditure	≥\$72.7M	\$88.6M			Total CIP actual + forecast committed cost for the fiscal year compared to CIP fiscal year budget. <b>Target: Forecast committed cost meets or exceeds 50% of budget for Fiscal Year 13/14 (\$145.4 / 2 = \$72.7M)</b>
Procurement	100%	100% (12/12)			Number of actual + forecast consultant and contractor procurements compared to planned for the fiscal year. <b>Target: Forecast/actual procurements for fiscal year meet or exceed planned.</b>
Safety	0	0			Number of OSHA reportable incidents associated with CIP construction for the fiscal year. <b>Target: zero incidents.</b>
Environment/Permits	0	0			Number of permit violations caused by CIP construction for the fiscal year. <b>Target: zero violations.</b>
Staff Count <sup>1</sup>	TBD	TBD	TBD	TBD	Number of additional staff started in the previous quarter compared to planned (City/Consultant). <b>Target: Number of City and Consultant Staff joined the program team for the quarter meets or exceeds planned.</b>

Footnote:1 – Staff count KPI measured quarterly; all other KPIs measured monthly

Footnote 2 – For the Procurement KPI, the number of forecasted procurements increased from 11 to 12, This count now includes the procurement of environmental review and permitting consultant services.

#### KEY:

Cost:



Meets or exceeds KPI target



Does not meet KPI target

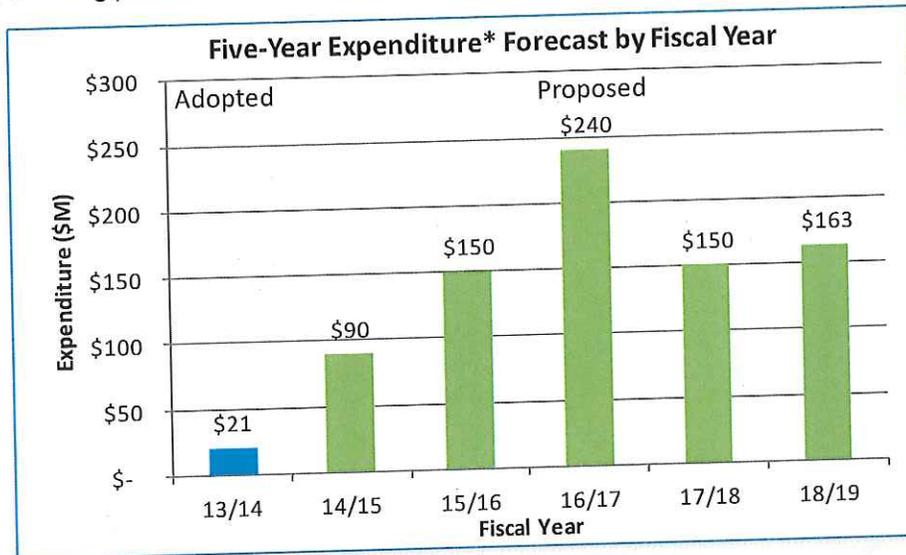


## Program Cost Performance

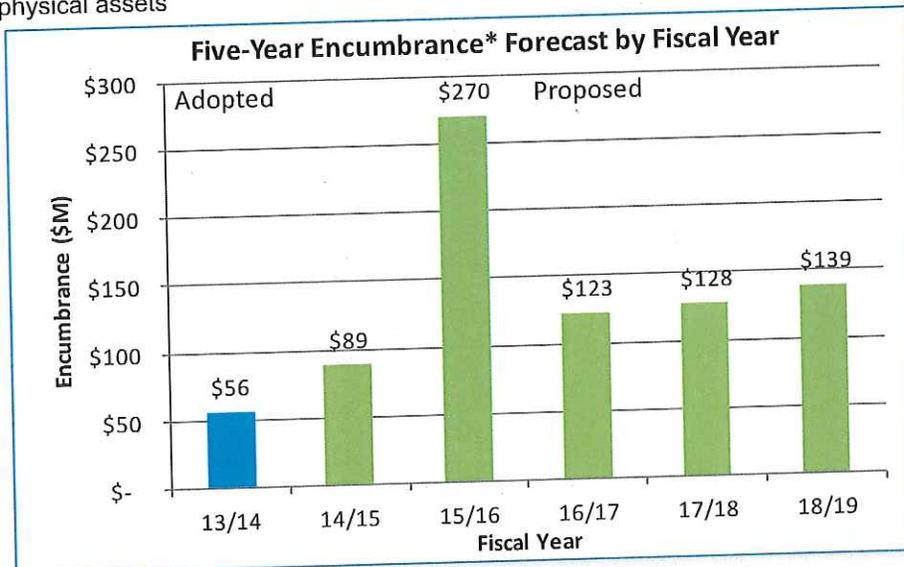
This section provides a summary of CIP cost performance for all construction projects and non-construction activities for FY13-14 and the Five-Year CIP.

### Proposed 2015-2019 CIP Expenditure and Encumbrances

To accommodate the proposed increase in expenditures and encumbrances over the next five years, the City is developing a long-term financial strategy to fund the needed, major capital improvements while minimizing the impact to ratepayers. The City will be holding special study sessions with TAC and TPAC in April to discuss ten-year funding strategy and the financing plan.



\*Expenditure defined as: Actual cost expended associated with services and construction of physical assets



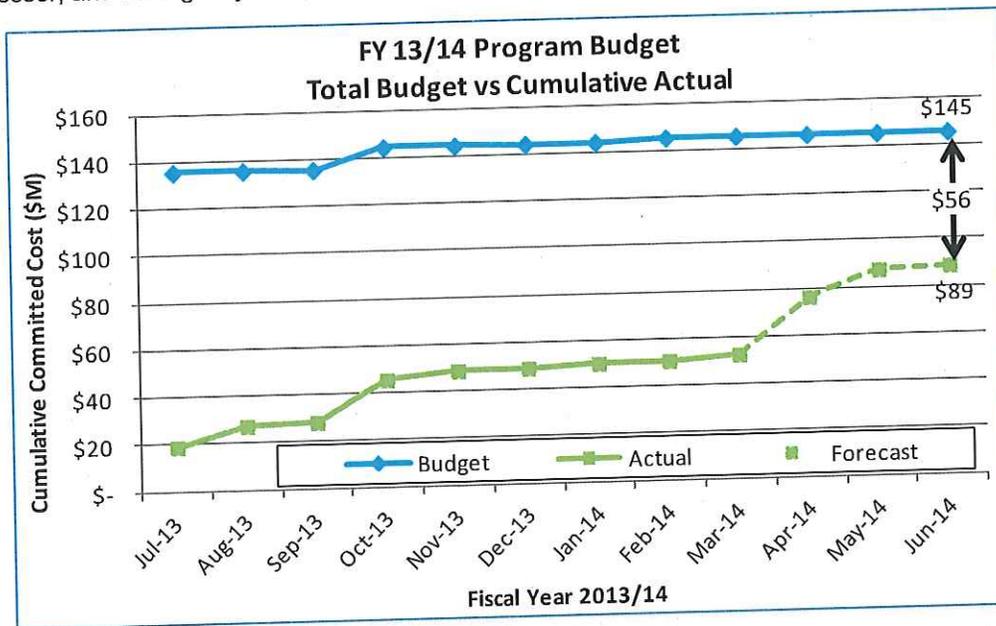
\*Encumbrance defined as: Financial commitments, such as purchase orders or contracts, which are chargeable to an appropriation and for which a portion of the appropriation is reserved



## Fiscal Year 2013-2014 Program Budget Performance

The fiscal year began with an initial program budget of \$135 million, with a \$9 million adjustment in October and a \$1 million adjustment in February, for a total program budget of \$145 million. Committed costs are expenditures and encumbrance balances, including carryover (encumbrance balances from the previous fiscal year). As of the close of the March reporting period, \$53 million in cumulative program spending had been achieved. This represents approximately 36% of the total program budget for FY13-14.

Committed costs are forecasted to reach \$89 million by the end of the fiscal year resulting in a projected year-end variance of approximately \$56 million as shown in the chart below. The last fiscal quarter will see a number of large construction contract awards including Digester Gas Storage Replacement, Fire Main Replacement – Phase III, Digester Gas Compressor, and Emergency Diesel Generators.



The projected year-end variance shrank from \$61 million to \$56 million due to the inclusion of construction contingencies and service orders in the forecast.



## Project Performance

There are currently six active projects in the construction phase with a further twelve projects in feasibility/development, design or bid and award phases (see PDM graphic at the front of this report). All active projects are listed in the table below. Projects in the construction phase have cost and schedule baselines established and are monitored using the City's Capital Project Management System (CPMS). These projects have green/red icons included in the table below to indicate whether they are on budget and schedule using the CPMS data as a source.

Project Name	Phase	Estimated Beneficial Use Date <sup>1</sup>	Cost Performance <sup>2</sup>	Schedule Performance <sup>2</sup>
<b>Baselined Projects</b>				
115KV Circuit Breaker Replacement	Construction	Jun 2014		
A5-A6 Nitrification Mag. Meter & Valve Replacement	Construction	Jul 2014		
DCS Fiber Optic Network Expansion	Construction	May 2014		
DCS Upgrade/Replacement	Construction	Jun 2016		
Dissolved Air Flotation (DAF) Dissolution Improvement	Construction	Apr 2014		
Handrail Replacement - Phase V	Construction	Mar 2015		
<b>Pre-Baseline Projects</b>				
BNR-2 Clarifier Guardrail Replacement	Bid & Award	Dec 2014	N/A	N/A
Digester Gas Compressor Upgrade	Bid & Award	Jul 2016	N/A	N/A
Digester Gas Storage Replacement	Bid & Award	Mar 2015	N/A	N/A
Emergency Diesel Generators	Bid & Award	Jul 2016	N/A	N/A
Fire Main Replacement - Phase III	Bid & Award	Mar 2015	N/A	N/A
RWF Street Rehabilitation - Phase III	Bid & Award	Jan 2015	N/A	N/A
Training Trailer Replacement	Bid & Award	May 2015	N/A	N/A
Filtration Building B2 & B3 Pipe & Valve Replacement	Design	Apr 2015	N/A	N/A
Digester & Thickener Facilities Upgrade	Feasibility/Development	Feb 2018	N/A	N/A
Cogeneration Facility	Feasibility/Development	Mar 2017	N/A	N/A
Plant Instrument Air System Upgrade	Feasibility/Development	Dec 2015	N/A	N/A
Iron Salt Feed Station	Feasibility/Development	Apr 2016	N/A	N/A

### KEY:

Cost:



On Budget



>1% Over Budget

Schedule:



On Schedule



>2 months delay

Footnote 1 – Beneficial Use is defined as when the work is sufficiently complete, in accordance with the contract documents, so that the City can occupy or use the work.

Footnote 2 – An explanation of cost and schedule variances on specific projects identified in this table is provided on the next page.





### **Significant Accomplishments**

On March 27, the City opened bids for the Emergency Diesel Generators project, which includes the installation of four 3 MW generators, two on-site fuel storage tanks, and auxiliary systems. Six of the eight pre-qualified design-build entities submitted bids. Five of the bids were lower than the Engineer's Estimate, with the apparent low bid being 10% under. Staff is currently evaluating the bids. The project is scheduled for TPAC and City Council consideration in June. Project Budget: \$21,800,000.

### **Explanation of Project Performance Issues**

#### **DAF Dissolution Improvement**

No changes since the last report. Please refer to the Monthly Status Report for February 2014 for a detailed explanation.



## Project Profile

### Digester Gas Storage Replacement

The existing gas holder at the Wastewater Facility was originally built in 1984. In 2002, the gas holder cover experienced a major failure and was repaired. A second major failure occurred in 2012. An inspection of the gas holder's interior established that its floating cover could no longer be safely operated resulting in the unit being taken permanently out of service. As an interim measure, a backup gas holder unit was put back into service. This backup unit, while operable, is older, smaller, and does not provide for long term reliable gas system control due to outdated components.

This project will demolish and replace the existing wet seal digester gas holder with a new dry seal digester gas holder, and will be located at the same site as the existing gas holder. This project will also install a new foundation system, electrical conduits, utility piping, and concrete pavement around the gas holder. Bids were opened on February 6 with a total of six bids received. The lowest responsive bidder was Anderson Pacific Engineering Construction, Inc for the total bid in the amount of \$1,825,100. This project is scheduled for TPAC and City Council consideration on April 17 and April 22, respectively. Construction is estimated to commence in June 2014 with an anticipated construction completion in March 2015. Project Budget: \$3,200,000.

### Project Location:

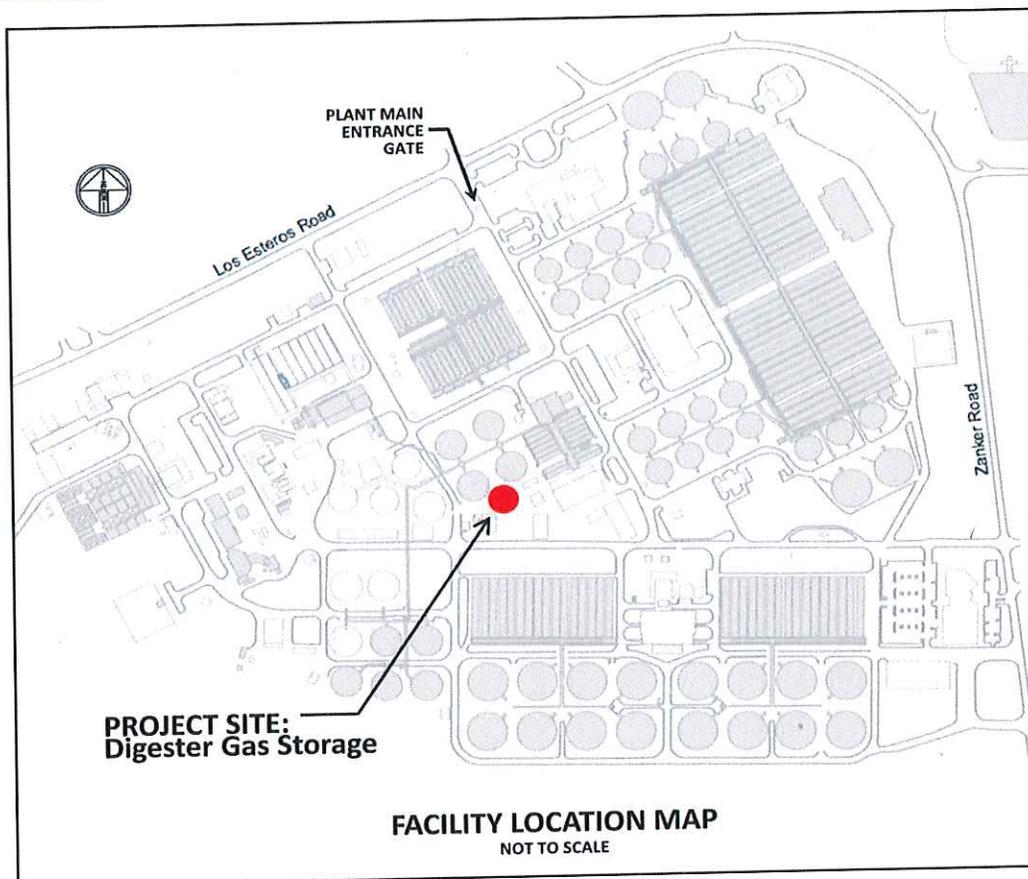


Figure 2: Digester Gas Storage Location Plan

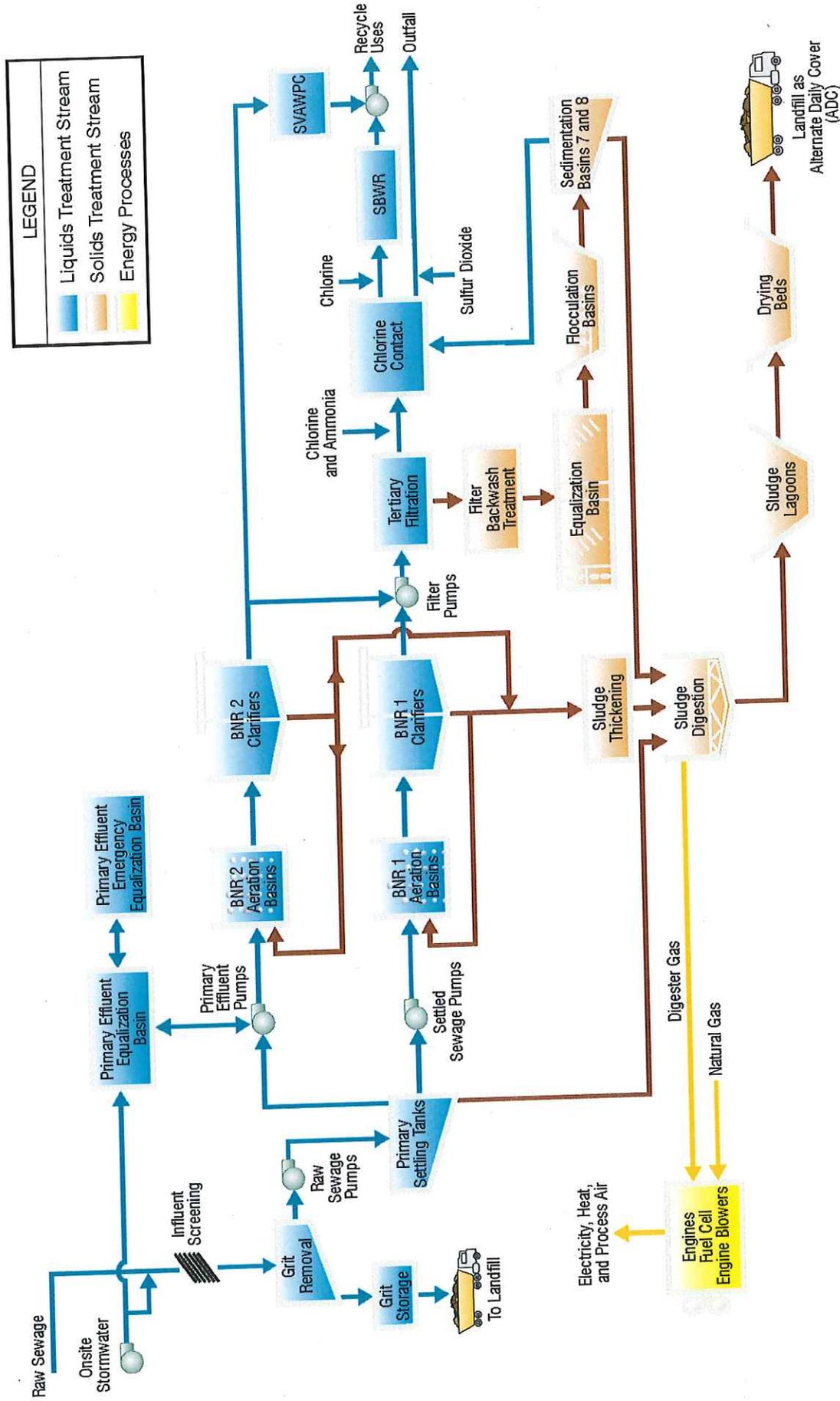


Figure 3: Existing Gas Storage Tank

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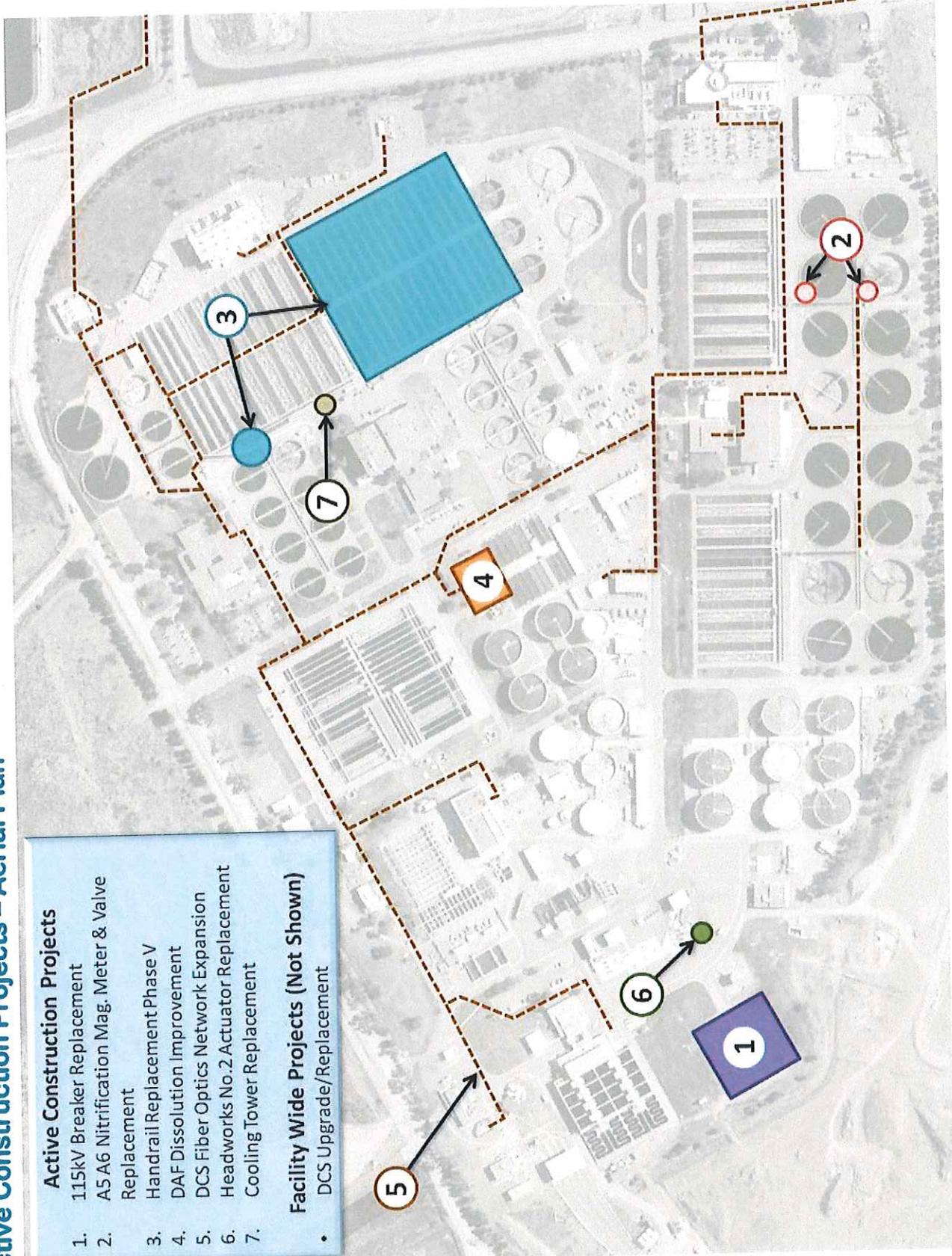
# Regional Wastewater Facility Treatment – Current Treatment Process Flow Diagram





## Active Construction Projects – Aerial Plan

- | Active Construction Projects       |  |
|------------------------------------|--|
| 1.                                 | 115kV Breaker Replacement                          |
| 2.                                 | A5 A6 Nitrification Mag. Meter & Valve Replacement |
| 3.                                 | Handrail Replacement Phase V                       |
| 4.                                 | DAF Dissolution Improvement                        |
| 5.                                 | DCS Fiber Optics Network Expansion                 |
| 6.                                 | Headworks No.2 Actuator Replacement                |
| 7.                                 | Cooling Tower Replacement                          |
| Facility Wide Projects (Not Shown) |  |
| •                                  | DCS Upgrade/Replacement                            |



5A

COUNCIL AGENDA: 05/20/14  
ITEM:



# Memorandum

**TO:** HONORABLE MAYOR  
AND CITY COUNCIL

**FROM:** Kerrie Romanow  
Jennifer Maguire

**SUBJECT:** SEE BELOW

**DATE:** April 28, 2014

Approved 

Date 5/2/14

**SUBJECT: REPORT ON BIDS AND AWARD OF CONTRACT FOR  
7100 – DIGESTER GAS COMPRESSOR UPGRADE PROJECT**

**RECOMMENDATION**

- (a) Report on bids and award of a construction contract for 7100 – Digester Gas Compressor Upgrade Project to the low bidder, Anderson Pacific Engineering and Construction, Inc., for the base bid in the amount of \$11,316,000, and approval of a ten percent contingency in the amount of \$1,131,600.
- (b) Adopt the following 2013-2014 Appropriation Ordinance Amendments in the San Jose-Santa Clara Treatment Plant Capital Fund:
  - (1) Decrease the Energy Generation Improvements appropriation to the Environmental Services Department in the amount of \$5,200,000; and
  - (2) Increase the Combined Heat and Power Equipment Repair and Rehabilitation appropriation to the Environmental Services Department in the amount of \$5,200,000.

**OUTCOME**

Award of this construction contract will allow for the construction of the Digester Gas Compressor Upgrade Project at the San José-Santa Clara Regional Wastewater Facility. Approval of a ten percent contingency will provide funding for any unanticipated work necessary for the completion of the project.

## BACKGROUND

The San José-Santa Clara Regional Wastewater Facility<sup>1</sup> (Wastewater Facility) currently operates three digester gas compressors located in the Sludge Control Building: two smaller Ingersoll-Rand single-action gas compressors (GC1 and GC3) installed in 1964, and one Norwalk gas compressor (GC4) installed in 1984. For nearly 30 years, GC4 has been the primary operating unit with GC1 and GC3 serving as backup units when GC4 is offline for maintenance or repairs. GC1 and GC3 are nearly 50 years old and are increasingly unreliable and difficult to maintain. GC4 is also nearing the end of its useful life due to continuous use.

The gas compressors are a critical element of the Wastewater Facility's power system. The Wastewater Facility's engine generators rely on blended gas to produce power and air for operating the various treatment processes. The compressors receive low-pressure digester gas and boost the pressure to the required operating pressures for use by the engines. Without reliable compressors, the engines would revert to operating on only natural gas with valuable digester gas being flared.

This project will design and construct a new 5,000 square foot building to house two new gas compressors. The new facility will be located immediately north of the existing Sludge Control Building. The new gas compressors will alternate as the primary operating unit. GC4 will be kept as a standby unit until it becomes too costly to maintain. The project also includes two digester gas pre-coolers, two cooling towers, associated gas piping, and associated building and equipment utility tie-ins. The work includes, but may not be limited to, furnishing all labor, supervision, materials, and equipment, which are necessary to design and construct the project.

### Project Delivery Approach

This project is a design-build low-bid project. A design consultant was retained to develop 30% drawings and specifications (also called "bridging documents") for the purpose of procuring a design-build entity to bring the project to 100% design and construction completion. This approach was selected for the following reasons:

- Time is of the essence - the digester gas compressors are a critical element of the energy management system. A condition assessment report completed in 2012 estimated a remaining useful life of 1 to 5 years. The design-build approach reduces project delivery time by allowing design and construction work to proceed while major equipment is ordered and fabricated. The estimated lead time for ordering and fabrication of the new compressors is up to 10 months. In addition, the collaboration between the City's operations and maintenance staff and the designer/builder is essential to the successful and expedient delivery of this project.

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<sup>1</sup> The legal, official name of the facility remains San Jose/Santa Clara Water Pollution Control Plant, but beginning in early 2013, the facility was approved to use a new common name, the San José-Santa Clara Regional Wastewater Facility.

- Improved quality and cost savings through early collaboration – the design-build entity, comprised of the designer and constructor, function as a single team and collaborate from the project start. Early collaboration on key decisions such as equipment selection, design approach, and constructability result in an overall higher quality product, and enable cost savings by reducing the potential for change orders and claims.

Request for Pre-Qualifications

Council Resolution No 71816, adopted on November 4, 2003, provides a policy for pre-qualifying contractors based on a project's complexity and construction value of more than \$10 million. This process helps to eliminate potential bidders who do not meet minimum qualifications and/or responsibility requirements early in the project, thereby adding to project efficiencies. Of special importance is the relationship and working history of the designer and builder. Based on these factors, the City has determined that Contractors who wish to submit bids for this project must be pre-qualified.

Three prospective design-build entities were pre-qualified through the pre-qualification process and were provided the partial design. This project was advertised on BidSync, however only the three pre-qualified bidders were permitted to submit bids.

ANALYSIS

Bids were opened on April 3, 2014, with the following results:

Contractor	City	Bid Amount	Variance Over/(Under) Amount	Variance Over/(Under) Percent
<b>Engineer's Estimate</b>		<b>\$9,121,161</b>		
Anderson Pacific Engineering Construction, Inc.	Santa Clara	\$11,316,000	\$2,194,839	24%
GSE Construction	Livermore	\$11,720,000	\$2,598,839	28%
C. Overaa & Co.	Richmond	\$12,133,000	\$3,011,839	33%

The low bid submitted by Anderson Pacific Engineering and Construction, Inc. (APEC), of Santa Clara, CA, is 24 percent above the Engineer's Estimate.

The primary reason for the higher bid was due to equipment cost. There are four different manufacturers for the type of gas compressors specified for this project. The two least expensive manufacturers did not submit quotations to the design-build entities, citing scheduling conflicts. As a result, the cost of the equipment quoted to the pre-qualified design-build entities is higher than what was factored into the Engineer's Estimate.

Staff reviewed the cost proposal submitted by APEC and found to be in order and considers this reasonable for the work involved.

Council Policy provides for a standard contingency of ten percent on public works projects of this nature to cover unforeseen conditions that may be encountered during construction. Staff considers the standard contingency appropriate for this project.

### EVALUATION AND FOLLOW-UP

No additional follow-up action with City Council is expected at this time. A progress report on this and other Wastewater Facility capital projects will be made to the Transportation and Environment Committee and the Council on a semiannual basis. Monthly progress reports will also be submitted to the Treatment Plant Advisory Committee and posted on the City's website.

### POLICY ALTERNATIVES

**Alternative 1: Direct City staff to perform the required services with in-house resources.**

**Pros:** Opportunity for staff to work on a large multi-discipline project.

**Cons:** The design and construction work requires a high level of expertise across multiple engineering disciplines and detailed working knowledge of tie-ins to existing electrical and controls systems. ESD does not possess the capacity or required technical capabilities.

**Reason for not recommending:** The City would need time to hire professional engineering staff with knowledge and licensure across multiple disciplines (structural, mechanical, electrical, controls etc) to accomplish this project. The construction would need to be bid separately, adding significant time to complete this time-sensitive project.

**Alternative 2: Direct City staff to reject all bids and re-bid the project at a later time.**

**Pros:** Re-bidding the project may result in a more favorable bid result.

**Cons:** Delaying this project elevates the risk of a major equipment failure which could potential result in continuous flaring of digester gas.

**Reason for not recommending:** Time is of the essence. It is critical to keep the project on schedule to ensure that a new reliable gas compression facility is put into place as soon as possible. There is a high risk that the existing gas compressors could experience a sudden failure due to their age and continuous mode of operation. This would require staff to revert to operating the engines on only natural gas (an increase to operating cost) and result in valuable digester gas being flared.

**PUBLIC OUTREACH/INTEREST**

- ✓ **Criterion 1:** Requires Council action on the use of public funds equal to \$1 million or greater. **(Required: Website 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)**

A "Notice to Contractors" inviting qualified contractors to submit bids was posted on BidSync and the *San José Post Record*. This memo will be posted on the City's website for the May 20, 2014, Council agenda.

**COORDINATION**

This project and memorandum has been coordinated with the Finance Department, Public Works Department, Planning, Building and Code Enforcement Department, and the City Attorney's Office. This item is scheduled to be heard at the May 15, 2014, Treatment Plant Advisory Committee meeting.

**COST SUMMARY/IMPLICATIONS**

1.	AMOUNT OF RECOMMENDATION/COST OF PROJECT:	\$ 11,316,000
	Project Delivery	\$ 2,515,500*
	Construction	11,316,000
	Contingency	1,131,600
	Total Project Costs	<u>14,963,100</u>
	Prior Fiscal Year Expenses:	<u>\$627,200</u>
	REMAINING PROJECT COSTS:	\$ 14,335,900

*\*Project delivery includes \$607,000 for consultant design and construction support services, \$151,000 for Design Services, \$1,547,500 for Construction Management Service, \$20,000 for Special Inspection Services and \$190,000 for Project Award and Closeout.*

2. COST ELEMENTS OF AGREEMENT/CONTRACT:

This is a unit price contract. \$ 11,316,000

3. SOURCE OF FUNDING: 512 – San José-Santa Clara Plant Capital Fund.

4. OPERATING COSTS: The proposed operating and maintenance costs will have no significant impact on the Plant Operating Budget.

In 2013-2014, the funding for the Digester Gas Compressor Upgrade project is insufficient to award this contract based on the actual bids. A budget action is recommended to increase the project budget by \$5,200,000. To offset this increase, a decrease to the Energy Generation Improvements appropriation is also recommended based on the projected expenditures this year. The 2015-2019 Proposed Capital Improvement Program (CIP) will recommend additional funds of \$820,000 for project delivery costs next fiscal year.

**BUDGET REFERENCE**

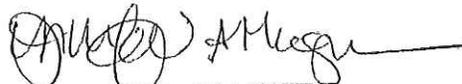
The table below identifies the fund and appropriations proposed to fund the contract(s) recommended as part of this memo and remaining project costs, including project delivery, construction, and contingency costs.

Fund #	Appn # / RC#	Appn. Name	Current Appn.	Recom'd Budget Action	Total	2013-14 Adopted Capital Budget	Last Budget Action (Date, Ord. #)
<b>Remaining Project Costs</b>					<b>\$14,335,900</b>		
512	7453 / 171675	Combined Heat & Power Equipment R&R	\$10,434,000	\$5,200,000	\$15,634,000	V-196	10/08/13 Ord. #29320
512	7454	Energy Generation Improvements	\$37,628,000	(\$5,200,000)	\$32,428,000	V-197	09/24/13 Ord. #29318

**CEQA**

Exempt, File No. PP13-060.

/s/  
 KERRIE ROMANOW  
 Director, Environmental Services Department

  
 JENNIFER A. MAGUIRE  
 Deputy City Manager/Budget Director

For questions please contact Ashwini Kantik, Assistant Director of Environmental Services Department at 408-975-2553.



**CITY COUNCIL ACTION REQUEST**

<b>Department(s):</b> Environmental Services	<b>CEQA:</b> Exempt, File No. PP13-045	<b>Coordination:</b> PW, Finance, PBCE, Fire, CMO - Budget, CAO, TPAC	<b>Dept. Approval:</b> /s/Ashwini Kantak for Kerrie Romanow
<b>Council District(s):</b> City-wide			<b>CMO Approval:</b> 

**SUBJECT: REPORT ON BIDS AND AWARD OF CONTRACT FOR THE 7249 - TRAINING TRAILER REPLACEMENT PROJECT**

**RECOMMENDATION:**  
1) Award of a construction contract for the 7249 - Training Trailer Replacement to the low bidder, Newton Construction and Management, Inc., in the amount of \$513,874.  
2) Approve a contingency in the amount of \$51,400.

**BASIS FOR RECOMMENDATION:**  
The existing Trailers A and B, at the San José-Santa Clara Regional Wastewater Facility<sup>1</sup> (Regional Wastewater Facility), were purchased and installed in 1985. Currently, Trailer A is occupied by Operator-in-Training (OIT) staff. Trailer B is used as a classroom and computer lab. Both trailers are nearly 30 years old and require frequent maintenance due to leaks and structural deterioration.  
This project will construct a new 7-wide trailer east of Trailer B to accommodate Regional Wastewater Facility training needs and additional OIT's. The new trailer will include complete electrical, mechanical, and plumbing systems; new metal ramps; concrete foundation; and asphalt pavement. Interior improvements include OIT workstations, office space, men and women's locker rooms, a conference room, and a lunch room. Exterior utility hook-ups, electrical power outlets for electric carts, HVAC connections, minor landscaping improvements, and demolition of the existing trailers will be performed by Facility staff.  
Bids were opened on April 3, 2014 and seven bidders submitted proposals. Newton Construction and Management, Inc., of San Luis Obispo, CA, submitted the low bid in the amount of \$513,874, which is 20 % above the Engineer's Estimate (EE). Upon review of the proposal, the higher bid was due to higher material costs for the modular trailers. Staff found the bid proposal submitted by the low bidder in order and reasonable for this type of project.  
Staff considers this low bid amount acceptable and the Council-approved standard contingency of 10 percent appropriate for this project.

<sup>1</sup>The legal, official name of the facility remains San Jose/Santa Clara Water Pollution Control Plant, but beginning in early 2013, the facility was approved to use a new common name, the San José-Santa Clara Regional Wastewater Facility.

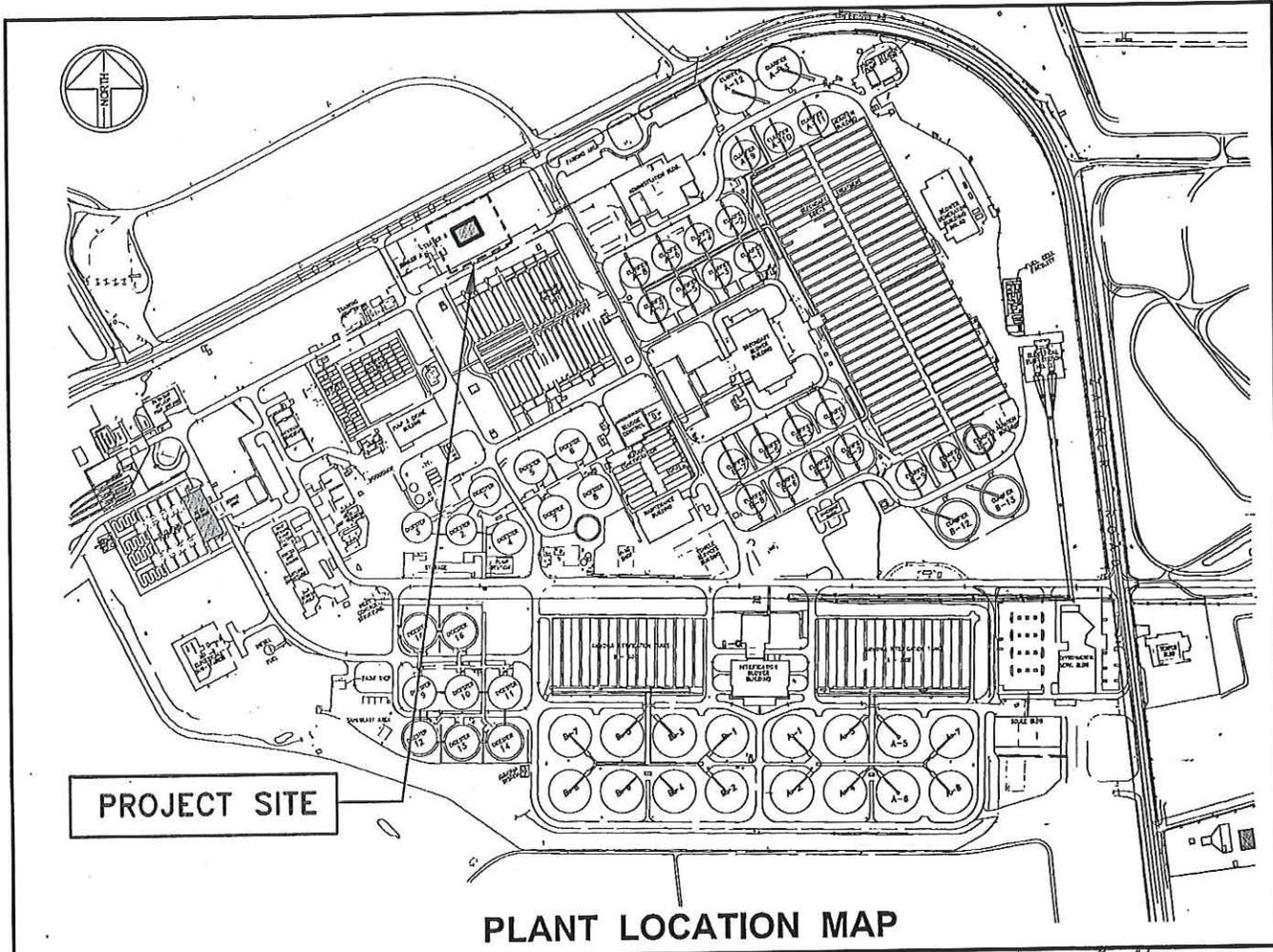
**COST AND FUNDING SOURCE:**

1. AMOUNT OF RECOMMENDATION/COST OF PROJECT:	\$513,874
2. COST OF PROJECT:	\$211,000*
Project Delivery	\$513,874
Construction	\$51,400
Contingency	<u>\$776,274</u>
<b>TOTAL PROJECT COSTS</b>	<u>77,542</u>
Expenditures to Date:	\$698,732
<b>REMAINING PROJECT COSTS</b>	

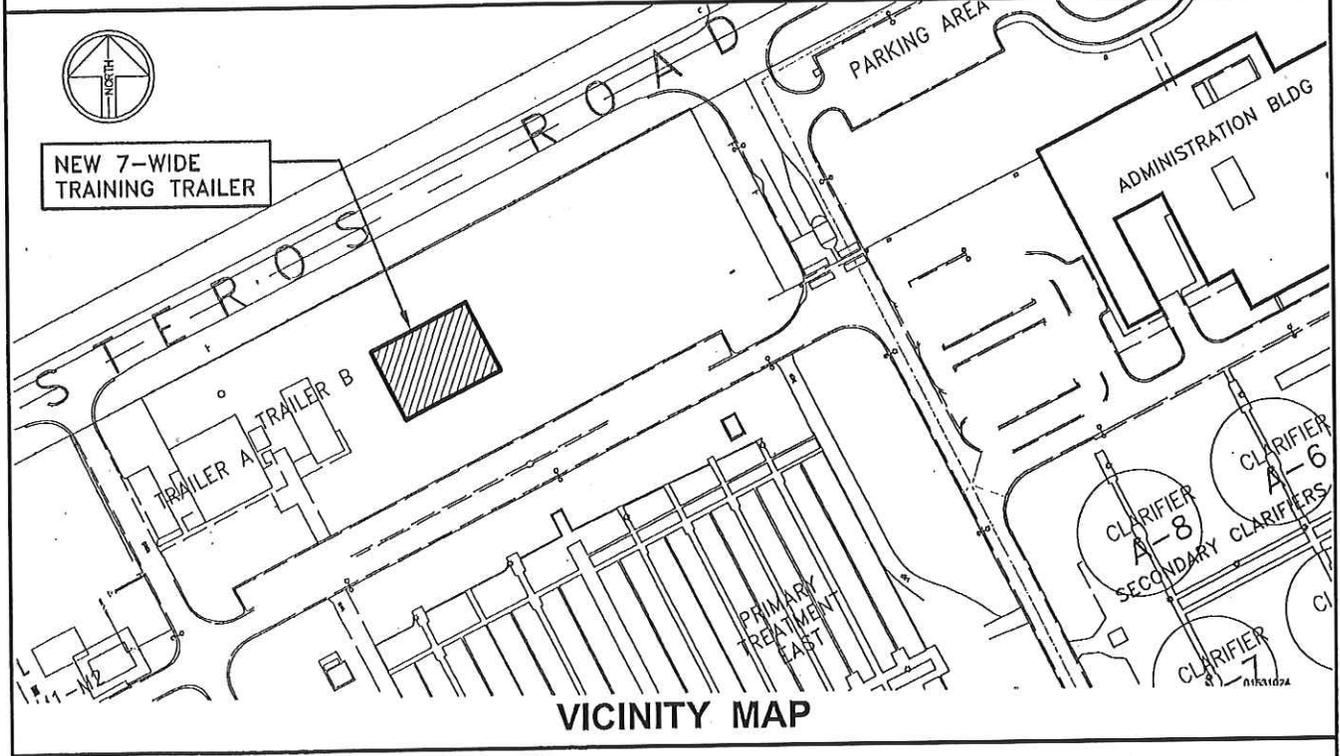
\* Project delivery includes \$83,700 for design services, \$98,400 for construction management services, and \$28,900 for project award and close-out.

SOURCE OF FUNDING: 512 – San José-Santa Clara Treatment Plant Capital Fund, 5690 – Plant Infrastructure Improvements (\$2,810,000 for 2013-2014).

**FOR QUESTIONS CONTACT: Ashwini Kantak, Assistant Director, Environmental Services at (408) 975-2553.**



**PLANT LOCATION MAP**



**VICINITY MAP**

**7249 - TRAINING TRAILER REPLACEMENT**

5C

COUNCIL AGENDA: 5/20/14  
ITEM:



# Memorandum

**TO:** HONORABLE MAYOR  
AND CITY COUNCIL

**FROM:** Kerrie Romanow

**SUBJECT:** SEE BELOW

**DATE:** April 23, 2014

Approved  Date 5/6/14

**SUBJECT: MASTER SERVICE AGREEMENTS WITH ENVIRONMENTAL SCIENCE ASSOCIATES, CH2M HILL ENGINEERS, INC. AND DAVID J. POWERS & ASSOCIATES, INC. FOR ENVIRONMENTAL REVIEW AND PERMITTING SERVICES**

### RECOMMENDATION

Approve the master agreements between the City of San José and the following firms for environmental review and permitting services for the San José-Santa Clara Regional Wastewater Facility and various other City projects and programs for a term through June 30, 2019, subject to the appropriation of funds:

1. Environmental Science Associates in an amount not to exceed \$2,125,000;
2. CH2M Hill Engineers, Inc. in an amount not to exceed \$500,000; and
3. David J. Powers & Associates, Inc. in an amount not to exceed \$375,000.

### OUTCOME

Approval of master service agreements with Environmental Science Associates, CH2M Hill Engineers, Inc., and David J. Powers & Associates, Inc. would enable staff to have these firms on retainer for environmental review and permitting services for various City projects and programs managed by the Environmental Services Department, including the capital improvement projects at the San José-Santa Clara Regional Wastewater Facility.

April 23, 2014

Subject: Master Agreements for Environmental Review and Permitting Services on Various City Projects

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## BACKGROUND

Environmental Services (“ESD”) is responsible for ensuring compliance with environmental regulations on many City projects. In 2008, the City selected David J. Powers through a Request for Qualifications (“RFQ”) process for environmental review services. This agreement expired on December 31, 2013. The City’s contract with Environmental Science Associates for environmental review services related to the Plant Master Plan (“PMP”) will terminate in June 30, 2014.

The San José City Council adopted the PMP and certified the associated Environment Impact Report (EIR) in November 2013. The PMP recommends over \$2.0 billion in construction projects be completed over the next 30 years to replace aging infrastructure at the San José-Santa Clara Regional Wastewater Facility<sup>1</sup> (Wastewater Facility) and to enable the Wastewater Facility to meet future regulatory requirements and service area growth, with more than \$1 billion of this work to occur in the first ten years. The PMP EIR provided environmental review for many of the recommended projects at a program level of detail. Before these projects can be approved for construction, further environmental review may be required to address the more detailed site-specific issues of a particular project.

On April 29, 2014, the City Council will be considering approval of a master consultant agreement with David J. Powers & Associates, Inc. for environmental consulting services for various City facilities. The scope of that agreement as distinguished from the agreement being considered by Council on May 20, 2014 is it will be managed by the Department of Public Works and used for projects not associated with the Wastewater Facility.

## ANALYSIS

On January 23, 2014, the City issued a Request for Qualification seeking interested firms to submit Statements of Qualifications (SOQs) for environmental review and permitting services in support of various projects and programs managed by the ESD. Thirteen SOQs were received by the February 14, 2014 submittal deadline. The 3-member Technical Evaluation Panel (TEP) consisted of staff from three different ESD Divisions: Sustainability and Compliance, Integrated Waste Management and Watershed. The TEP reviewed the written SOQs and invited the top three firms to interviews held on March 25, 2014.

Evaluation of the SOQs and the interview were based on each firm’s expertise, experience and approach that consisted of:

- Qualifications/expertise of the lead personnel of the firm;
- Experience providing environmental review and permitting services for projects and programs of similar size, scope, and complexity;

<sup>1</sup> The legal, official name of the facility remains San Jose/Santa Clara Water Pollution Control Plant, but beginning in early 2013, the facility was approved to use a new common name, the San José-Santa Clara Regional Wastewater Facility.

April 23, 2014

Subject: Master Agreements for Environmental Review and Permitting Services on Various City Projects

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- Approach to managing small, complex or large projects;
- Approach to manage a project and assign staff and resources adequately;
- City's Local and Small Business Preference Ordinance.

The final rankings are summarized below:

<u>Consultant Firm</u>	<u>Total Score</u>	<u>Rank</u>
Environmental Science Associates	85	1
CH2M Hill Engineers, Inc.	84	2
David J. Powers & Associates	81	3

Two of the three firms qualified for the Local Business Preference and one firm qualified for the Small Business Preference.

All three firms demonstrated a high level of technical expertise and experience in providing a broad range of environmental consultant services including but not limited to project/program environmental review, clearance, and permitting; environmental documentation, studies, and reports; site monitoring and reporting; regulatory research and environmental compliance evaluation; construction document review and worker training; and other environmental consultation services.

Staff recommends approval of master agreements with all three firms, for varying amounts based on their expertise and various projects and program needs within ESD as follows:

- Environmental Science Associates is recommended to provide primary support to the Wastewater Facility Capital Improvements, Operations & Maintenance, and Sustainability & Compliance Divisions on Facility capital improvement projects. It is anticipated that several capital improvement projects will require environmental review and permitting support within the next five years. These projects include, but are not limited to, the New Headworks Project, Digested Sludge Dewatering Facility, Lagoons and Drying Bed Retirement, Outfall Rehabilitation and Repair Project, Yard Piping and Road Improvements, and Support Building Improvements.
- CH2M Hill Engineers, Inc. is recommended to provide primary support on various projects to the Integrated Waste Management Division, Watershed Protection Division, and Municipal Water System. Secondary support could be provided to various other projects/programs within other divisions of ESD. These projects may include, but are not limited to zero waste initiatives and water delivery services.
- David J. Powers & Associates is recommended to provide primary support to the Wastewater Facility Operations & Maintenance and Sustainability & Compliance Divisions on various projects. These projects may include, but are not limited to Wastewater Facility burrowing owl habitat and the A18 pond and levee.

These master agreements would provide much needed technical expertise and support on an as-needed basis, and provide staff the ability to choose the firm that would best complement staff expertise. Staff reserves the discretion to issue individual service orders based on the particular consultant firm's expertise, cost and availability. The service order for a specific project would still need to be negotiated between the parties as to scope and cost.

### EVALUATION AND FOLLOW-UP

No additional follow up action with the Council is expected at this time. All service orders issued for environmental review and permitting services related to the Facility projects will be reported to Treatment Plant Advisory Committee (TPAC) on the monthly summary of procurement and contract activity.

### POLICY ALTERNATIVES

**Alternative #1: Direct City staff to provide the required services with in-house resources.**

**Pros:** Increased work options for City staff.

**Cons:** A bulk of the anticipated work is environmental analysis for the Wastewater Facility capital improvement projects pursuant to California Environmental Quality Act (CEQA). CEQA analysis requires the independent judgment of the City's Planning Department staff and therefore cannot be completed by the project proponent (i.e. the Environmental Services Department). Some of the anticipated work may require analysis and/or reporting by registered engineers and/or certified biologists in various technical specialties. In-house Planning Department staff do not possess the capacity or all of the required technical capability across the broad range of expertise anticipated for the projects.

**Reason for not recommending:** The City would need to hire several new staff members with the knowledge and expertise in a variety of environmental areas. Portions of the anticipated work would still need to be performed by third-party licensed engineers, geologists or other specialists to meet regulatory requirements.

### PUBLIC OUTREACH/INTEREST

- Criteria 1:** Requires Council action on the use of public funds equal to \$1,000,000 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 Criterion 1: Requires Council action on the use of public funds equal to \$1 million or greater. The RFQ was posted on BidSync and the City's Internet procurement posting site. This memorandum will be posted on the City's website for the May 20, 2014 City Council agenda.

### COORDINATION

The memorandum has been coordinated with the City Manager's Budget Office, the City Attorney's Office and the Planning, Building and Code Enforcement Department. The item is scheduled to be heard at the May 15, 2015 TPAC meeting.

### COST SUMMARY/IMPLICATIONS

1.	AMOUNT OF RECOMMENDATION:	\$ 3,000,000*
2.	COST AGREEMENT WITH EACH CONSULTANT:	
	Environmental Science Associates Agreement	\$ 2,125,000
	CH2M Hill Agreement	\$ 500,000
	David J. Powers & Associates Inc Agreement	\$ 375,000
	<b>TOTAL AGREEMENT AMOUNT</b>	<b>\$ 3,000,000</b>

\* Funding for these Master Agreements will come from the San José/Santa Clara Treatment Plant Capital Fund (512), the San José/Santa Clara Treatment Plant Operating Fund (513), and the Integrated Waste Management Fund (423). Costs for these contracts to be incurred in future fiscal years are subject to Council approval of the funding.

3. **FISCAL IMPACT:** No additional funding is necessary to approve these master agreements. Funds have already or will be appropriated as needed for the various capital projects through the Plant Capital Improvement Program or will be appropriated for the various City projects upon issuance of each service order.

HONORABLE MAYOR AND CITY COUNCIL

April 23, 2014

Subject: Master Agreements for Environmental Review and Permitting Services on Various City Projects

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**CEQA**

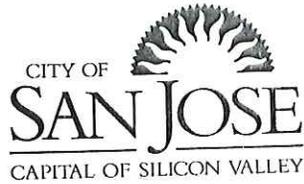
Not a Project, File No. PP10-066(d), Consultant Services.

/s/

KERRIE ROMANOW

Director, Environmental Services

For questions please contact René Eyerly, Sustainability and Compliance Manager at (408) 975-2594.



# Memorandum

**TO: TREATMENT PLANT ADVISORY COMMITTEE**      **FROM: Kerrie Romanow**  
**SUBJECT: FIVE-YEAR 2015-2019 PROPOSED CAPITAL IMPROVEMENT PROGRAM**      **DATE: May 9, 2014**

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This memorandum serves to transmit the San José/Santa Clara Regional Wastewater Facility Proposed Five-Year 2015-2019 Capital Improvement Program (CIP). The anticipated five-year CIP and agency contributions were discussed with staff representatives from the tributary agencies on February 13<sup>th</sup> and March 10<sup>th</sup>. The Proposed Five-Year CIP is provided to the Treatment Plant Advisory Committee's review and for a recommendation to the San José City Council for approval.

If you should have any questions, please contact Ashwini Kankat at 408-975-2553.

/s/  
KERRIE ROMANOW  
Director, Environmental Services

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

700 Los Esteros Road  
San Jose, California 95134

**Five-Year 2015-2019**  
**Capital Improvement Program**

Submitted by

Kerrie Romanow, Director

Environmental Services Department

City of San Jose

**TO: Treatment Plant Advisory Committee**

Chuck Reed  
Pat Kolstad  
Jose Esteves  
Jamie Matthews  
Chuck Page  
John M. Gatto  
Jennifer Maguire  
Kansen Chu  
Madison Nguyen

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





**2014-2015 CAPITAL BUDGET**

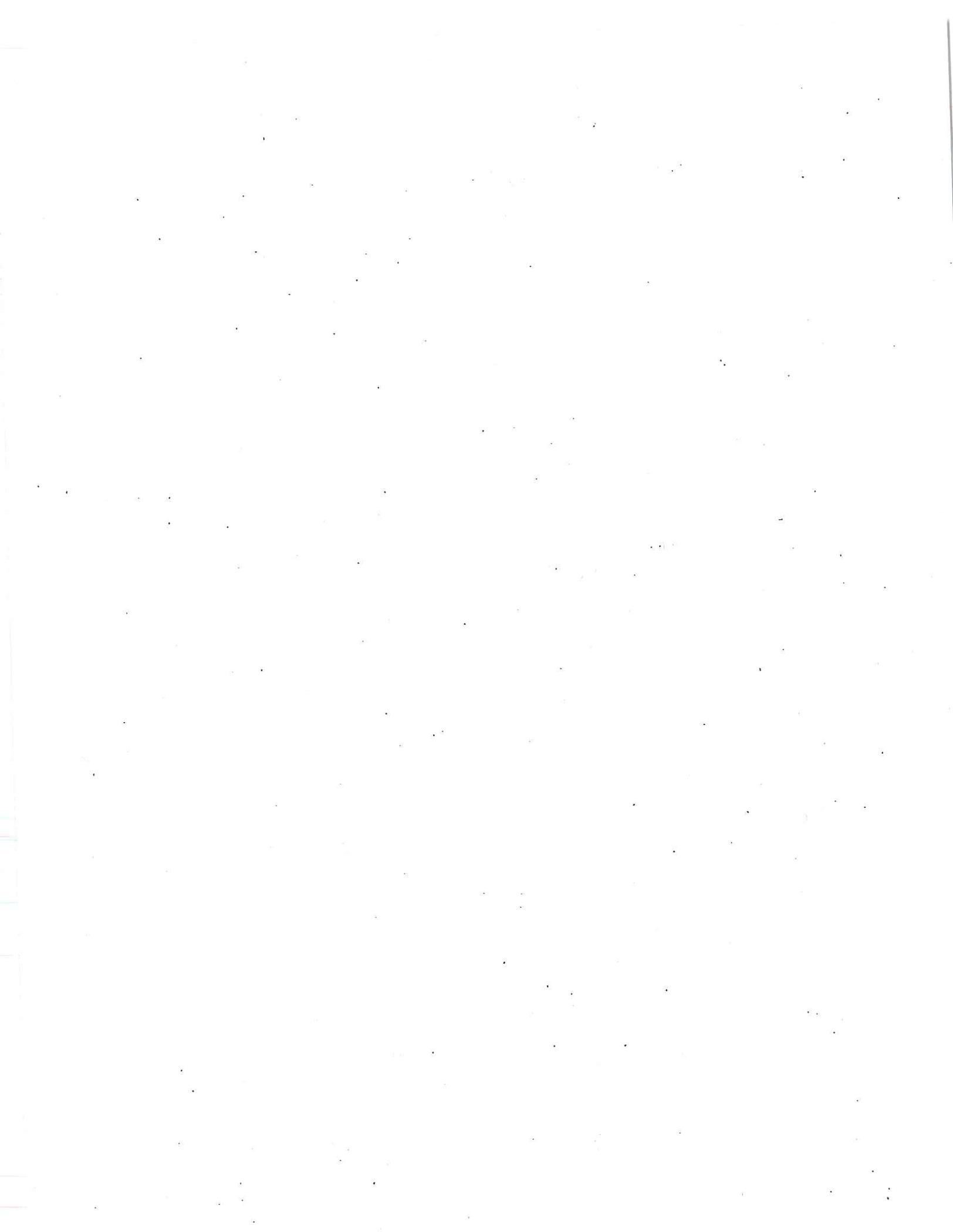
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**2015-2019 CAPITAL  
IMPROVEMENT PROGRAM**



**WATER POLLUTION  
CONTROL**

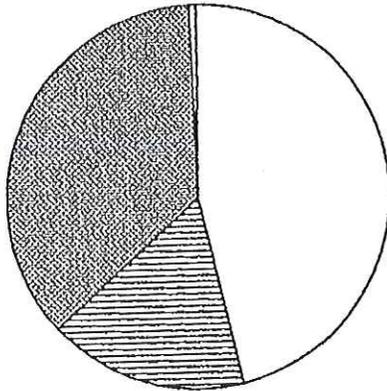
WATER POLLUTION  
CONTROL



# WATER POLLUTION CONTROL 2015-2019 Capital Improvement Program

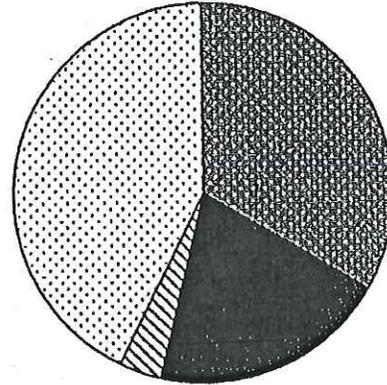
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2014-2015 Proposed  
Source of Funds



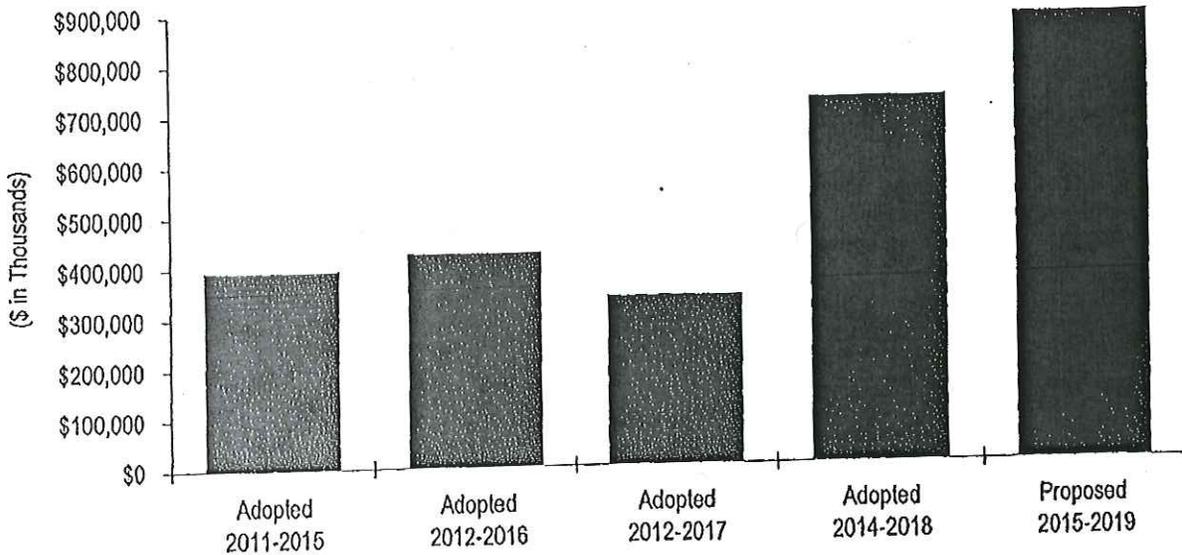
- Beginning Fund Balance
- ▨ Other Government Agencies
- ▧ Transfers
- ▩ Interest and Miscellaneous

2014-2015 Proposed  
Use of Funds



- ▧ Construction
- Non-Construction
- ▨ Reserves and Transfers
- Ending Fund Balance

CIP History



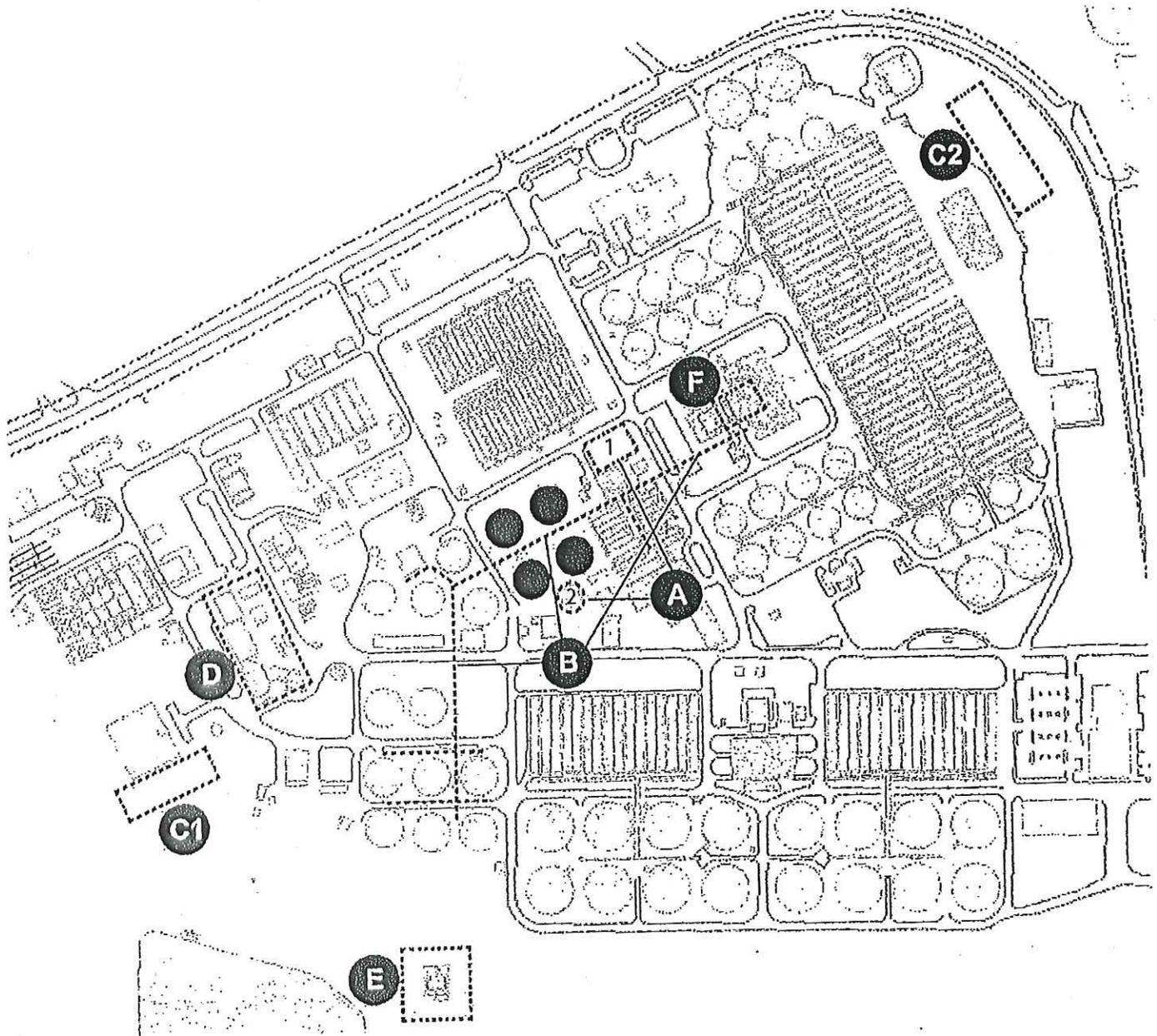
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# Water Pollution Control

## 2015-2019 Proposed Capital Improvement Program\*

- A) Combined Heat & Power Equipment Repair & Rehabilitation
  - 1. Digester Gas Compressor Upgrade
  - 2. Digester Gas Storage Replacement
- B) Digester and Thickener Facilities Upgrade

- C) Energy Generation Improvements
  - 1. Emergency Diesel Generators
  - 2. Cogeneration Facility
- D) Headworks Improvements & New Headworks
- E) Iron Salt Feed Station
- F) Plant Instrument Air System Upgrade



\* Includes only the first set of projects to be in construction at the Plant. Please see the Source & Use for a full listing.

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**Water Pollution Control Capital Program**  
**2015-2019 Proposed Capital Improvement Program**  
**Overview**

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**INTRODUCTION**

The San José/Santa Clara Water Pollution Control Plant (Plant) is a regional wastewater treatment facility serving eight South Bay cities and four special districts including: San José, Santa Clara, Milpitas, Cupertino Sanitary District (Cupertino), West Valley Sanitation District (Campbell, Los Gatos, Monte Sereno, and Saratoga), County Sanitation Districts 2-3 (unincorporated), and Burbank Sanitary District (unincorporated). 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). ESD is also responsible for planning, designing, and constructing capital improvements at the Plant, including water reuse facilities. On March 4, 2013, the City Council approved to change the name of the Plant to the San José-Santa Clara Regional Wastewater Facility for use in future communications and public outreach.

PLANT INFRASTRUCTURE	
ACRES OF LAND	2,684
AVERAGE DRY WEATHER INFLUENT CAPACITY (MILLIONS OF GALLONS PER DAY)	167
AVERAGE DRY WEATHER INFLUENT FLOW (MILLIONS OF GALLONS PER DAY)	110
DRY METRIC TONS OF BIOSOLIDS HAULED EACH YEAR	56,000
AVERAGE MEGAWATTS PRODUCED	8.35

The 2015-2019 Proposed Capital Improvement Program (CIP) provides funding of \$887.0 million, of which \$142.3 million is allocated in 2014-2015. The five-year CIP is developed by City staff, reviewed by the Treatment Plant Advisory Committee (TPAC), and forwarded to the San José City Council for budget approval. The budgeted 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 the operation, maintenance, and capital costs of its own sewage collection system; 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.

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

**PROGRAM PRIORITIES AND OBJECTIVES**

The 2015-2019 Proposed CIP is consistent with the goals and policies outlined in the City of San José Envision 2040 General Plan. These include maintaining adequate operational capacity for wastewater treatment to accommodate the City's economic and population growth; adopting and implementing new technologies for wastewater to achieve greater safety, energy efficiency, and environmental benefit; and maintaining and operating the Plant in compliance with all applicable local, State, and federal regulatory requirements.

# Water Pollution Control Capital Program

## 2015-2019 Proposed Capital Improvement Program

### Overview

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#### PROGRAM PRIORITIES AND OBJECTIVES

The development of this Proposed CIP is guided by the Plant Master Plan (PMP), a 30-year planning-level document focused on long term rehabilitation and modernization of the Plant. On April 19, 2011, the City Council approved a preferred alternative for the Draft PMP and directed staff to proceed with a program-level environmental review of the preferred alternative. In November 2013, the City Council approved the PMP and certified the final Environmental Impact Report. In December 2013, Santa Clara's City Council took similar actions. The PMP recommends more than 114 capital improvement projects to be implemented over a 30-year planning period at an estimated investment level of approximately \$2 billion, with over \$1 billion to be invested in the next ten years.



San José-Santa Clara Regional  
Wastewater Facility

A capital program of this size will require significant resources in order to manage and deliver effective projects on time and on budget. On September 24, 2013, the City Council approved a consultant agreement with MWH Americas, Inc. to assist and support ESD in developing and implementing this capital improvement program. On October 15, 2013, MWH program team members mobilized and are now co-located with City staff to form an integrated Program Management Office and program team. Priorities for the near-term include completing program start-up activities, ensuring the ability to use alternative project delivery methods, securing program financing, and developing program staff.

*Program Start-Up Activities:* The initial focus of the program start-up activities includes establishing a Program Execution Plan that will guide implementation of the CIP; developing supporting systems, tools, and processes, organization and governance structures, master schedules and budgets, performance reports, and a document management system; and completing a detailed project validation process to critically evaluate project needs and priorities. The projects included with this Proposed CIP are based on the outcome of the validation process.

*Alternative Delivery Methods:* Early results of the validation process indicate that bundling related projects into large construction packages and using alternative delivery methods (e.g., design-build, progressive design-build, design-build-operate, construction-manager-at-risk) may prove advantageous for the program. The program team has begun to work with the City's legal team and Public Works staff to investigate and pursue the required authority, at the state and federal levels, to use alternative project delivery methods on the program (for the purpose of gaining efficiencies and/or cost savings). For the time being, it is assumed that the majority of projects in the Proposed

# Water Pollution Control Capital Program

## 2015-2019 Proposed Capital Improvement Program

### Overview

#### PROGRAM PRIORITIES AND OBJECTIVES

CIP will be delivered using traditional project delivery (design-bid-build) and/or low-bid design-build project delivery, for which the City already has authority.

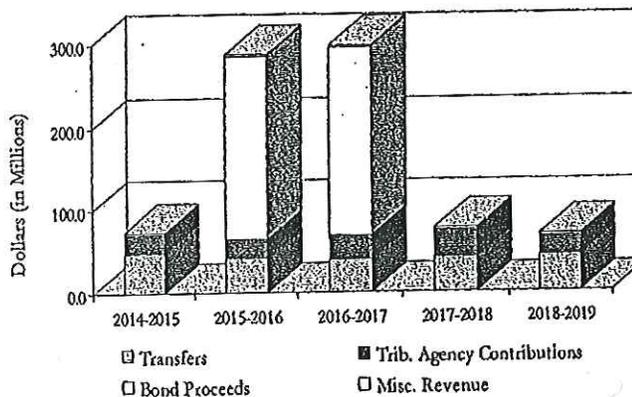
*Program Financing:* To date, the general concept for funding the CIP has been to pay for critical rehabilitation projects inside the fence line of the Plant's main operational area with existing ratepayer funds, and to finance new technology projects (new biosolids facilities, cogeneration facility, and advanced filter facility). More recently, discussions with the Plant's partner agency and tributary members have focused on the possibility of external financing for large rehabilitation projects that have an asset life of 30 years or greater, to better address generational equity. Finance managers from the Cities of San José and Santa Clara and the tributary agencies have met to discuss financing needs and have agreed to participate in external financing to minimize ratepayer impacts. Follow-up recommendations will be brought to TPAC and the City Council as more information becomes available. For the next five years, San José's portion of the funding for the Proposed CIP is already programmed into the 2015-2019 sewer rate models with moderate rate increases of 3%-5% planned beginning in 2015-2016.

*Program Staff Development:* Successful delivery of this large, multi-disciplinary CIP will require an integrated team of City staff, outside consultants, and contractors. After the program start-up efforts conclude, the program team will increase its attention on project delivery. An immediate priority will be identifying resource needs and securing a combination of City staff and consultants to deliver the program. The program team is currently supported by City staff from Environmental Services, Public Works, Planning, Finance, and the City Attorney's Office, and staff from MWH Americas, Inc. The program will also continue to draw from the professional consultant and contractor community for subject-matter technical expertise, engineering services, and construction management.

#### SOURCES OF FUNDING

Revenues for the Five-Year CIP are derived from several sources: transfers from the City of San José Sewer Service and Use Charge Fund and Sewage Treatment Plant Connection Fee Fund; contributions from the City of Santa Clara and other tributary agencies; interest earnings; Calpine Metcalf Energy Center Facilities repayments; a federal grant from the US Bureau of Reclamation; and proceeds from a planned bond issuance.

Summary of Revenues



# Water Pollution Control Capital Program

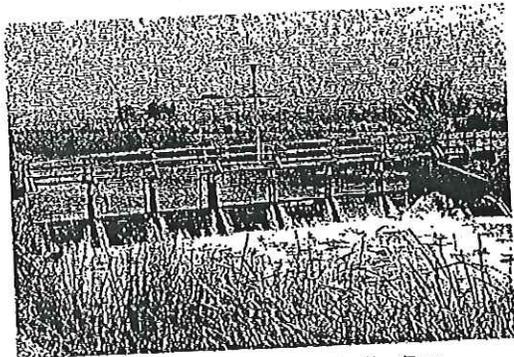
## 2015-2019 Proposed Capital Improvement Program

### Overview

#### SOURCES OF FUNDING

The Sewer Service and Use Charge Fund derives its revenues from fees imposed on San José users of the residential, commercial, and industrial sanitary sewer system. Transfers from this fund to the Plant CIP over the five years total \$165.3 million, which reflect a \$13.5 million (8.3%) increase compared to the 2014-2018 Adopted CIP due to the incorporation of projects recommended from the validation process as described under Program Priorities and Objectives.

Contributions from the City of Santa Clara and other agencies are determined according to agreements with the participating agencies based on financing plans, anticipated Plant expenditures, and the amount and characteristics of flows from each agency's connections to the Treatment Plant. These contributions reimburse the City for actual project expenditures. In this Proposed CIP, contributions from the City of Santa Clara and other agencies total \$133.2 million, which represents a \$70.4 million (52.1%) decrease compared to the 2014-2018 Adopted CIP due to their participation in the external financing.



Treated Water Flows to the Bay

To accommodate these costs in future years, a bond issuance amounting to \$221.1 million is programmed in 2015-2016, followed by another issuance of \$227.0 million in 2016-2017. Debt service on the bonds is estimated to be approximately \$5.2 million in 2015-2016 rising to approximately \$27.7 million in 2017-2018 to reflect the amortization of the interest and principal loan amount. The Proposed CIP assumes that no rate increase will be needed for the Sewer Service and Use Charge Fund for 2014-2015; however, rate increases of 3% to 5% are anticipated in the out years of the CIP and will be reassessed at a later time based on the levels of debt service needed to accomplish the full 30-year PMP. Based on the priorities identified through the validation process, the estimated size of the issuance and the related debt service are scheduled to cover project costs programmed in the Proposed 2015-2019 CIP while avoiding large rate increases that would be required to fund the PMP in a "pay-as-you-go" scenario. The bond issuance does not reflect a more comprehensive financing plan that will be required to accomplish the full 30-year PMP.

Currently, the program team is working to scope the PMP projects fully and sequence them into an overall implementation plan. A more detailed financial plan, an overall program execution plan, updated cost estimates and cash flow curves are also being developed. Staff anticipates that in late 2014, project planning will be much further along, which will facilitate the development of a more refined long-term financial plan.

**Water Pollution Control Capital Program**  
**2015-2019 Proposed Capital Improvement Program**  
**Overview**

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**PROGRAM HIGHLIGHTS**

The wastewater that enters the Plant is treated using various physical and biological processes before being discharged into San Francisco Bay. This section provides an overview of each treatment process and identifies some of the major projects to be implemented with this CIP.

Preliminary Wastewater Treatment

The headworks facility, located at the front end of the Plant, is designed to provide preliminary treatment of the incoming wastewater. Large solids such as rags, sticks, floatables, grit, and grease are removed through a screening and grit removal process to protect downstream pumping and other equipment. Projects included with this CIP are focused on constructing a new headworks facility and improving the existing wet weather reliability headworks structures.

Project Name	Description	2015-2019 CIP Cost	Estimated Completion
Headworks Improvements	Modify Headworks No. 2 to accommodate all dry weather flow to allow Headworks No. 1 (HW1) to be taken out of service. Based on condition assessment, rehabilitate HW1 to keep it operational until the New Headworks is completed.	\$28.0 million	3 <sup>rd</sup> Quarter 2019
New Headworks	Construct new headworks, expand and line equalization basin as needed and incorporate odor control measures.	\$88.4 million	3 <sup>rd</sup> Quarter 2022

Primary Wastewater Treatment

The primary treatment process consists of a series of uncovered concrete holding tanks fitted with mechanisms that work to slow the flow of wastewater and allow heavy solids to settle out while allowing oil, grease, and lighter solids to float to the surface.

Mechanical skimmers remove grease and floatable materials from the water surface and settled solids (i.e., sludge) are collected at the bottom of the tanks while the remaining liquid waste stream is moved onto the next process for further treatment. Rehabilitation of the primary tanks will be conducted in four phases, one quadrant at a time over an estimated ten year period. Funding included with this CIP focuses on the first phase of work which will include replacement of all mechanical, electrical, and controls equipment; refurbishment and coating of concrete; structural modifications to accommodate odor control covers; and odor treatment.

# Water Pollution Control Capital Program

## 2015-2019 Proposed Capital Improvement Program

### Overview

#### PROGRAM HIGHLIGHTS

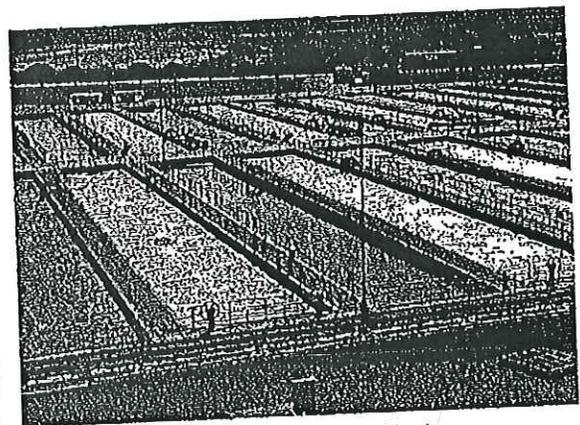
##### Primary Wastewater Treatment (Cont'd.)

Project Name	Description	2015-2019 CIP Cost	Estimated Completion
East Primary Rehabilitation, Seismic Retrofit, and Odor Control	Seismic retrofit primary tanks for odor control covers, coat concrete, convert clarifier mechanisms to stainless steel, and install odor control treatment system.	\$42.2 million	3 <sup>rd</sup> Quarter 2024
Iron Salt Feed Station	Construct permanent iron salt and polymer dosing station including a concrete containment structure, pumps, piping, and instrumentation to dose and deliver iron salt solution. Adding iron salts to incoming wastewater will improve Plant operations by enhancing the settling of sludge in the primary clarifiers and reducing corrosion and odor.	\$3.3 million	2 <sup>nd</sup> Quarter 2017

##### Secondary Wastewater Treatment

The secondary treatment process at the Plant consists of a series of aeration basins and clarifiers where biological treatment of the wastewater takes place. Microorganisms and wastewater are mixed and aerated in these tanks for varying lengths of time and intensity, resulting in the settling out of large particulate matter or sludge. A portion of the settled sludge is returned to the secondary treatment process for reuse and the remainder removed as excess waste.

The secondary treatment process removes contaminants as required by the Plant's NPDES discharge permit. Rehabilitation of the secondary and nitrification clarifiers will be conducted in phases over a 30-year period and involves performance modifications, along with mechanical, structural, and electrical rehabilitation. Funding included with this CIP focuses on rehabilitating a number of nitrification clarifiers and modifications to one secondary clarifier followed by performance monitoring before proceeding with rehabilitation of the remaining secondary clarifiers and nitrification clarifiers.



*Secondary Aeration Tanks*

# Water Pollution Control Capital Program

## 2015-2019 Proposed Capital Improvement Program

### Overview

#### PROGRAM HIGHLIGHTS

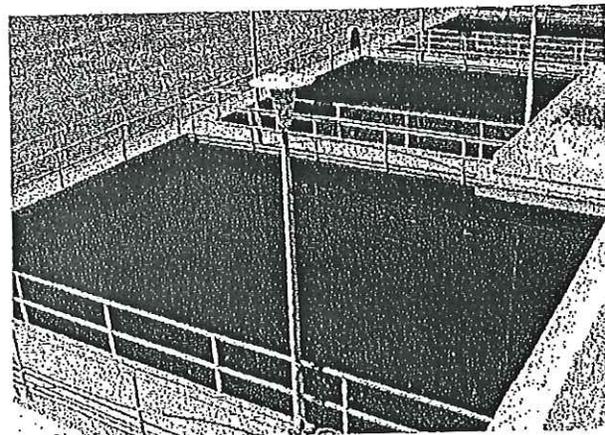
##### Secondary Wastewater Treatment (Cont'd)

Project Name	Description	2015-2019 CIP Cost	Estimated Completion
Aeration Tanks and Blower Rehabilitation	Rehabilitate secondary and nitrification aeration tanks. Replace coarse bubble diffusers with fine bubble diffusers and install variable frequency drives (VFDs).	\$43.9 million	3 <sup>rd</sup> Quarter 2025
Secondary Clarifier Rehabilitation Demonstration	Retrofit one secondary clarifier to determine optimal process configuration for improving clarifier performance and efficiency.	\$2.0 million	2 <sup>nd</sup> Quarter 2020
Secondary and Nitrification Clarifier Rehabilitation	Rehabilitate structural, mechanical, and electrical elements of existing nitrification and secondary clarifiers.	\$26.4 million	4 <sup>th</sup> Quarter 2026

##### Tertiary Wastewater Treatment

The tertiary treatment process is the final treatment stage at the Plant and consists of a gravity filtration process and a disinfection process. The Plant currently filters a portion of the secondary effluent stream to reuse standards, and the remainder to the standards required for discharge to the San Francisco Bay.

Due to the age and condition of the existing tertiary filters, a significant investment would be required to refurbish and retain them for long-term future use. Work included with this CIP focuses on replacing filter media and underdrain systems to ensure continued regulatory compliance and operational reliability. Other work includes improvements to the Plant's outfall bridge and levee and tracking regulatory developments, which may trigger the need for a new disinfection facility in the next two to three NPDES permit cycles.



*Existing Filter Complex*

**Water Pollution Control Capital Program**  
**2015-2019 Proposed Capital Improvement Program**  
**Overview**

**PROGRAM HIGHLIGHTS**

Tertiary Wastewater Treatment (Cont'd.)

Project Name	Description	2015-2019 CIP Cost	Estimated Completion
Filter Rehabilitation	Replace filter media and, potentially, underdrain systems, replace valves and electrical controls, install air scouring equipment and piping, and repair concrete.	\$26.5 million	3 <sup>rd</sup> Quarter 2020
Outfall Bridge and Levee Improvements	Conduct condition assessment, repair or replace bridge and instrumentation supports, repair levee and gate, and refurbish electrical transformer.	\$8.1 million	2 <sup>nd</sup> Quarter 2019

Biosolids

The Plant currently processes biosolids material through a combination of anaerobic digestion, lagoon storage, and air drying. The final product is recycled as alternative daily cover (ADC) at the Newby Island landfill. Due to the projected closure of the Newby Island landfill in 2025, potential changes to biosolids regulations, and odor impacts to the surrounding community, the Plant will be transitioning to new biosolids management operations by 2018. The first phase of this transition will include mechanical dewatering and odor control facilities. The new biosolids operation will ultimately consist of mechanical dewatering, thermal drying, side stream treatment, and odor control components. In addition, phased rehabilitation of the digesters, sludge thickening, and gas handling facilities will be implemented over a ten-year period. Funding included with this CIP focuses on the first phase of the digester rehabilitation, construction of a new digested sludge dewatering facility, and retirement of the existing lagoons and drying beds.

Project Name	Description	2015-2019 CIP Cost	Estimated Completion
Digested Sludge Dewatering Facility	Construct new mechanical dewatering facility and support systems to replace existing sludge storage lagoons and open air solar drying beds.	\$68.2 million	2 <sup>nd</sup> Quarter 2019
Digester and Thickener Facilities Upgrade	Rehabilitate up to ten anaerobic digesters, including new covers and mixing systems, and heating system upgrades. Modify six dissolved air flotation units for co-thickening and odor control upgrades. Construct new above ground gas manifold, new sludge pipeline, and new waste biogas flare system.	\$63.7 million	1 <sup>st</sup> Quarter 2025

**Water Pollution Control Capital Program**  
**2015-2019 Proposed Capital Improvement Program**  
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**PROGRAM HIGHLIGHTS**

Biosolids (Cont'd.)

Project Name	Description	2015-2019 CIP Cost	Estimated Completion
Lagoons and Drying Beds Retirement	Decommission use of existing sludge storage lagoons and open air solar drying beds for post-digestion processing through a phased approach.	\$12.2 million	2 <sup>nd</sup> Quarter 2025
Thermal Drying Facility	Construct new thermal drying facility and support systems to replace existing sludge storage lagoons and open air solar drying beds. Funding in the Proposed CIP will provide for early planning and development of the estimated \$132.0 million facility.	\$2.6 million	4 <sup>th</sup> Quarter 2023

Electrical Systems and Power Generation

The day-to-day operation of the Plant depends heavily on having reliable energy sources and reliable, operable systems with built-in redundancy. While past CIP's focused on modifications to the electrical distribution system, this CIP focuses on replacing aging energy generation equipment. The Plant's engine generators, mechanical and electrical process air compressor, and gas compressors are between 17 and 58 years old, and have been breaking down with increasing frequency, well beyond forecast levels. Funding included with this CIP focuses on construction of a new digester gas compressor facility, a new gas holder, new advanced internal combustion engines, and backup diesel generators. Additional switchgear replacements/upgrades and other electrical improvements will also be made to further enhance electrical reliability at the Plant.

Project Name	Description	2015-2019 CIP Cost	Estimated Completion
Energy Generation Improvements	Construct a new cogeneration facility to replace existing engine-generators with new internal combustion engines and construct new emergency diesel generators.	\$87.0 million	1 <sup>st</sup> Quarter 2018
Plant Electrical Reliability	Replace switchgears, modify distribution buses and cabling, and provide backup systems in the Plant's electrical systems.	\$6.0 million	4 <sup>th</sup> Quarter 2016

# Water Pollution Control Capital Program

## 2015-2019 Proposed Capital Improvement Program

### Overview

#### PROGRAM HIGHLIGHTS

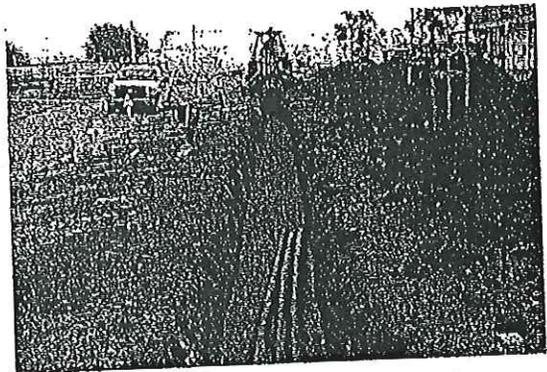
##### Advanced Process Control Systems

The Plant is a highly complex, automated facility monitored and controlled by a complex system of instrumentation (meters, gauges, controllers, etc.) and a Distributed Control System (DCS). The DCS allows operators in a control center to remotely monitor and control operations of the treatment processes, such as opening a valve and adjusting flow through a certain process area utilizing information gathered through the meters and gauges. Funding included with this CIP focuses on development of a Plant-wide automation master plan, flow meter replacement, sensor and control upgrades, and DCS system upgrades.

Project Name	Description	2015-2019 CIP Cost	Estimated Completion
Advanced Facility Control and Meter Replacement	Develop an automation master plan, replace existing flow meters and actuators, and upgrade sensors, controls, and monitoring equipment throughout the Plant.	\$29.4 million	2 <sup>nd</sup> Quarter 2024
Treatment Plant Distributed Control System	Upgrade and convert system hardware and software components.	\$1.5 million	2 <sup>nd</sup> Quarter 2017

##### Site Facility Improvements

Many of the Plant's buildings and grounds are up to 50 years old. As the Plant expanded, support buildings and infrastructure have become decentralized, resulting in inefficient operations. This CIP includes funding for various site improvement projects, such as building improvements, road and storm drainage improvements, equipment replacement, handrail replacements, yard piping rehabilitation, and water systems improvements.



*Fire Main Replacement - Phase 2*

**Water Pollution Control Capital Program**  
**2015-2019 Proposed Capital Improvement Program**  
**Overview**

**PROGRAM HIGHLIGHTS**

Site Facility Improvements

Project Name	Description	2015-2019 CIP Cost	Estimated Completion
Equipment Replacement	Replacement of air compressors, tanks, pumps, motors, control systems, valves, heat exchangers, engine auxiliaries, lab instruments, and other capital equipment as required.	\$8.3 million	Ongoing
Facility Wide Water Systems Improvements	Rehabilitate, replace, and/or extend the Plant's four water systems, including piping, valves, pumps, controls, and other ancillary equipment.	\$13.8 million	1 <sup>st</sup> Quarter 2022
Plant Instrument Air System Upgrade	Construct new above-grade, distributed instrument air supply system.	\$9.1 million	1 <sup>st</sup> Quarter 2019
Plant Infrastructure Improvements	Replacement and rehabilitation work includes handrail replacement, concrete repairs, telecommunication systems upgrade, and Plant support systems/building improvements.	\$8.9 million	Ongoing
Support Building Improvements	Construct various tenant improvements to administration, operations, engineering, and other support buildings. Construct new warehousing facilities and electronic warehouse management system.	\$22.2 million	3 <sup>rd</sup> Quarter 2023
Tunnel Rehabilitation	Structural, mechanical, coating, and piping improvements to the Plant's tunnel system.	\$9.9 million	4 <sup>th</sup> Quarter 2024
Urgent and Unscheduled Treatment Plant Rehabilitation	Timely response to unanticipated maintenance and repair needs at the Plant.	\$7.5 million	Ongoing
Yard Piping and Road Improvements	Phased rehabilitation or replacement of pipes throughout the Plant. Roadway and drainage improvements to Plant's main operations and residual solids management areas.	\$49.3 million	Ongoing

# Water Pollution Control Capital Program

## 2015-2019 Proposed Capital Improvement Program

### Overview

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#### PROGRAM HIGHLIGHTS

##### South Bay Water Recycling Program

The South Bay Water Recycling (SBWR) System was authorized by the City Council in 1993 as a project to divert up to 15 million gallons per day of treated effluent from the bay during the summer by providing non-potable recycled water to customers in Milpitas, Santa Clara, and San José. Current SBWR projects underway include the SBWR Reservoir Facility, which is constructing an Advanced Water Purification Center as a joint project with the Santa Clara Valley Water District (SCVWD). The Advanced Water Purification Center will provide for additional filtration and treatment of the recycled water. This project is expected to be completed in early 2014, marking a significant milestone in the evolution of SBWR. In addition, a strategic planning effort with the SCVWD is underway to develop a Master Plan to address future expansion, operation, and maintenance of the system.

The SBWR Master Planning process is expected to be completed by December 2014. The process will develop recommendations and options for SBWR's mandates, mission, service level, cost effectiveness, and funding through engagement of key stakeholders from the Plant Tributary Agencies and the SCVWD. The Master Plan will include an assessment of the ability of existing infrastructure to meet current and future recycled water demands and identify future capital improvements to enhance system reliability and water quality. In August 2011, the U.S. Bureau of Reclamation awarded the City approximately \$1.2 million to conduct a feasibility study for improvements and expansions to the SBWR system, which will fund about half of this Master Planning effort.

This Proposed Five-Year CIP includes \$3.0 million for SBWR System Reliability and Infrastructure Replacement Project, with \$1.5 million budgeted for 2014-2015.

Project Name	Description	2014-2018 CIP Cost	Estimated Completion
SBWR System Reliability and Infrastructure Replacement	System reliability improvements including, but not limited to, rehabilitation and/or replacement of pump station components, control and communication systems, pipelines, and other system related infrastructure.	\$3.0 million	2 <sup>nd</sup> Quarter 2016

**Water Pollution Control Capital Program**  
**2015-2019 Proposed Capital Improvement Program**  
**Overview**

**PROGRAM HIGHLIGHTS**

Reserves

As in prior years, the 2015-2019 Proposed CIP includes a \$5.0 million reserve for equipment replacement. This reserve level was established in accordance with the State Water Resources Control Board (SWRCB) Fund Loan Agreement policy, the Clean Water Financing Authority bond covenants, and requirements in the Master Agreements for Wastewater Treatment between the City of San José, City of Santa Clara, and the Tributary Agencies.

**MAJOR CHANGES FROM THE 2014-2018 ADOPTED CIP**

Major changes from the 2014-2018 Adopted CIP include:

Process Area	Project Name	Funding Change
Preliminary Treatment	Headworks Improvements	+ \$23.7 million
Preliminary Treatment	New Headworks	+ \$11.8 million
Primary Treatment	East Primary Rehabilitation, Seismic Retrofit, and Odor Control	+ \$27.5 million
Primary Treatment	Iron Salt Feed Station	+ \$3.3 million
Secondary Treatment	Aeration Tanks and Blower Rehabilitation	+ \$43.9 million
Secondary Treatment	Secondary Clarifier Rehabilitation Demonstration	+ \$26.4 million
Secondary Treatment	Secondary and Nitrification Clarifier Rehabilitation	+ \$22.0 million
Tertiary Treatment	Filter Rehabilitation	+ \$26.9 million
Tertiary Treatment	New Disinfection Facilities	+ \$0.4 million
Tertiary Treatment	Outfall Bridge and Levee Improvements	+ \$8.1 million
Biosolids	Digested Sludge Dewatering Facility	- \$256.8 million
Biosolids	Digester and Thickener Facilities Upgrate	+ \$18.3 million
Biosolids	Lagoons and Drying Beds Retirement	+ \$12.2 million
Biosolids	Thermal Drying Facility	+ \$2.6 million
Electrical Systems and Power Generation	Energy Generation Improvements	+ \$24.5 million
Electrical Systems & Power Generation	Plant Electrical Reliability	+ \$3.9 million
Advanced Process Control & Automation	Advanced Facility Control and Meter Replacement	+ \$30.4 million
Site Facility Improvements	Facility Wide Water Systems Improvements	+ \$13.8 million
Site Facility Improvements	Plant Instrument Air System Upgrade	+ \$9.1 million

# Water Pollution Control Capital Program 2015-2019 Proposed Capital Improvement Program

## Overview

### MAJOR CHANGES FROM THE 2014-2018 ADOPTED CIP

Process Area	Project Name	Funding Change
Site Facility Improvements	Support Building Improvements	+\$22.2 million
Site Facility Improvements	Tunnel Rehabilitation	+\$9.9 million
Non-Construction	Program Management	+\$5.8 million
Non-Construction	Record Drawings	+\$13.2 million

The most significant increases to the program reflect the incorporation of the critical rehabilitation, gap projects, and new technology projects (biosolids transition and energy generation) identified through the project validation process.

### OPERATING BUDGET IMPACT

Most projects in this Proposed CIP are expected to minimize operations and maintenance liabilities in the Operating Budget. The table below and Attachment A summarizes the operating and maintenance impact to the Sewer Service and Use Charge Fund for several projects.

#### Net Operating Budget Impact Summary

	<u>2015-2016</u>	<u>2016-2017</u>	<u>2017-2018</u>	<u>2018-2019</u>
Digested Sludge Dewater Facility				\$13,930,000
Digester and Thickener Facilities Upgrade				\$420,000
Energy Generation Improvements			(\$5,190,000)	(\$5,290,000)
			(\$5,190,000)	\$9,060,000

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

Of significance, the new biosolids process, which includes the Digested Sludge Dewater Facility project, is expected to have a significant impact on the operating budget in 2018-2019. The digested sludge dewatering and thermal drying facilities are energy intensive, require enclosed odor-controlled buildings, and potentially 24-hour operations. The selected project delivery method for the Biosolids projects (design-build, design-build-operate, or other) and final biosolids disposition alternatives will also impact future operating costs.

A few other projects are expected to introduce new operating costs (primarily chemical costs) particularly those with odor control elements (e.g., Digester and Thickener Facilities Upgrades, New Headworks, Iron Salt Feed Station, and East Primary Rehabilitation). While there are increased operating costs, these costs are expected to be partially offset by energy savings achieved through better solids settling, less aeration demand, and improved biogas production.

Water Pollution Control Capital Program  
2015-2019 Proposed Capital Improvement Program

**Overview**

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**OPERATING BUDGET IMPACT**

The Energy Generation Improvements will replace existing engine generators with lower emissions internal combustion engines that will result in lower energy efficiencies and lower operating maintenance costs. The Energy Generation Improvements will start operation in 2016-2017.

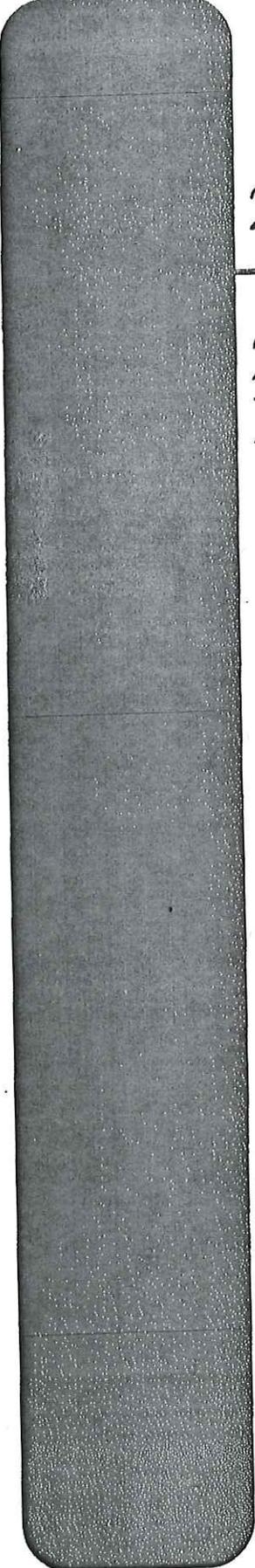
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Water Pollution Control  
**2015-2019 Proposed Capital Improvement Program**  
**Attachment A - Operating Budget Impact**

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	<u>2015-2016</u>	<u>2016-2017</u>	<u>2017-2018</u>	<u>2018-2019</u>
<u>Water Pollution Control</u>				
Digested Sludge Dewatering Facility				\$13,930,000
Digester and Thickener Facilities Upgrade				\$420,000
Energy Generation Improvements			(\$5,190,000)	(\$5,290,000)
Total Water Pollution Control			<u>(\$5,190,000)</u>	<u>\$9,060,000</u>

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# 2014-2015 CAPITAL BUDGET

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## 2015-2019 CAPITAL IMPROVEMENT PROGRAM

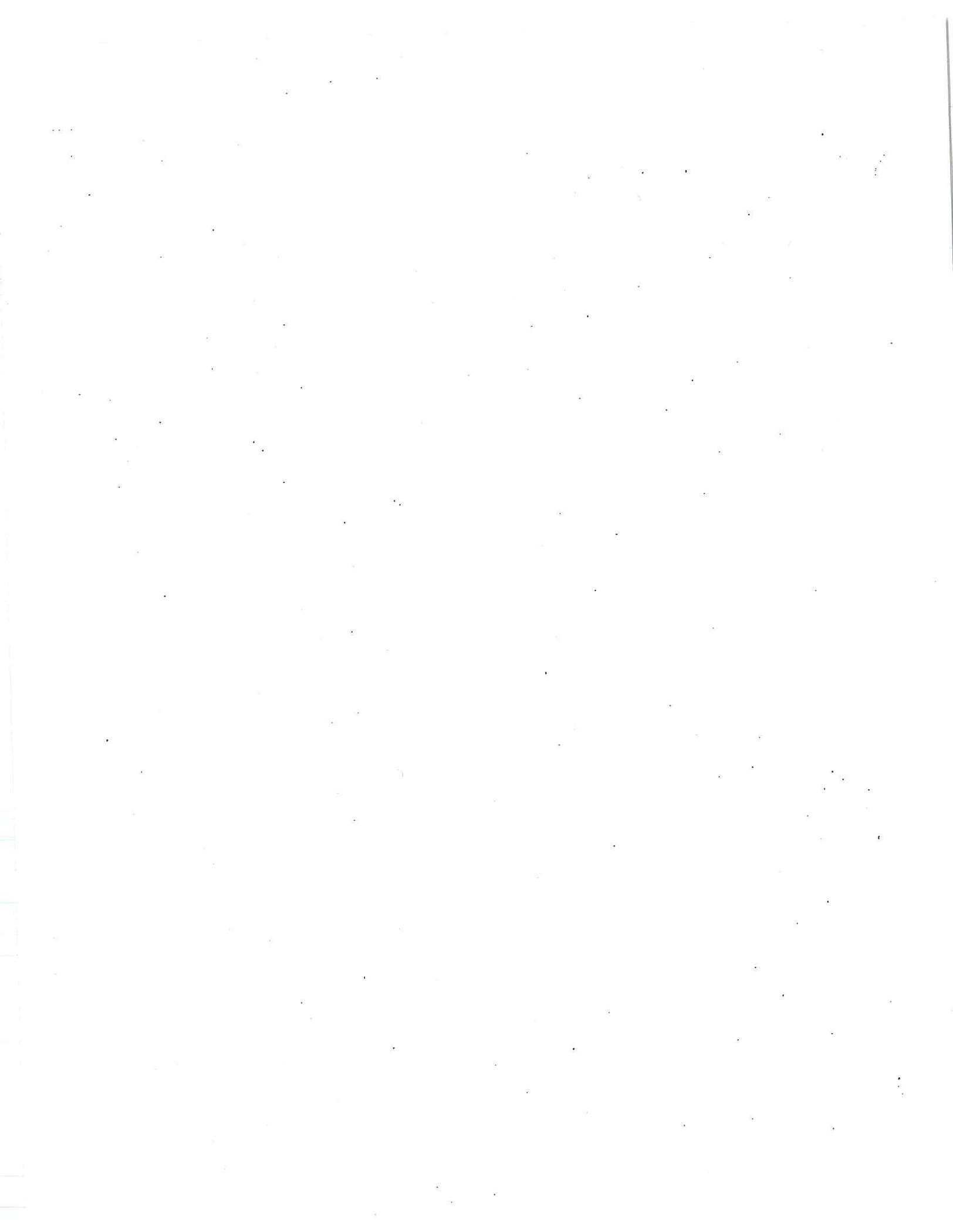


### WATER POLLUTION CONTROL

SOURCE OF FUNDS

USE OF FUNDS

*The Source of Funds displays the capital revenues by funding source for each year of the Five-Year Capital Improvement Program. The Use of Funds displays the capital expenditures by line-item for each year of the five-year period.*



Water Pollution Control  
**2015-2019 Proposed Capital Improvement Program**  
**Source of Funds (Combined)**

	Estimated 2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	5-Year Total
<b>SOURCE OF FUNDS</b>							
<u>San José-Santa Clara Treatment Plant Capital Fund (512)</u>							
Beginning Fund Balance	127,906,013	66,060,697	60,483,697	58,210,697	200,855,697	110,880,697	66,060,697 *
Safe of Bonds			221,139,000	227,032,000			448,171,000
<b>Revenue from Other Agencies:</b>							
<u>Federal Government</u>							
- SBWR Master Plan Grant	900,000						
- U.S. Bureau of Reclamation Grant	250,000	250,000	250,000	250,000	250,000	250,000	1,250,000
<u>Water Pollution Control Plant User Agencies</u>							
- 2005 Bond Debt Repayment	1,223,000	1,216,000	1,221,000	1,070,000	165,000	155,000	3,827,000
- 2015-2017 Bond Debt Service Repayment			1,742,000	6,410,000	9,481,000	9,481,000	27,114,000
- Equipment Replacement			588,000	588,000	588,000	588,000	2,352,000
- State Revolving Fund Loan	1,374,000	1,374,000	1,374,000	1,374,000	1,374,000	555,000	6,051,000
- Repayment							
- WPCP Projects	23,001,000	21,341,000	18,317,000	18,973,000	21,776,000	13,442,000	93,849,000
<u>Santa Clara Valley Water District</u>							
- SCVWD - Advanced Water Treatment Contribution	1,000,000						
<b>Contributions, Loans and Transfers from:</b>							
<u>Special Funds</u>							
- Transfer for 2015-2017 Debt Service from the Sewer Service and Use Charge Fund (541)			3,489,000	12,552,000	18,247,000	18,247,000	52,535,000
- Transfer from the Sewage Treatment Plant Connection Fee Fund (539)	3,090,000	3,090,000	3,090,000	3,090,000	3,090,000	1,249,000	13,609,000
- Transfer from the Sewer Service and Use Charge Fund (541)	34,576,000	48,000,000	37,788,000	27,772,000	24,544,000	25,723,000	163,827,000

Water Pollution Control

**2015-2019 Proposed Capital Improvement Program  
Source of Funds (Combined)**

	Estimated 2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	5-Year Total
<b>SOURCE OF FUNDS (CONTD.)</b>							
San José-Santa Clara Treatment Plant Capital Fund (512)							
Interest Income	450,000	569,000	1,055,000	1,890,000	1,589,000	1,285,000	6,388,000
Miscellaneous Revenue	389,000	389,000	389,000	389,000	389,000	389,000	1,945,000
- Calpine Metcalf Energy Center Facilities Repayment	17,291,684						
Reserve for Encumbrances	<u>211,450,697</u>	<u>142,289,697</u>	<u>350,925,697</u>	<u>359,600,697</u>	<u>282,348,697</u>	<u>182,244,697</u>	<u>886,978,697 *</u>
Total San José-Santa Clara Treatment Plant Capital Fund	<u>211,450,697</u>	<u>142,289,697</u>	<u>350,925,697</u>	<u>359,600,697</u>	<u>282,348,697</u>	<u>182,244,697</u>	<u>886,978,697 *</u>
<b>TOTAL SOURCE OF FUNDS</b>							

\* The 2015-2016 through 2018-2019 Beginning Balances are excluded from the FIVE-YEAR TOTAL SOURCE OF FUNDS to avoid multiple counting of the same funds.

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Use of Funds (Combined)**

	Estimated 2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	5-Year Total
<b>USE OF FUNDS</b>							
<b>Construction Projects</b>							
Public Art	565,000	287,000	1,512,000	36,000	37,000	694,000	2,566,000
Public Art	565,000	287,000	1,512,000	36,000	37,000	694,000	2,566,000
<b>Total Public Art</b>							
<b>Preliminary Wastewater Treatment</b>							
Headworks No. 2 Enhancement	7,914,000						28,020,000
1. Headworks Improvements	1,515,000	1,240,000	4,780,000	21,260,000	370,000	370,000	28,020,000
2. New Headworks	353,000	2,880,000	14,620,000	780,000	1,610,000	68,480,000	88,370,000
<b>Total Preliminary Wastewater Treatment</b>	<b>9,782,000</b>	<b>4,120,000</b>	<b>19,400,000</b>	<b>22,040,000</b>	<b>1,980,000</b>	<b>68,850,000</b>	<b>116,390,000</b>
<b>Primary Wastewater Treatment</b>							
3. East Primary Rehabilitation, Seismic Retrofit, and Odor Control	715,000		1,860,000	18,320,000	1,350,000	20,650,000	42,180,000
4. Iron Salt Feed Station	1,900,000	3,010,000	150,000	140,000			3,300,000
<b>Total Primary Wastewater Treatment</b>	<b>2,615,000</b>	<b>3,010,000</b>	<b>2,010,000</b>	<b>18,460,000</b>	<b>1,350,000</b>	<b>20,650,000</b>	<b>45,480,000</b>
<b>Secondary Wastewater Treatment</b>							
Biological Nutrients Removal 1 and Biological Nutrients Removal 2 Connection	876,000			410,000	1,560,000	60,000	2,030,000
Secondary Clarifier Rehabilitation Demonstration		1,580,000	3,210,000	16,310,000	1,520,000	21,320,000	43,940,000
5. Aeration Tanks and Blower Rehabilitation	3,159,000	160,000	5,070,000	590,000	20,270,000	330,000	26,420,000
6. Secondary and Nitrification Clarifier Rehabilitation							
<b>Total Secondary Wastewater Treatment</b>	<b>4,035,000</b>	<b>1,740,000</b>	<b>8,280,000</b>	<b>17,310,000</b>	<b>23,350,000</b>	<b>21,710,000</b>	<b>72,390,000</b>

## Water Pollution Control

### 2015-2019 Proposed Capital Improvement Program

#### Use of Funds (Combined)

	Estimated 2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	5-Year Total
<b>USE OF FUNDS (CONTD.)</b>							
<b>Construction Projects</b>							
Tertiary Wastewater Treatment							
Alternative Disinfection	980,000					370,000	370,000
New Disinfection Facilities	896,000						
New Filter Complex	800,000	490,000	4,680,000	460,000	20,580,000	310,000	26,520,000
7. Filter Rehabilitation		300,000	1,480,000	6,050,000	160,000	130,000	8,120,000
8. Outfall Bridge and Levee Improvements				6,510,000	20,740,000	810,000	35,010,000
<b>Total Tertiary Wastewater Treatment</b>	<b>2,676,000</b>	<b>790,000</b>	<b>6,160,000</b>	<b>6,510,000</b>	<b>20,740,000</b>	<b>810,000</b>	<b>35,010,000</b>
<b>Biosolids</b>							
Dissolved Air Flotation Rehabilitation and Odor Control Lagoons and Drying Beds Retirement	773,000		570,000	5,380,000	5,930,000	340,000	12,220,000
Thermal Drying Facility	1,000,000	2,940,000	62,500,000	990,000	980,000	2,590,000	2,590,000
9. Digated Sludge Dewatering Facility		1,440,000	59,680,000	1,120,000	1,110,000	330,000	63,680,000
10. Digester and Thickener Facilities Upgrade				7,490,000	8,020,000	4,080,000	146,720,000
<b>Total Biosolids</b>	<b>14,269,000</b>	<b>4,380,000</b>	<b>122,750,000</b>	<b>7,490,000</b>	<b>8,020,000</b>	<b>4,080,000</b>	<b>146,720,000</b>
<b>Electrical Systems and Power Generation</b>							
11. Combined Heat and Power Equipment Repair and Rehabilitation	10,616,000	420,000	370,000	30,000			820,000
12. Energy Generation Improvements	38,425,000	11,070,000	73,470,000	1,470,000	980,000		86,990,000
13. Plant Electrical Reliability	3,122,000	5,600,000	300,000	100,000			6,000,000
<b>Total Electrical Systems and Power Generation</b>	<b>52,163,000</b>	<b>17,090,000</b>	<b>74,140,000</b>	<b>1,600,000</b>	<b>980,000</b>		<b>93,810,000</b>

Water Pollution Control  
2015-2019 Proposed Capital Improvement Program

Use of Funds (Combined)

	Estimated 2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	5-Year Total
<u>USE OF FUNDS (CONTD.)</u>							
<u>Construction Projects</u>							
Advanced Process Control & Automation							
Plant-wide Flowmeter Replacement Program	1,000,000						
14. Advanced Facility Control and Meter Replacement	3,242,000	340,000	910,000	4,790,000	23,130,000	220,000	29,390,000
15. Treatment Plant Distributed Control System	2,496,000	500,000	500,000				1,500,000
<b>Total Advanced Process Control &amp; Automation</b>	<b>6,738,000</b>	<b>840,000</b>	<b>1,410,000</b>	<b>5,290,000</b>	<b>23,130,000</b>	<b>220,000</b>	<b>30,890,000</b>
<u>Site Facility Maintenance and Improvements</u>							
Treatment Plant Engine Rebuild	1,453,000						
16. Equipment Replacement	2,819,000	1,663,000	1,663,000	1,663,000	1,663,000	1,663,000	8,315,000
17. Facility Wide Water Systems Improvements		460,000	2,290,000	130,000	10,790,000	130,000	13,800,000
18. Plant Infrastructure Improvements	5,410,000	1,000,000	2,840,000	1,000,000	1,000,000	3,050,000	8,890,000
19. Plant Instrument Air System Upgrade		8,540,000	160,000	160,000	150,000	90,000	9,100,000
20. Support Building Improvements		490,000	1,700,000	8,640,000	620,000	10,770,000	22,220,000
21. Treatment Plant Fire Main Replacement	1,563,000	250,000					250,000
22. Tunnel Rehabilitation		60,000	930,000	3,810,000	4,920,000	190,000	9,910,000
23. Urgent and Unscheduled Treatment Plant Rehabilitation	2,385,000	1,500,000	1,500,000	1,500,000	1,500,000	1,500,000	7,500,000
24. Yard Piping and Road Improvements	1,118,000	270,000	3,910,000	19,730,000	24,450,000	960,000	49,320,000
<b>Total Site Facility Maintenance and Improvements</b>	<b>14,748,000</b>	<b>14,233,000</b>	<b>14,993,000</b>	<b>36,633,000</b>	<b>45,093,000</b>	<b>18,353,000</b>	<b>129,305,000</b>

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**

**Use of Funds (Combined)**

	Estimated 2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	5-Year Total
<b>USE OF FUNDS (CONTD.)</b>							
<u>Construction Projects</u>							
South Bay Water Recycling							
Plant Backup Water Supply	1,313,000						
SBWR Extension	8,224,000						
SBWR Reservoir Facility	300,000						3,000,000
25. SBWR System Reliability and Infrastructure Replacement	2,300,000	1,500,000	1,500,000				
<b>Total South Bay Water Recycling</b>	<b>12,137,000</b>	<b>1,500,000</b>	<b>1,500,000</b>				<b>3,000,000</b>
<b>Total Construction Projects</b>	<b>119,728,000</b>	<b>47,990,000</b>	<b>252,155,000</b>	<b>115,369,000</b>	<b>124,680,000</b>	<b>135,367,000</b>	<b>675,561,000</b>
<u>Non-Construction</u>							
General Non-Construction							
2015-2017 Transfer to Clean Water Financing Authority Debt Service	653,000	692,000	699,000	706,000	713,000	720,000	3,530,000
Capital Program and Public Works Department Support Service Costs				3,000,000			3,000,000
Master Plan Updates							
Plant Master Plan	861,000						
SBWR Master Plan	1,846,000						
SBWR Recycling Master Plan Reimbursement	561,000						
Transfer to Clean Water Financing Authority Debt Service Payment Fund	6,953,000	6,915,000	6,943,000	6,787,000	5,882,000	5,524,000	32,051,000
26. Payment for Clean Water Financing Authority Trustee	5,000	5,000	5,000	5,000	5,000	5,000	25,000
27. Preliminary Engineering	1,002,000	5,000,000	1,000,000	1,000,000	1,000,000	1,000,000	9,000,000

Water Pollution Control  
2015-2019 Proposed Capital Improvement Program

**Use of Funds (Combined)**

	Estimated 2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	5-Year Total
<b>USE OF FUNDS (CONTD.)</b>							
<b>Non-Construction</b>							
General Non-Construction							
28. Program Management	9,284,000	11,390,000	9,420,000	8,260,000	6,800,000	5,000,000	40,870,000
29. Record Drawings		250,000	12,700,000	90,000	90,000	90,000	13,220,000
30. State Revolving Fund Loan Repayment	4,464,000	4,464,000	4,464,000	4,464,000	4,464,000	1,804,000	19,660,000
<b>Total General Non-Construction</b>	<b>25,629,000</b>	<b>28,716,000</b>	<b>40,462,000</b>	<b>43,274,000</b>	<b>46,682,000</b>	<b>41,871,000</b>	<b>201,005,000</b>
Contributions, Loans and Transfers to General Fund		4,000					4,000
Transfer to General Fund: Human Resources/Payroll System Upgrade		4,000					4,000
<b>Total Contributions, Loans and Transfers to General Fund</b>		<b>4,000</b>					<b>4,000</b>
Contributions, Loans and Transfers to Special Funds							
Transfer to the City Hall Debt Service Fund	33,000	96,000	98,000	102,000	106,000	115,000	517,000
<b>Total Contributions, Loans and Transfers to Special Funds</b>	<b>33,000</b>	<b>96,000</b>	<b>98,000</b>	<b>102,000</b>	<b>106,000</b>	<b>115,000</b>	<b>517,000</b>
<b>Reserves</b>							
Equipment Replacement Reserve		5,000,000					5,000,000
<b>Total Reserves</b>		<b>5,000,000</b>					<b>5,000,000</b>
<b>Total Non-Construction</b>	<b>25,662,000</b>	<b>33,816,000</b>	<b>40,560,000</b>	<b>43,376,000</b>	<b>46,788,000</b>	<b>41,986,000</b>	<b>206,526,000</b>
<b>Ending Fund Balance</b>	<b>66,060,697</b>	<b>60,483,697</b>	<b>58,210,697</b>	<b>200,855,697</b>	<b>110,880,697</b>	<b>4,891,697</b>	<b>4,891,697*</b>

Water Pollution Control

2015-2019 Proposed Capital Improvement Program

Use of Funds (Combined)

	Estimated 2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	5-Year Total
USE OF FUNDS (CONTD.)							
TOTAL USE OF FUNDS	211,450,697	142,289,697	350,925,697	359,600,697	282,348,697	182,244,697	886,978,697*

\* The 2014-2015 through 2017-2018 Ending Balances are excluded from the FIVE-YEAR TOTAL USE OF FUNDS to avoid multiple counting of the same funds.

# 2014-2015 CAPITAL BUDGET

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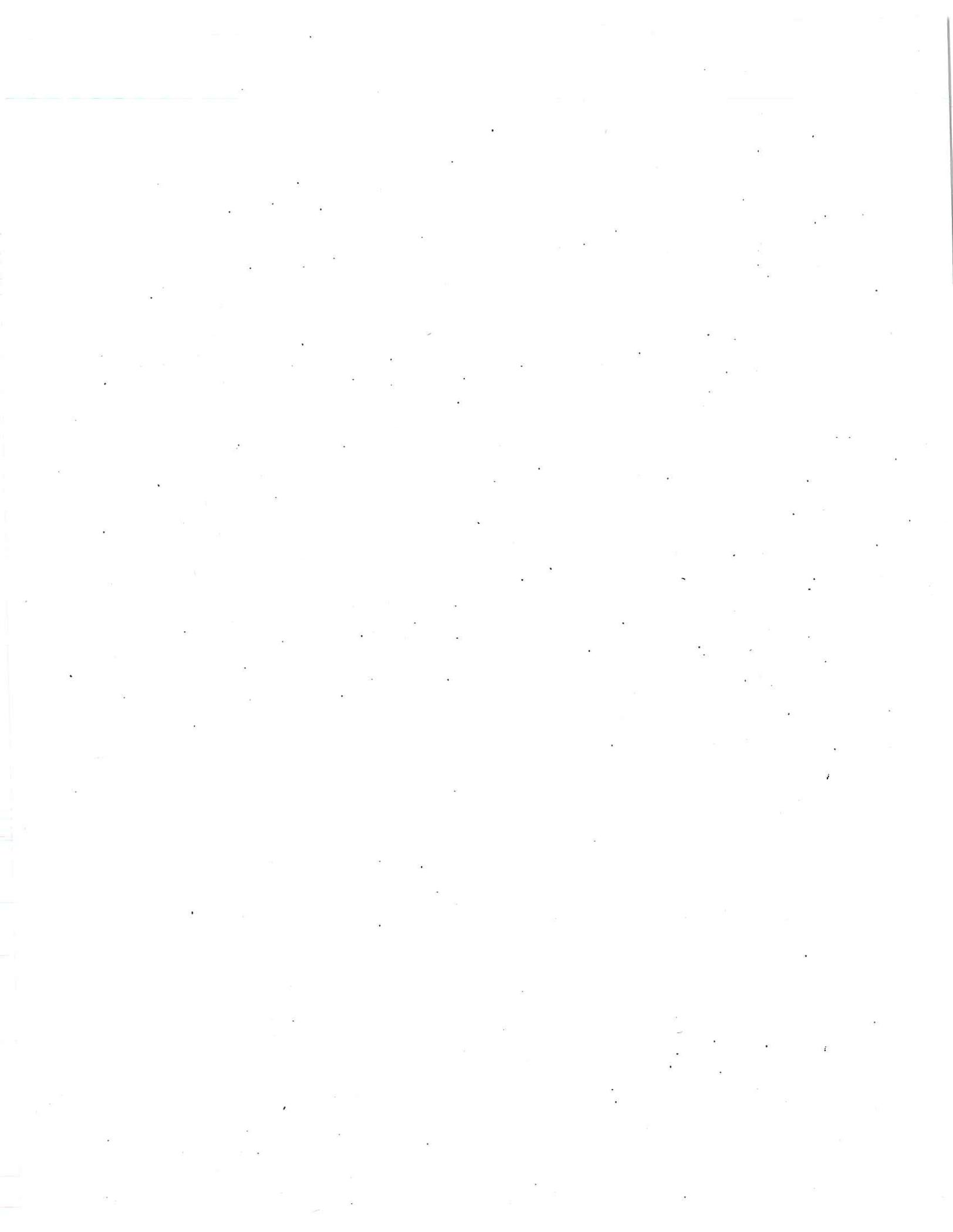
## 2015-2019 CAPITAL IMPROVEMENT PROGRAM

### WATER POLLUTION CONTROL

#### DETAIL OF CONSTRUCTION PROJECTS

#### DETAIL OF NON-CONSTRUCTION PROJECTS

*The Detail of Construction Projects section provides information on the individual construction projects with funding in 2014-2015. The Detail of Non-Construction Projects section is abbreviated and provides information on the individual non-construction project, with funding in 2014-2015. On the Use of Funds statement, these projects are numbered.*



# Water Pollution Control

## 2015-2019 Proposed Capital Improvement Program

### Detail of Construction Projects

#### 1. Headworks Improvements

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b>	3rd Qtr. 2012
<b>CSA Outcome:</b>	Reliable Utility Infrastructure	<b>Revised Start Date:</b>	
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b>	2nd Qtr. 2015
<b>Council District:</b>	4	<b>Revised Completion Date:</b>	3rd Qtr. 2019
<b>Location:</b>	Water Pollution Control Plant		

**Description:** This project will modify Headworks No. 2 (HW2) to accommodate all dry weather flow. Improvements include re-routing some inlet and recycle flow piping, new storm water pump stations, and other mechanical enhancements to improve reliability and operation performance. In addition, this project will complete a condition assessment of Headworks No. 1 (HW1) to identify equipment that may require rehabilitation. Improvements may include refurbishment of bar screens, grit classifiers, discharge valves, channel gate valves, and/or concrete.

**Justification:** HW1 was built in the mid-1950s and early 1960s and is the Plant's duty headworks. HW2 was built in 2008 and was designed to operate in parallel with HW1 to handle peak hour wet weather flow. This project will improve the functional reliability of HW2 so HW1 can be taken out of service for repair, which will allow it to remain in operation until a new headworks is constructed to serve as the Plant's new duty headworks.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Development	64	1,515	1,515	1,240	260				1,500		3,079
Design					4,430				4,430		4,430
Bld & Award					90	60			150		150
Construction						21,200	370	90	21,660		21,660
Post Construction								280	280	80	360
TOTAL	64	1,515	1,515	1,240	4,780	21,260	370	370	28,020	80	29,679

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund	64	1,515	1,515	1,240	4,780	21,260	370	370	28,020	80	29,679
TOTAL	64	1,515	1,515	1,240	4,780	21,260	370	370	28,020	80	29,679

ANNUAL OPERATING BUDGET IMPACT (000'S)										
None										

**Major Changes in Project Cost:**  
 2015-2019 CIP - increase of \$23.7 million due to incorporation of a portion of Headworks No. 2 Enhancement project.

**Notes:**  
 This project corresponds to Plant Master Plan Project Nos. 1, 2, and 7 and Validation Project PLH-01. Prior to 2015-2019, this project was titled "Headworks No. 1 Repair and Rehabilitation". The schedule was revised during the 2015-2019 project validation process.

FY Initiated:	2012-2013	Appn. #:	7448
Initial Project Budget:	\$5,975,000	USGBC LEED:	N/A

# Water Pollution Control

## 2015-2019 Proposed Capital Improvement Program

### Detail of Construction Projects

#### 2. New Headworks

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b>	3rd Qtr. 2012
<b>CSA Outcome:</b>	Rollable Utility Infrastructure	<b>Revised Start Date:</b>	
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b>	2nd Qtr. 2013
<b>Council District:</b>	4	<b>Revised Completion Date:</b>	3rd Qtr. 2022
<b>Location:</b>	Water Pollution Control Plant		

**Description:** This project will construct a new headworks to serve as the Plant's duty headworks. It also involves increasing the equalization basin volume and installing lining and spraydown systems to facilitate cleaning. The project will also install new covers over select areas, such as junction boxes and grit collection, for odor control. New conduits will be installed for the collected foul air, and a new odor treatment facility that could combine biological and/or chemical treatment technology will be provided.

**Justification:** The original headworks, Headworks No. 1, was built in the mid 1950s and further expanded in the 1960s. Due to its age and condition, extensive structural rehabilitation and mechanical rehabilitation would be needed to operate it as the Plant's long-term duty headworks. Based on previous studies, building a new duty headworks facility would be more cost effective and would provide greater operational reliability and enhanced treatment, addressing some of the operational issues currently experienced at the Plant, such as the deposition of grit in downstream processes.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior	2013-14	2013-14	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year	Beyond	Project
	Years	Appn.	Estimate						Total	5-Year	Total
Development	144	353	353	2,880	1,520				4,400		4,897
Design					13,100	780	1,010		14,890		14,890
Bld & Award							600	40	640		640
Construction								68,440	68,440	1,570	70,010
Post Construction										780	780
TOTAL	144	353	353	2,880	14,620	780	1,610	68,480	88,370	2,350	91,217

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund	144	353	353	2,880	14,620	780	1,610	68,480	88,370	2,350	91,217
TOTAL	144	353	353	2,880	14,620	780	1,610	68,480	88,370	2,350	91,217

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

None

**Major Changes in Project Cost:**  
 2015-2019 CIP - Increase of \$11.8 million due to incorporation of a portion of Headworks No. 2 Enhancement project.

**Notes:**  
 This project corresponds to Plant Master Plan Project Nos. 1, 3, 4, 5, and 8 and Validation Project PLH-02. Prior to 2015-2019, this project was titled "Headworks No. 2 Expansion". Schedule revised during the 2015-2019 project validation process.

<b>FY Initiated:</b>	2012-2013	<b>Appn. #:</b>	7449
<b>Initial Project Budget:</b>	\$79,400,000	<b>USGBC LEED:</b>	N/A

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Detail of Construction Projects**

**3. East Primary Rehabilitation, Seismic Retrofit, and Odor Control**

CSA:	Environmental and Utility Services	Initial Start Date:	3rd Qtr. 2009
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	3rd Qtr. 2010
Department:	Environmental Services	Initial Completion Date:	4th Qtr. 2012
Council District:	4	Revised Completion Date:	3rd Qtr. 2024
Location:	Water Pollution Control Plant		

**Description:** This project rehabilitates the existing primary clarifiers, including coating of concrete and replacement of clarifier mechanisms with corrosion resistant materials. It also includes structural retrofits to allow new covers to be installed over a portion or all of the primary treatment area to contain odors. A new odor extraction and treatment system will also be constructed.

**Justification:** This project restores the mechanical and structural integrity of the aging clarifiers, and provides odor control measures.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Development	30	715	715		1,860	3,080			4,940		5,685
Design						15,240	1,240		16,480		16,480
Bid & Award							110		250		250
Construction								20,510	20,510	65,590	86,100
Post Construction										1,050	1,050
<b>TOTAL</b>	<b>30</b>	<b>715</b>	<b>715</b>		<b>1,860</b>	<b>18,320</b>	<b>1,350</b>	<b>20,650</b>	<b>42,180</b>	<b>66,640</b>	<b>109,565</b>

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund	30	715	715		1,860	18,320	1,350	20,650	42,180	66,640	109,565
<b>TOTAL</b>	<b>30</b>	<b>715</b>	<b>715</b>		<b>1,860</b>	<b>18,320</b>	<b>1,350</b>	<b>20,650</b>	<b>42,180</b>	<b>66,640</b>	<b>109,565</b>

ANNUAL OPERATING BUDGET IMPACT (000'S)											
None											

**Major Changes In Project Cost:**

2012-2016 CIP - Increase of \$80.1 million; \$16.626 million due to increase of scope to incorporate master planning recommendations for seismic upgrades and odor control measures; \$63.52 million reflects the addition of the Beyond 5-Year expense not previously programmed.  
 2013-2017 CIP - decrease of \$1.7 million due to revised cost estimate.  
 2015-2019 CIP - increase of \$27.5 million due to revised project validation cost estimate.

**Notes:**

This project corresponds to Plant Master Plan Project Nos. 9, 10, and 11 and Validation Project PLP-02. Schedule revised during the 2015-2019 project validation process.

FY Initiated:	2010-2011	Appn. #:	7226
Initial Project Budget:	\$3,605,000	USGBC LEED:	N/A

# Water Pollution Control

## 2015-2019 Proposed Capital Improvement Program

### Detail of Construction Projects

#### 4. Iron Salt Feed Station

CSA:	Environmental and Utility Services	Initial Start Date:	3rd Qtr. 2010
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	1st Qtr. 2012
Department:	Environmental Services	Initial Completion Date:	2nd Qtr. 2012
Council District:	4	Revised Completion Date:	2nd Qtr. 2017
Location:	Water Pollution Control Plant		

**Description:** This project constructs a permanent iron salt and polymer dosing station including a concrete containment structure and ancillary pumping, piping, and instrumentation to deliver chemical solution to incoming wastewater.

**Justification:** The addition of iron salts and polymer to incoming wastewater will improve plant operation by enhancing the sludge settling in the primary clarifiers, reducing corrosion and odor, reducing energy usage in the secondary treatment system, and increasing feedstock to digesters, which will increase biogas production.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Development	80										80
Design	10	1,095	1,095								1,105
Bld & Award		30	30						3,160		3,935
Construction		775	775	3,010	150				140		140
Post Construction						140					
<b>TOTAL</b>	<b>90</b>	<b>1,900</b>	<b>1,900</b>	<b>3,010</b>	<b>150</b>	<b>140</b>			<b>3,300</b>		<b>5,290</b>
FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund	90	1,900	1,900	3,010	150	140			3,300		5,290
<b>TOTAL</b>	<b>90</b>	<b>1,900</b>	<b>1,900</b>	<b>3,010</b>	<b>150</b>	<b>140</b>			<b>3,300</b>		<b>5,290</b>
ANNUAL OPERATING BUDGET IMPACT (000'S)											
Cost Offset						1,450	1,460	1,480			
Operating						(1,450)	(1,460)	(1,480)			
<b>TOTAL</b>											

**Major Changes in Project Cost:**

2014-2018 CIP - decrease of \$0.347 million due to scope revision.  
 2015-2019 CIP - increase of \$3.3 million due to revised project validation cost estimate.

**Notes:**

This project corresponds to Plant Master Plan Project No. 14 and Validation Project PLP-01. Schedule revised during the 2015-2019 project validation process.

FY Initiated:	2010-2011	Appn. #:	7230
Initial Project Budget:	\$2,340,000	USGBC LEED:	N/A

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Detail of Construction Projects**

**5. Aeration Tanks and Blower Rehabilitation**

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b>	1st Qtr. 2015
<b>CSA Outcome:</b>	Reliable Utility Infrastructure	<b>Revised Start Date:</b>	
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b>	3rd Qtr. 2025
<b>Council District:</b>	4	<b>Revised Completion Date:</b>	
<b>Location:</b>	Water Pollution Control Plant		

**Description:** This project rehabilitates the secondary and nitrification aeration tanks including structural, mechanical, electrical, and instrumentation upgrades. It also replaces the existing coarse bubble diffusers with fine bubble diffusers, installs partition walls and reconfigures air piping to optimize process treatment capabilities. The project will also install variable frequency drives (VFDs) to the electric driven blowers in Building 40 and decommission the engine drive blowers in the Secondary Blower Building. It will also replace the S11 switchgear and install VFDs on the nitrification blowers. A condition assessment study, aeration assessment, and process modeling will be completed to inform the ultimate project scope.

**Justification:** The secondary and nitrification aeration tanks were constructed in phases between the 1960s and 1980s. Due to their age and the aggressive and corrosive environment they operate in, extensive rehabilitation is required. Conversion to fine bubble diffusers will increase the oxygen transfer efficiency and lower energy requirements. Installing VFDs will minimize the impact of the starting on the blowers when the Plant is run on emergency power.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Development				1,580	3,210	90			4,880		4,880
Design						16,220	1,300		17,520		17,520
Bid & Award							220		250		250
Construction								21,290	21,290	70,360	91,650
Post Construction										580	580
<b>TOTAL</b>				<b>1,580</b>	<b>3,210</b>	<b>16,310</b>	<b>1,520</b>	<b>21,320</b>	<b>43,940</b>	<b>70,940</b>	<b>114,880</b>

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund				1,580	3,210	16,310	1,520	21,320	43,940	70,940	114,880
<b>TOTAL</b>				<b>1,580</b>	<b>3,210</b>	<b>16,310</b>	<b>1,520</b>	<b>21,320</b>	<b>43,940</b>	<b>70,940</b>	<b>114,880</b>

ANNUAL OPERATING BUDGET IMPACT (000'S)										
None										

**Major Changes in Project Cost:**

None

**Notes:**

This project corresponds to Plant Master Plan Project Nos. 20, 24, and 85 and Valldallon Project PLS-01.

<b>FY Initiated:</b>	2014-2015	<b>Appn. #:</b>	
<b>Initial Project Budget:</b>	\$114,880,000	<b>USGBC LEED:</b>	N/A

# Water Pollution Control

## 2015-2019 Proposed Capital Improvement Program

### Detail of Construction Projects

#### 6. 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:	2nd Qtr. 2024
Council District:	4	Revised Completion Date:	4th Qtr. 2026
Location:	Water Pollution Control Plant		

**Description:** This project includes phased rehabilitation of the 26 secondary and 16 nitrification clarifiers. Structural improvements may include, but are not limited to, concrete repairs and coating, replacement of central effluent launders with new peripheral launders (in older clarifiers), new clarifier mechanisms and baffle installations, pipe support and meter vault replacements, and railing, stairway, and walkway improvements. Mechanical improvements may include, but are not limited to, piping, valve and actuator replacements, spray water system replacements, scum skimmer system upgrades, and return activated sludge piping lining. Electrical and Instrumentation Improvements may include, but are not limited to, motor control center replacements, new wiring and other electrical equipment upgrades. Other incidental work may include grouting, painting, coating, and other surface treatments.

**Justification:** The Plant's 26 secondary clarifiers and 16 nitrification clarifiers have been in service for 30 to 50 years depending on the year of construction. Two condition assessments, completed in 2011 and 2012, recommended phased rehabilitation of the secondary and nitrification clarifiers, respectively. The improvements are needed to address structural, mechanical, electrical and instrumentation deficiencies and will extend the useful life of the clarifier assets for an additional 30 years.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Development	1,146	50	50	180	860				1,020		2,216
Design	18	330	330		4,210	460			4,670	4,240	9,258
Bid & Award		24	24			130	100		230		254
Construction		2,730	2,730				20,170	330	20,500	26,210	49,440
Post Construction		25	25							500	525
TOTAL	1,164	3,159	3,159	160	5,070	590	20,270	330	26,420	30,950	61,693

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund	1,164	3,159	3,159	160	5,070	590	20,270	330	26,420	30,950	61,693
TOTAL	1,164	3,159	3,159	160	5,070	590	20,270	330	26,420	30,950	61,693

ANNUAL OPERATING BUDGET IMPACT (000'S)											
None											

**Major Changes In Project Cost:**

2014-2018 CIP - Increase of \$13.0 million due to revised estimate.  
 2015-2019 CIP - Increase of \$22.0 million due to revised project validation cost estimate.

**Notes:**

This project corresponds to Plant Master Plan Project Nos. 21 and 23 and Validation Project PLS-02. This project is planned to be completed in two phases.

FY Initiated:	2009-2010	Appn. #:	7074
Initial Project Budget:	\$26,701,000	USGBC LEED:	N/A

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Detail of Construction Projects**

**7. Filter Rehabilitation**

CSA:	Environmental and Utility Services	Initial Start Date:	3rd Qtr. 2011
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	3rd Qtr. 2013
Department:	Environmental Services	Initial Completion Date:	2nd Qtr. 2013
Council District:	4	Revised Completion Date:	3rd Qtr. 2020
Location:	Water Pollution Control Plant		

**Description:** This project will replace filter media and potentially underdrain systems for all filters. It will also include valve replacements, electrical control replacements, air scouring equipment and piping additions, and concrete repairs. The extent of rehabilitation will depend on the results of a detailed condition assessment to be completed in summer 2016 to determine whether to fully refurbish the filter facility or keep it operational until a new filter complex is built. This CIP programs funding for preliminary engineering.

**Justification:** The existing filter complex was constructed in the 1970s and requires significant refurbishment. The filter media, consisting of anthracite and sand, needs to be replaced and some of the mechanical and electrical components need to be upgraded. These interim improvements are needed to ensure continued regulatory compliance and operational reliability.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Development		3	3	490	680				1,170		1,173
Design		147	147		4,000	370			4,370		4,517
Bld & Award		25	25			90	60		150		175
Construction		600	600				20,520	310	20,830		21,490
Post Construction		25	25							60	345
TOTAL		800	800	490	4,680	460	20,580	310	26,520	380	27,700

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund		800	800	490	4,680	460	20,580	310	26,520	380	27,700
TOTAL		800	800	490	4,680	460	20,580	310	26,520	380	27,700

ANNUAL OPERATING BUDGET IMPACT (000'S)										
None										

**Major Changes in Project Cost:**  
 2014-2018 CIP - decrease of \$2.7 million due to the removal of scope that is dependent on the evaluation of the demonstration project.  
 2015-2019 CIP - increase of \$26.9 million due to revised scope and project validation cost estimate.

**Notes:**  
 This project corresponds to Plant Master Plan Project Nos. 31 and 32 and Validation Project PLF-01. Prior to 2015-2019, this project was titled "Filter Improvements". Schedule revised during the 2015-2019 project validation process.

FY Initiated:	2010-2011	Appn. #:	7227
Initial Project Budget:	\$3,506,000	USGBC LEED:	N/A

# Water Pollution Control

## 2015-2019 Proposed Capital Improvement Program

### Detail of Construction Projects

#### 8. Outfall Bridge and Levee Improvements

CSA:	Environmental and Utility Services	Initial Start Date:	3rd Qtr. 2014
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	
Department:	Environmental Services	Initial Completion Date:	2nd Qtr. 2019
Council District:	4	Revised Completion Date:	
Location:	Water Pollution Control Plant		

**Description:** The project includes a condition assessment, bridge repairs or replacement, levee and levee gate repairs, and electrical transformer refurbishment.

**Justification:** The existing outfall bridge and instrumentation supports are in poor condition. In addition, the west-side levee of Pond A-18 is experiencing significant erosion. This project will improve the aging facilities to ensure reliability at the outfall compliance point.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Development				300	240				540		540
Design					1,240	70			1,310		1,310
Bid & Award						160			160		160
Construction						5,820	160		5,980		5,980
Post Construction								130	130		130
<b>TOTAL</b>				300	1,480	6,050	160	130	8,120		8,120

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund				300	1,480	6,050	160	130	8,120		8,120
<b>TOTAL</b>				300	1,480	6,050	160	130	8,120		8,120

ANNUAL OPERATING BUDGET IMPACT (000'S)										
None										

**Major Changes in Project Cost:**  
None

**Notes:**  
This project corresponds to Validation Project PLD-02.

FY Initiated: 2014-2015  
Initial Project Budget: \$8,120,000

Appn. #: \_\_\_\_\_  
USGBC LEED: N/A

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Detail of Construction Projects**

**9. Digested Sludge Dewatering Facility**

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b>	3rd Qtr. 2012
<b>CSA Outcome:</b>	Reliable Utility Infrastructure	<b>Revised Start Date:</b>	2nd Qtr. 2014
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b>	2nd Qtr. 2013
<b>Council District:</b>	4	<b>Revised Completion Date:</b>	2nd Qtr. 2019
<b>Location:</b>	Water Pollution Control Plant		

**Description:** This project will construct a new mechanical dewatering facility and support systems to replace the existing sludge storage lagoons and open air solar drying beds. The size, type, design, and technology selected for the new biosolids dewatering facility will depend on an engineering study currently underway that looks at siting, available technologies, and an evaluation of capital and operational costs for various alternatives. All new mechanical dewatering units, feed tank, storage, conveyance, and chemical dosing facilities will be housed in an odor-controlled building.

**Justification:** The adopted Plant Master Plan recommends consolidating the Plant's operational area including reducing the biosolids process footprint. This project responds to this recommendation. It also provides for more flexibility in biosolids disposal options in anticipation of the Newby Island landfill closure in 2025, responds to more stringent regulations for landfilling and alternative daily cover, and addresses odor, noise, and aesthetic concerns from the operations of the lagoons and sludge drying beds.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Development		1,000	1,000	2,940	890				3,830		4,830
Design					11,060				11,060		11,060
Bld & Award					200				200		200
Construction					50,350	990	980		52,320		52,320
Post Construction								820	820		820
<b>TOTAL</b>		<b>1,000</b>	<b>1,000</b>	<b>2,940</b>	<b>62,500</b>	<b>990</b>	<b>980</b>	<b>820</b>	<b>68,230</b>		<b>69,230</b>

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund		1,000	1,000	2,940	62,500	990	980	820	68,230		69,230
<b>TOTAL</b>		<b>1,000</b>	<b>1,000</b>	<b>2,940</b>	<b>62,500</b>	<b>990</b>	<b>980</b>	<b>820</b>	<b>68,230</b>		<b>69,230</b>

ANNUAL OPERATING BUDGET IMPACT (000'S)											
Operating										13,930	
<b>TOTAL</b>										<b>13,930</b>	

**Major Changes in Project Cost:**  
 2014-2018 CIP - Increase of \$325.0 million due to accelerated project start and compressed implementation schedule.  
 2015-2019 CIP - decrease of \$256.8 million due to creation of separate biosolids projects through project validation.

**Notes:**  
 This project corresponds to Plant Master Plan Project Nos. 44, 54, and 57-60, 64 and Validation Project PS-03. The Expenditure Schedule is based on the design/build estimate. Prior to 2015-2019, this project was titled "New Biosolids Facility". Schedule revised during the 2015-2019 project validation process.

<b>FY Initiated:</b>	2012-2013	<b>Appn. #:</b>	7452
<b>Initial Project Budget:</b>	\$1,000,000	<b>USGBC LEED:</b>	N/A

# Water Pollution Control

## 2015-2019 Proposed Capital Improvement Program

### Detail of Construction Projects

#### 10. Digester and Thickener Facilities Upgrade

CSA:	Environmental and Utility Services	Initial Start Date:	3rd Qtr. 2006
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	
Department:	Environmental Services	Initial Completion Date:	2nd Qtr. 2008
Council District:	4	Revised Completion Date:	1st Qtr. 2025
Location:	Water Pollution Control Plant		

**Description:** This project will rehabilitate up to ten anaerobic digesters through a phased approach. This first phase of the project rehabilitates four digesters. The project also rehabilitates and modifies six dissolved air flotation units, pressure saturation tanks, pipes, pumps, and ancillary equipment. The digester gas conveyance and tunnel systems will also be upgraded to include new pipe support racks, new piping, valves, controls, and safety improvements.

**Justification:** The Plant has 16 anaerobic digesters constructed between 1956 and 1983. This project will restore digester capacity and improve reliability and safety of the gas conveyance system to ensure reliable operation of the digestion process.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Development	511	12,496	12,496						1,350	3,280	16,287
Design	647			1,350					200	9,600	11,597
Bld & Award	1			90	110				61,060	49,640	110,701
Construction	1				59,570	1,120	370		1,070	580	1,650
Post Construction							740	330			
<b>TOTAL</b>	<b>1,160</b>	<b>12,496</b>	<b>12,496</b>	<b>1,440</b>	<b>59,680</b>	<b>1,120</b>	<b>1,110</b>	<b>330</b>	<b>63,680</b>	<b>63,350</b>	<b>140,686</b>
FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund	1,160	12,496	12,496	1,440	59,680	1,120	1,110	330	63,680	63,350	140,686
<b>TOTAL</b>	<b>1,160</b>	<b>12,496</b>	<b>12,496</b>	<b>1,440</b>	<b>59,680</b>	<b>1,120</b>	<b>1,110</b>	<b>330</b>	<b>63,680</b>	<b>63,350</b>	<b>140,686</b>
ANNUAL OPERATING BUDGET IMPACT (000'S)											
Operating									420		
<b>TOTAL</b>									<b>420</b>		

**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 \$84.0 million to fund construction/rehabilitation costs due to increased project scope.
- 2010-2014 CIP - Increase of \$11.5 million due to incorporation of digester gas line replacement.
- 2011-2015 CIP - decrease of \$34.0 million due to decrease in the number of digesters from eleven to four.
- 2012-2016 CIP - decrease of \$23.2 million due to realignment of project to the Plant Master Plan estimate.
- 2013-2017 CIP - Increase of \$24.2 million due to revisions in the cost estimation methodology.
- 2014-2018 CIP - Increase of \$57.3 million to align with the Master Plan recommendation to rehabilitate up to ten digesters.
- 2015-2019 CIP - Increase of \$18.3 million due to revised project validation cost estimate.

**Notes:**

This project corresponds to Plant Master Plan Project Nos. 45 -53 and Validation Project PS-01. This project is planned to be completed in two phases. Prior to 2015-2019, this project was titled "Digester Rehabilitation".

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

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Detail of Construction Projects**

**11. Combined Heat and Power Equipment Repair and Rehabilitation**

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b>	3rd Qtr. 2012
<b>CSA Outcome:</b>	Reliable Utility Infrastructure	<b>Revised Start Date:</b>	
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b>	2nd Qtr. 2013
<b>Council District:</b>	4	<b>Revised Completion Date:</b>	3rd Qtr. 2016
<b>Location:</b>	Water Pollution Control Plant		

**Description:** This project will install new digester gas compressors, housed in a new building, along with new digester gas pre-coolers, cooling towers, gas piping, and associated utility tie-ins. In addition, this project will replace an existing digester gas holder.

**Justification:** A reliable supply of digester gas will be a key input to the Plant's new cogeneration facility. The existing gas compressors are more than 30 years old and increasingly unreliable and difficult to maintain. The existing digester gas holder was built in 1984 and is currently out of service. Rehabilitating these systems is critical to safely and efficiently managing the Plant's valuable digester gas.

<b>EXPENDITURE SCHEDULE (000'S)</b>											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Development	4										4
Design	469	575	575								1,044
Bld & Award	3	41	41								44
Construction	2	9,954	9,954	420					420		10,376
Post Construction		46	46		370	30			400		446
<b>TOTAL</b>	<b>478</b>	<b>10,616</b>	<b>10,616</b>	<b>420</b>	<b>370</b>	<b>30</b>			<b>820</b>		<b>11,914</b>

<b>FUNDING SOURCE SCHEDULE (000'S)</b>											
San José-Santa Clara Treatment Plant Capital Fund	478	10,616	10,616	420	370	30			820		11,914
<b>TOTAL</b>	<b>478</b>	<b>10,616</b>	<b>10,616</b>	<b>420</b>	<b>370</b>	<b>30</b>			<b>820</b>		<b>11,914</b>

<b>ANNUAL OPERATING BUDGET IMPACT (000'S)</b>										
None										

**Major Changes In Project Cost:**  
 2014-2018 CIP - Increase of \$8.2 million due to addition of new projects (Digester Gas Compressor Upgrade and Digester Gas Holding Tank Upgrade).  
 2015-2019 CIP - Increase of \$0.5 million due to increased engineer's estimate for Digester Gas Compressor Upgrade project.

**Notes:**  
 This project corresponds to Validation Projects PE-03 and PE-04. Schedule revised during the 2015-2019 project validation process.

<b>FY Initiated:</b>	2012-2013	<b>Appn. #:</b>	7453
<b>Initial Project Budget:</b>	\$3,200,000	<b>USGBC LEED:</b>	N/A

# Water Pollution Control

## 2015-2019 Proposed Capital Improvement Program

### Detail of Construction Projects

#### 12. Energy Generation Improvements

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b>	3rd Qtr. 2012
<b>CSA Outcome:</b>	Reliable Utility Infrastructure	<b>Revised Start Date:</b>	
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b>	2nd Qtr. 2013
<b>Council District:</b>	4	<b>Revised Completion Date:</b>	1st Qtr. 2018
<b>Location:</b>	Water Pollution Control Plant		

**Description:** This project will install new, lower-emission engine-generators to replace the aged existing engine-generators and allow for the retirement of the aged engine-driven blowers. It includes a new generator building, gas cleaning/condition system, gas blending system, piping, dedicated control system, and motor control centers. Additionally, this project will install emergency diesel generators and storage tanks to provide backup power in the event of an extended power outage from PG&E.

**Justification:** Energy generation capacity and operational reliability have become significant issues at the Plant in recent years. The outdated engine-generators are increasingly difficult to maintain due to a lack of available parts and repairs require significant downtime. Additionally, while the existing systems meet current air regulations, they will not meet the more stringent regulations anticipated in the future. Replacing these facilities with new lower-emission engine-generators will reduce the risk of operational failure and permit violations while providing robust and reliable energy generating facilities to power the Plant for decades.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Development	377	678	678	130					130		1,185
Design	14	8,079	8,079						400		8,093
Bld & Award		184	184	400					84,540		584
Construction		29,484	29,484	10,540	73,000	1,000			1,920		114,024
Post Construction					470	470	980				1,920
<b>TOTAL</b>	<b>391</b>	<b>38,425</b>	<b>38,425</b>	<b>11,070</b>	<b>73,470</b>	<b>1,470</b>	<b>980</b>		<b>86,990</b>		<b>125,806</b>

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund	391	38,425	38,425	11,070	73,470	1,470	980		86,990		125,806
<b>TOTAL</b>	<b>391</b>	<b>38,425</b>	<b>38,425</b>	<b>11,070</b>	<b>73,470</b>	<b>1,470</b>	<b>980</b>		<b>86,990</b>		<b>125,806</b>

ANNUAL OPERATING BUDGET IMPACT (000'S)											
Cost Offset							(9,430)	(9,613)			
Operating							4,240	4,323			
<b>TOTAL</b>							<b>(5,190)</b>	<b>(5,290)</b>			

**Major Changes in Project Cost:**

2014-2018 CIP - increase of \$100.0 million due to acceleration of the implementation schedule.  
 2015-2019 CIP - increase of \$24.5 million due to revised program validation cost estimate.

**Notes:**

This project corresponds to Plant Master Plan Nos. 74, 75, and 76 and Validation Projects PE-01 and PE-02. Prior to 2014-2018 this project was titled "Combined Heat and Power Technology Evaluation." Schedule revised during the 2015-2019 project validation process.

<b>FY Initiated:</b>	2012-2013	<b>Appn. #:</b>	7454
<b>Initial Project Budget:</b>	\$1,300,000	<b>USGBC LEED:</b>	N/A

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Detail of Construction Projects**

**13. Plant Electrical Reliability**

CSA:	Environmental and Utility Services	Initial Start Date:	3rd Qtr. 2003
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	
Department:	Environmental Services	Initial Completion Date:	2nd Qtr. 2014
Council District:	4	Revised Completion Date:	4th Qtr. 2016
Location:	Water Pollution Control Plant		

**Description:** This project replaces substations and switches, modifies power distribution buses and cabling, and provides backup systems to enhance the overall safety and reliability of the Plant electrical systems. The project includes a multi-phase construction schedule based upon a study completed in 2004.

**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 addresses immediate safety needs and provides for future reliability needs.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Development	458								1,320		458
Design	6,366			1,320					100		7,686
Bid & Award	50			100					100		150
Construction	14,899	3,052	3,052	4,180	300				4,480		22,431
Post Construction	20	70	70			100			100		190
<b>TOTAL</b>	<b>21,793</b>	<b>3,122</b>	<b>3,122</b>	<b>5,600</b>	<b>300</b>	<b>100</b>			<b>6,000</b>		<b>30,915</b>

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund	21,793	3,122	3,122	5,600	300	100			6,000		30,915
<b>TOTAL</b>	<b>21,793</b>	<b>3,122</b>	<b>3,122</b>	<b>5,600</b>	<b>300</b>	<b>100</b>			<b>6,000</b>		<b>30,915</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 \$3.0 million to reflect a project scope change.  
 2011-2015 CIP - Increase of \$11.4 million due to increased project scope.  
 2013-2017 CIP - decrease of \$64.7 million due to removal of the Gas Turbine/Internal Combustion Engine project scope, which is being refined and will be included as part of the Energy Generation Improvements project described in the Overview of this CIP.  
 2015-2019 CIP - Increase of \$3.9 million due to revised project validation cost estimate.

**Notes:**

This project replaces a formerly ongoing allocation titled "Electrical System Improvements."

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

# Water Pollution Control

## 2015-2019 Proposed Capital Improvement Program

### Detail of Construction Projects

#### 14. Advanced Facility Control and Meter Replacement

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b>	3rd Qtr. 2010
<b>CSA Outcome:</b>	Reliable Utility Infrastructure	<b>Revised Start Date:</b>	
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b>	2nd Qtr. 2014
<b>Council District:</b>	4	<b>Revised Completion Date:</b>	2nd Qtr. 2024
<b>Location:</b>	Water Pollution Control Plant		

**Description:** This project will develop a Plant-wide automation master plan, replace existing flow meters and actuators, and upgrade sensors, controls, and monitoring equipment throughout the Plant.

**Justification:** The Plant currently has hundreds of meters measuring liquid, sludge, and gas streams. Many existing sensors, actuators, and flow meters are inaccurate or unreliable. Due to their age, it is more cost effective to replace them with modern equipment to ensure performance reliability and assure that needed components are available for ongoing maintenance. This project will allow the Plant to move towards improved data capture, resulting in greater operational reliability and flexibility.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Development	45				870	490			1,360		1,405
Design	15	567	567			4,300			4,300		4,882
Bld & Award		75	75				420		420		495
Construction	36	2,050	2,050	340			22,710	220	23,270	810	26,166
Post Construction	129	550	550		40				40	280	999
<b>TOTAL</b>	<b>225</b>	<b>3,242</b>	<b>3,242</b>	<b>340</b>	<b>910</b>	<b>4,790</b>	<b>23,130</b>	<b>220</b>	<b>29,390</b>	<b>1,090</b>	<b>33,947</b>
FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund	225	3,242	3,242	340	910	4,790	23,130	220	29,390	1,090	33,947
<b>TOTAL</b>	<b>225</b>	<b>3,242</b>	<b>3,242</b>	<b>340</b>	<b>910</b>	<b>4,790</b>	<b>23,130</b>	<b>220</b>	<b>29,390</b>	<b>1,090</b>	<b>33,947</b>
ANNUAL OPERATING BUDGET IMPACT (000'S)											
None											

**Major Changes In Project Cost:**

- 2012-2016 CIP - decrease of \$5.9 million due to decreased scope.
- 2013-2017 CIP - decrease of \$2.1 million due to the establishment of the Treatment Plant Distributed Control System project as part of the approval of the 2011-2012 Mid-Year Budget Review.
- 2014-2018 CIP - increase of \$0.5 million due to updated cost estimate.
- 2015-2019 CIP - increase of \$30.4 million due to revised scope, addition of meter replacement scope, and project validation cost estimate.

**Notes:**

This project corresponds with Plant Master Plan No. 90 and Validation Project PA-01. Prior to 2015-2019, this project was titled "Advanced Process Control and Automation". This project is planned to be completed in two phases. Schedule revised during the 2015-2019 project validation process.

<b>FY Initiated:</b>	2010-2011	<b>Appn. #:</b>	7224
<b>Initial Project Budget:</b>	\$11,000,000	<b>USGBC LEED:</b>	N/A

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Detail of Construction Projects**

**15. Treatment Plant Distributed Control System**

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b>	1st Qtr. 2012
<b>CSA Outcome:</b>	Reliable Utility Infrastructure	<b>Revised Start Date:</b>	
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b>	2nd Qtr. 2016
<b>Council District:</b>	4	<b>Revised Completion Date:</b>	2nd Qtr. 2017
<b>Location:</b>	Water Pollution Control Plant		

**Description:** This project will upgrade and convert the existing Distributed Control System (DCS) at the Plant. The system is composed of a network of field controllers, workstations, and servers that control most aspects of Plant operations.

**Justification:** The current control system is outdated and will no longer be supported by the vendor beginning in 2015. Upgrading the system is vital to maintaining efficient operations and improving monitoring capabilities.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Design	109	96	96	500	500	500			1,500		1,705
Construction	296	2,400	2,400								2,696
<b>TOTAL</b>	<b>405</b>	<b>2,496</b>	<b>2,496</b>	<b>500</b>	<b>500</b>	<b>500</b>			<b>1,500</b>		<b>4,401</b>

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund	405	2,496	2,496	500	500	500			1,500		4,401
<b>TOTAL</b>	<b>405</b>	<b>2,496</b>	<b>2,496</b>	<b>500</b>	<b>500</b>	<b>500</b>			<b>1,500</b>		<b>4,401</b>

ANNUAL OPERATING BUDGET IMPACT (000'S)										
None										

**Major Changes In Project Cost:**  
 2014-2018 CIP - Increase of \$0.5 million due to higher than expected consultant costs.  
 2015-2019 CIP - decrease of \$0.2 million due to lower than expected construction costs.

**Notes:**  
 This project was established as part of the approval of the 2011-2012 Mid-Year Budget Review. Prior to this action, this project was part of the Equipment Replacement and Advanced Process Control and Automation projects.

<b>FY Initiated:</b>	2012-2013	<b>Appn. #:</b>	7394
<b>Initial Project Budget:</b>	\$4,065,000	<b>USGBC LEED:</b>	N/A

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Detail of Construction Projects**

**16. Equipment Replacement**

CSA:	Environmental and Utility Services	Initial Start Date:	Ongoing
GSA 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 ongoing replacement and rehabilitation of equipment at the Plant. Equipment anticipated to be replaced or rehabilitated includes air compressors, tanks, pumps, motors, control systems, valves, heat exchangers, engine auxiliaries, lab instruments, and other equipment as required.

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

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Development		30	30								
Design		673	673								
Bld & Award		357	357								
Construction		17	17								
Post Construction		1,742	1,742	1,663	1,663	1,663	1,663	1,663	8,315		
Equipment											
<b>TOTAL</b>		<b>2,819</b>	<b>2,819</b>	<b>1,663</b>	<b>1,663</b>	<b>1,663</b>	<b>1,663</b>	<b>1,663</b>	<b>8,315</b>		
FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund		2,819	2,819	1,663	1,663	1,663	1,663	1,663	8,315		
<b>TOTAL</b>		<b>2,819</b>	<b>2,819</b>	<b>1,663</b>	<b>1,663</b>	<b>1,663</b>	<b>1,663</b>	<b>1,663</b>	<b>8,315</b>		
ANNUAL OPERATING BUDGET IMPACT (000'S)											
None											

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

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

FY Initiated:	Ongoing	Appn. #:	4332
Initial Project Budget:		USGBC LEED:	N/A

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Detail of Construction Projects**

**17. Facility Wide Water Systems Improvements**

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b>	3rd Qtr. 2014
<b>CSA Outcome:</b>	Reliable Utility Infrastructure	<b>Revised Start Date:</b>	
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b>	1st Qtr. 2022
<b>Council District:</b>	4	<b>Revised Completion Date:</b>	
<b>Location:</b>	Water Pollution Control Plant		

**Description:** This project rehabilitates, replaces, and/or extends the Plant's four water systems including piping, valves, pumps, controls and other ancillary equipment. The scope of work will be based on hydraulic modeling and study of existing and future water demands at the Plant. The project may be constructed in phases based on the outcome of the study and priority of needs.

**Justification:** The Plant's four water systems include potable water, groundwater, process/fire protection water, and recycled water. These were constructed over time with the various Plant expansions and are in need of rehabilitation and upgrade due to age, condition, worker safety, and code compliance requirements. In addition, changes to water uses and demands have not been addressed over time. An updated hydraulic model and assessment of current and future water demands will allow for the proper sizing of these systems to improve current and future performance and reduce damage to pumping equipment.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Development				460	240				700		700
Design					2,050	130			2,180		2,180
Bld & Award							200		200		200
Construction							10,590	130	10,720	110	10,830
Post Construction										220	220
<b>TOTAL</b>				<b>460</b>	<b>2,290</b>	<b>130</b>	<b>10,790</b>	<b>130</b>	<b>13,800</b>	<b>330</b>	<b>14,130</b>

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund				460	2,290	130	10,790	130	13,800	330	14,130
<b>TOTAL</b>				<b>460</b>	<b>2,290</b>	<b>130</b>	<b>10,790</b>	<b>130</b>	<b>13,800</b>	<b>330</b>	<b>14,130</b>

ANNUAL OPERATING BUDGET IMPACT (000'S)										
None										

**Major Changes in Project Cost:**

None

**Notes:**

This project corresponds to Plant Master Plan Project No. 105 and Validation Project PF-06.

<b>FY Initiated:</b>	2014-2015	<b>Appn. #:</b>	
<b>Initial Project Budget:</b>	\$14,130,000	<b>USGBC LEED:</b>	N/A

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Detail of Construction Projects**

**18. 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. Examples of the ongoing replacement and rehabilitation work include handrail replacement, concrete repairs, telecommunication systems upgrade, and Plant support system improvements.

Justification: Many mechanical, electrical, and structural assets at the Plant are in poor condition due to age and wear. 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.

**EXPENDITURE SCHEDULE (000'S)**

Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Development		840	840	500		920	920		2,340		
Design					70				70		
Bld & Award		4,034	4,034	420	2,770	80	80	2,980	6,330		
Construction		536	536	80				70	150		
Post Construction											
Program Management											
<b>TOTAL</b>		<b>5,410</b>	<b>5,410</b>	<b>1,000</b>	<b>2,840</b>	<b>1,000</b>	<b>1,000</b>	<b>3,050</b>	<b>8,890</b>		

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

San José-Santa Clara Treatment Plant Capital Fund	5,410	5,410	1,000	2,840	1,000	1,000	3,050	8,890
<b>TOTAL</b>	<b>5,410</b>	<b>5,410</b>	<b>1,000</b>	<b>2,840</b>	<b>1,000</b>	<b>1,000</b>	<b>3,050</b>	<b>8,890</b>

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

None

Major Changes In Project Cost:  
 N/A

Notes:  
 This project corresponds to Plant Master Plan Project No. 97 and corresponds to Validation Project PF-03. Project schedule dates and selected budget information are not provided due to the ongoing nature of this project.

FY Initiated: Ongoing Appn. #: 5690  
 Initial Project Budget: USGBC LEED: N/A

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Detail of Construction Projects**

**19. Plant Instrument Air System Upgrade**

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b>	3rd Qtr. 2014
<b>CSA Outcome:</b>	Reliable Utility Infrastructure	<b>Revised Start Date:</b>	
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b>	1st Qtr. 2019
<b>Council District:</b>	4	<b>Revised Completion Date:</b>	
<b>Location:</b>	Water Pollution Control Plant		

**Description:** This project replaces the existing high-pressure Plant Instrument air supply system with a new above grade distributed system. This project also makes electrical upgrades to provide for power and redundancy improvements to the Plant air supply system.

**Justification:** The Instrument air supply system plays a critical role by providing high pressure air for pneumatic operations and controls of valves and instruments located throughout the Plant process areas. The existing system is outdated and its location in the basement of the Secondary Blower Building makes it vulnerable to flooding. The existing system also lacks an independent power source and sufficient reservoirs for maintaining operations during an extended power failure. Replacement of the system will improve operational reliability and minimize interruptions to critical operations.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Design			60						60		60
Bld & Award			190						190		190
Construction			8,290	160	160	80	70	90	8,690		8,690
Post Construction									160		160
<b>TOTAL</b>			<b>8,540</b>	<b>160</b>	<b>160</b>	<b>150</b>	<b>90</b>		<b>9,100</b>		<b>9,100</b>

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund			8,540	160	160	150	90		9,100		9,100
<b>TOTAL</b>			<b>8,540</b>	<b>160</b>	<b>160</b>	<b>150</b>	<b>90</b>		<b>9,100</b>		<b>9,100</b>

ANNUAL OPERATING BUDGET IMPACT (000'S)										
None										

**Major Changes in Project Cost:**  
None

**Notes:**  
This project corresponds to Validation Project PF-07.

<b>FY Initiated:</b>	2014-2015	<b>Appn. #:</b>	
<b>Initial Project Budget:</b>	\$9,100,000	<b>USGBC LEED:</b>	N/A

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Detail of Construction Projects**

**20. Support Building Improvements**

CSA: Environmental and Utility Services Initial Start Date: 1st Qtr. 2015  
 CSA Outcome: Reliable Utility Infrastructure Revised Start Date:  
 Department: Environmental Services Initial Completion Date: 3rd Qtr. 2023  
 Council District: 4 Revised Completion Date:  
 Location: Water Pollution Control Plant

**Description:** This project constructs various tenant improvements to the administration, operations, engineering, and other support buildings located throughout the Plant. It may include floor, ceiling, wall, partition, plumbing, heating, ventilation and air conditioning upgrades, fire protection, and security improvement as well as ancillary landscaping improvements. It also constructs new warehousing facilities and an electronic warehouse management system which may include new computers, a central database, barcode scanners, mobile tablets, and other technology improvements. This project will be constructed in phases based on a detailed tenant improvement study, warehouse design study, and priority of needs.

**Justification:** Most of the buildings at the Plant are between 30 to 50 years old and are in need of refurbishment to improve worker health, safety, and environment. The tenant improvements are also needed to bring the buildings into compliance with current building and safety codes. The new warehousing facility and warehousing management system will improve operational efficiency through better control of the movement and storage of materials including shipping, receiving, material stocking, use, and distribution.

<b>EXPENDITURE SCHEDULE (000'S)</b>											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Development				490	1,700	610			2,700		2,700
Design						8,130	580		8,710		8,710
Bld & Award							40	160	200		200
Construction								10,610	10,610	32,790	43,400
Post Construction										580	580
<b>TOTAL</b>				<b>490</b>	<b>1,700</b>	<b>8,640</b>	<b>620</b>	<b>10,770</b>	<b>22,220</b>	<b>33,370</b>	<b>55,590</b>

<b>FUNDING SOURCE SCHEDULE (000'S)</b>											
San José-Santa Clara Treatment Plant Capital Fund				490	1,700	8,640	620	10,770	22,220	33,370	55,590
<b>TOTAL</b>				<b>490</b>	<b>1,700</b>	<b>8,640</b>	<b>620</b>	<b>10,770</b>	<b>22,220</b>	<b>33,370</b>	<b>55,590</b>

<b>ANNUAL OPERATING BUDGET IMPACT (000'S)</b>										
None										

**Major Changes In Project Cost:**  
None

**Notes:**  
This project includes Plant Master Plan Project Nos. 94, 95, 96, 98, 106, and 107 and corresponds to Valdallon Project PF-02.

FY Initiated: 2014-2015 Appn. #: N/A  
 Initial Project Budget: \$55,590,000 USGBC LEED: N/A

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Detail of Construction Projects**

**21. Treatment Plant Fire Main Replacement**

CSA:	Environmental and Utility Services	Initial Start Date:	1st Qtr. 2012
CSA Outcome:	Reliable Utility Infrastructure	Revised Start Date:	
Department:	Environmental Services	Initial Completion Date:	2nd Qtr. 2013
Council District:	4	Revised Completion Date:	2nd Qtr. 2015
Location:	Water Pollution Control Plant		

**Description:** The fire main piping system, which is part of the Fire Protection System for the Plant, consists of approximately 15,000 linear feet of pipes ranging from 6, 8, 10, and 12 inches; two 100-HP electric pumps; fire hydrants; and associated valves. The fire main piping was installed as the Plant expanded over the past 50 years. A condition assessment was conducted in 2007 and revealed that most of the existing pipe is corroded. This funding rehabilitates the system.

**Justification:** This project will ensure the reliability of the fire protection system at the Plant.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Design		111							230		111
Construction	1,208	1,543	1,543	230					230		2,981
Post Construction	9	20	20	20					20		49
<b>TOTAL</b>	<b>1,328</b>	<b>1,563</b>	<b>1,563</b>	<b>250</b>					<b>250</b>		<b>3,141</b>
FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund	1,328	1,563	1,563	250					250		3,141
<b>TOTAL</b>	<b>1,328</b>	<b>1,563</b>	<b>1,563</b>	<b>250</b>					<b>250</b>		<b>3,141</b>
ANNUAL OPERATING BUDGET IMPACT (000'S)											
None											

**Major Changes in Project Cost:**

2014-2018 CIP - Increase of \$0.5 million due to higher than expected construction costs.  
 2015-2019 CIP - Increase of \$0.2 million due to higher than expected construction costs.

**Notes:**

This project was previously included as part of the Plant Infrastructure Improvements project and was established as part of the approval of the 2011-2012 Mid-Year Budget Review.

FY Initiated:	2012-2013	Appn. #:	7397
Initial Project Budget:	\$2,400,000	USGBC LEED:	N/A

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Detail of Construction Projects**

**22. Tunnel Rehabilitation**

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b>	2nd Qtr. 2015
<b>CSA Outcome:</b>	Rollable Utility Infrastructure	<b>Revised Start Date:</b>	
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b>	4th Qtr. 2024
<b>Council District:</b>	4	<b>Revised Completion Date:</b>	
<b>Location:</b>	Water Pollution Control Plant		

**Description:** This project will rehabilitate and make safety improvements to the tunnel system throughout the Plant. The work may include structural, mechanical, electrical, ventilation, fire safety, and coating improvements and will be completed in phases based on a detailed condition assessment, physical testing, and prioritization of needs.

**Justification:** The Plant has an extensive tunnel system that houses piping, valves, pumps, controls and other equipment. Many of these tunnels were built more than 50 years ago and need to be rehabilitated and upgraded to ensure compliance with safety requirements. To the extent practical, obsolete piping in the tunnels should also be removed to improve maintenance access and make room for new process piping.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Development				60	930	130			1,120		1,120
Design						3,680			3,680		3,680
Bld & Award							150		150		150
Construction							4,770	190	4,960	15,420	20,380
Post Construction										220	220
TOTAL				60	930	3,810	4,920	190	9,910	15,640	25,550
FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund				60	930	3,810	4,920	190	9,910	15,640	25,550
TOTAL				60	930	3,810	4,920	190	9,910	15,640	25,550
ANNUAL OPERATING BUDGET IMPACT (000'S)											
None											

**Major Changes In Project Cost:**

None

**Notes:**

This project corresponds to Plant Master Plan Project Nos. 12, 13, 46, 103, and 104 and Validation Project PF-01.

<b>FY Initiated:</b>	2014-2015	<b>Appn. #:</b>	
<b>Initial Project Budget:</b>	\$25,550,000	<b>USGBC LEED:</b>	N/A

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Detail of Construction Projects**

**23. Urgent and Unscheduled Treatment Plant Rehabilitation**

<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 ongoing allocation is used to investigate, prioritize, and rehabilitate structures and systems at the Water Pollution Control Plant. This funding will be used to respond to the Plant's urgent maintenance and rehabilitation needs that cannot be programmed during the annual CIP budget process.

**Justification:** This allocation is required due to the deterioration of structures and systems at the Plant.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Development		1,500	1,500	1,500	1,500	1,500	1,500	1,500	7,500		
Design			885								
Construction			885								
<b>TOTAL</b>		<b>2,385</b>	<b>2,385</b>	<b>1,500</b>	<b>1,500</b>	<b>1,500</b>	<b>1,500</b>	<b>1,500</b>	<b>7,500</b>		
FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund		2,385	2,385	1,500	1,500	1,500	1,500	1,500	7,500		
<b>TOTAL</b>		<b>2,385</b>	<b>2,385</b>	<b>1,500</b>	<b>1,500</b>	<b>1,500</b>	<b>1,500</b>	<b>1,500</b>	<b>7,500</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>Appn. #:</b>	7395
<b>Initial Project Budget:</b>		<b>USGBC LEED:</b>	N/A

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Detail of Construction Projects**

**24. Yard Piping and Road Improvements**

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

**Description:** This project will rehabilitate and/or replace process piping systems, valves, and related appurtenances throughout the Plant. The work will be completed in phases based on the outcome of a detailed condition assessment, physical testing, and prioritization of needs. This project will also make roadway and drainage-related improvements throughout the Plant's main operations and residual management areas.

**Justification:** The Plant has approximately 300,000 linear feet of piping along with associated valves and related appurtenances. The pipes range in diameter from 8 inches to 144 inches and carry gas, liquids, sludge, air, steam and other process streams to and from the various treatment areas. The pipes vary in age, material, condition, reliability and redundancy. Over 70 percent of the piping was installed more than 25 years ago and is in need of rehabilitation or replacement due to age, failure, and/or excessive maintenance. The Plant also has an extensive roadway network, nearly 40,000 linear feet of paved surfaces that needs rehabilitation and/or replacement due to excessive wear, heavy vehicle traffic, and drainage issues.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Development		500	500	270	3,910	1,750			5,930		
Design						17,980			17,980		
Bld & Award							250		250		
Construction		608	608				24,200	960	25,160		
Post Construction		10	10								
<b>TOTAL</b>		<b>1,118</b>	<b>1,118</b>	<b>270</b>	<b>3,910</b>	<b>19,730</b>	<b>24,450</b>	<b>960</b>	<b>49,320</b>		
FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund		1,118	1,118	270	3,910	19,730	24,450	960	49,320		
<b>TOTAL</b>		<b>1,118</b>	<b>1,118</b>	<b>270</b>	<b>3,910</b>	<b>19,730</b>	<b>24,450</b>	<b>960</b>	<b>49,320</b>		
ANNUAL OPERATING BUDGET IMPACT (000'S)											
None											

**Major Changes in Project Cost:**

N/A

**Notes:**

This project corresponds to Plant Master Plan Project Nos. 98 and 100 and Validation Project PF-04. Prior to 2015-2019, this project was titled "Treatment Plant Street Rehabilitation".

FY Initiated: Ongoing

Appn. #: 7396

Initial Project Budget:

USGBC LEED: N/A

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Detail of Construction Projects**

**25. SBWR System Reliability and Infrastructure Replacement**

<b>CSA:</b>	Environmental and Utility Services	<b>Initial Start Date:</b>	3rd Qtr. 2012
<b>CSA Outcome:</b>	Safe, Reliable, and Sufficient Water Supply	<b>Revised Start Date:</b>	
<b>Department:</b>	Environmental Services	<b>Initial Completion Date:</b>	2nd Qtr. 2016
<b>Council District:</b>	4	<b>Revised Completion Date:</b>	
<b>Location:</b>	Water Pollution Control Plant		

**Description:** This allocation will be used for system reliability improvements including, but not limited to, rehabilitation and/or replacement of pump station components (pumps, motors, and ancillary equipment), control and communication systems, pipelines, and other system-related infrastructure.

**Justification:** This project improves system reliability; addresses critical infrastructure needs, and ensures the integrity and reliability of the distribution system.

EXPENDITURE SCHEDULE (000'S)											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Design	18										18
Construction	70	2,300	2,300	1,500	1,500				3,000		5,370
<b>TOTAL</b>	<b>88</b>	<b>2,300</b>	<b>2,300</b>	<b>1,500</b>	<b>1,500</b>				<b>3,000</b>		<b>5,388</b>

FUNDING SOURCE SCHEDULE (000'S)											
San José-Santa Clara Treatment Plant Capital Fund	88	2,300	2,300	1,500	1,500				3,000		5,388
<b>TOTAL</b>	<b>88</b>	<b>2,300</b>	<b>2,300</b>	<b>1,500</b>	<b>1,500</b>				<b>3,000</b>		<b>5,388</b>

ANNUAL OPERATING BUDGET IMPACT (000'S)										
None										

**Major Changes in Project Cost:**  
 2015-2019 CIP - decrease of \$1.1 million due to reduction of scope.

**Notes:**  
 Prior to 2012-2013, this funding was included as part of the SBWR Master Plan project, but has been converted into a distinct project to more accurately reflect the purpose of these funds.

<b>FY Initiated:</b>	2012-2013	<b>Appn. #:</b>	7455
<b>Initial Project Budget:</b>	\$6,500,000	<b>USGBC LEED:</b>	N/A

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Detail of Non-Construction Projects**

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

**CSA:** Environmental and Utility Services  
**CSA Outcome:** Reliable Utility Infrastructure  
**Department:** Environmental Services  
**Description:** This allocation provides for administrative costs of the San José/Santa Clara Clean Water Financing Authority related to bond issuances.

<b>EXPENDITURE SCHEDULE (000'S)</b>											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Program Management		5	5	5	5	5	5	5	25		
<b>TOTAL</b>		5	5	5	5	5	5	5	25		

<b>FUNDING SOURCE SCHEDULE (000'S)</b>											
San José-Santa Clara Treatment Plant Capital Fund		5	5	5	5	5	5	5	25		
<b>TOTAL</b>		5	5	5	5	5	5	5	25		

**Notes:**  
 Selected budget information is not provided due to the ongoing nature of this project.

Appn. #: 6584

**27. Preliminary Engineering**

**CSA:** Environmental and Utility Services  
**CSA Outcome:** Reliable Utility Infrastructure  
**Department:** Environmental Services  
**Description:** This allocation provides funding to support preliminary engineering for Plant-related projects, including studies, pilots, and field verifications to evaluate impacts on operations.

<b>EXPENDITURE SCHEDULE (000'S)</b>											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Development		1,002	1,002	5,000	1,000	1,000	1,000	1,000	9,000		
<b>TOTAL</b>		1,002	1,002	5,000	1,000	1,000	1,000	1,000	9,000		

<b>FUNDING SOURCE SCHEDULE (000'S)</b>											
San José-Santa Clara Treatment Plant Capital Fund		1,002	1,002	5,000	1,000	1,000	1,000	1,000	9,000		
<b>TOTAL</b>		1,002	1,002	5,000	1,000	1,000	1,000	1,000	9,000		

**Notes:**  
 Selected budget information is not provided due to the ongoing nature of this project.

Appn. #: 7456

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Detail of Non-Construction Projects**

**28. Program Management**

**CSA:** Environmental and Utility Services  
**CSA Outcome:** Reliable Utility Infrastructure  
**Department:** Environmental Services  
**Description:** This allocation funds the administration and management of the Water Pollution Control Capital Improvement Program.

<b>EXPENDITURE SCHEDULE (000'S)</b>											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Program Management		9,284	9,284	11,390	9,420	8,260	6,800	5,000	40,870		
<b>TOTAL</b>		<b>9,284</b>	<b>9,284</b>	<b>11,390</b>	<b>9,420</b>	<b>8,260</b>	<b>6,800</b>	<b>5,000</b>	<b>40,870</b>		

<b>FUNDING SOURCE SCHEDULE (000'S)</b>											
San José-Santa Clara Treatment Plant Capital Fund		9,284	9,284	11,390	9,420	8,260	6,800	5,000	40,870		
<b>TOTAL</b>		<b>9,284</b>	<b>9,284</b>	<b>11,390</b>	<b>9,420</b>	<b>8,260</b>	<b>6,800</b>	<b>5,000</b>	<b>40,870</b>		

**Notes:**  
 Selected budget information is not provided due to the ongoing nature of this project.

**Appn. #:** 7481

**29. Record Drawings**

**CSA:** Environmental and Utility Services  
**CSA Outcome:** Reliable Utility Infrastructure  
**Department:** Environmental Services  
**Description:** This project develops a document management system and standards for electronically capturing, indexing, storing, retrieving, distributing, and versioning master drawings, specifications, and other final design documents. It also involves inventorying, developing, updating, and integrating existing records and field drawings.

<b>EXPENDITURE SCHEDULE (000'S)</b>											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Post Construction				250	12,700	90	90	90	13,220	350	13,570
<b>TOTAL</b>				<b>250</b>	<b>12,700</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>13,220</b>	<b>350</b>	<b>13,570</b>

<b>FUNDING SOURCE SCHEDULE (000'S)</b>											
San José-Santa Clara Treatment Plant Capital Fund				250	12,700	90	90	90	13,220	350	13,570
<b>TOTAL</b>				<b>250</b>	<b>12,700</b>	<b>90</b>	<b>90</b>	<b>90</b>	<b>13,220</b>	<b>350</b>	<b>13,570</b>

**Notes:**  
 This project corresponds to Plant Master Plan Project No. 114 and Validation Project PF-05.

**Appn. #:**

**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Detail of Non-Construction Projects**

**30. State Revolving Fund Loan Repayment**

**CSA:** Environmental and Utility Services  
**CSA Outcome:** Healthy Streams, Rivers, Marsh and Bay  
**Department:** Environmental Services  
**Description:** This allocation provides for the repayment of low interest State loans awarded for South Bay Water Recycling projects.

<b>EXPENDITURE SCHEDULE (000'S)</b>											
Cost Elements	Prior Years	2013-14 Appn.	2013-14 Estimate	2014-15	2015-16	2016-17	2017-18	2018-19	5-Year Total	Beyond 5-Year	Project Total
Debt Service	63,231	4,464	4,464	4,464	4,464	4,464	4,464	1,804	19,660		87,355
<b>TOTAL</b>	<b>63,231</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>1,804</b>	<b>19,660</b>		<b>87,355</b>
<b>FUNDING SOURCE SCHEDULE (000'S)</b>											
San José-Santa Clara Treatment Plant Capital Fund	63,231	4,464	4,464	4,464	4,464	4,464	4,464	1,804	19,660		87,355
<b>TOTAL</b>	<b>63,231</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>1,804</b>	<b>19,660</b>		<b>87,355</b>

Appn. #: 6590

# 2014-2015 CAPITAL BUDGET

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## 2015-2019 CAPITAL IMPROVEMENT PROGRAM

### WATER POLLUTION CONTROL

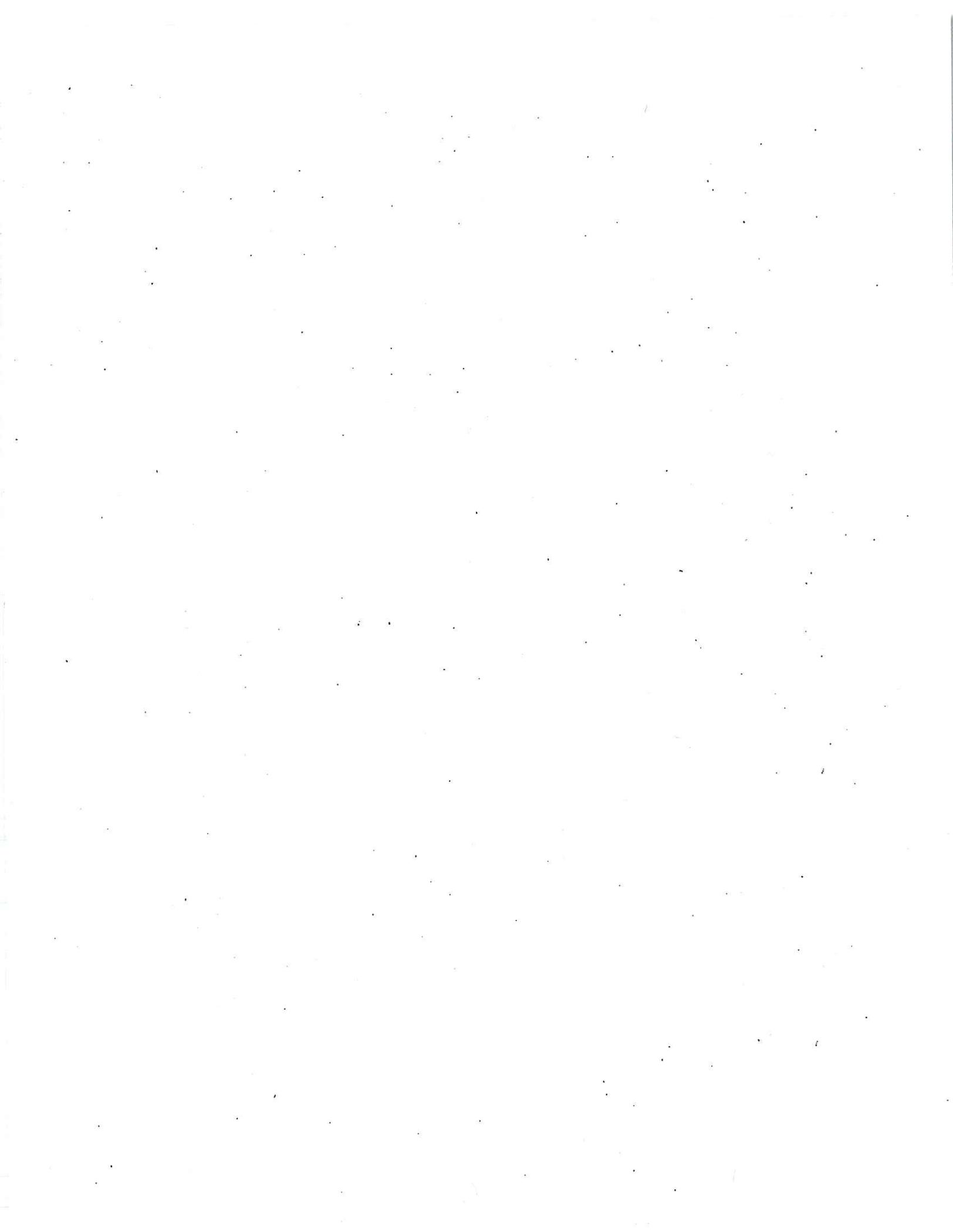
SUMMARY OF PROJECTS THAT  
START AFTER 2014-2015

SUMMARY OF RESERVES

EXPLANATION OF FUNDS

FLOW AND PRIORITY OF FUNDS

*The Summary of Projects that Start after 2014-2015 includes those projects that have funding budgeted starting after 2014-2015. The Summary of Reserves includes all reserves budgeted within the Five-Year Capital Improvement Program. On the Use of Funds statement, the projects in these summaries are not numbered.*



**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Summary of Projects that Start after 2014-2015**

---

<b>Project Name:</b> 2015-2017 Transfer to Clean Water Financing Authority Debt Service <b>5-Year CIP Budget:</b> \$79,649,000 <b>Total Budget:</b> \$79,649,000 <b>Council District:</b> 4 <b>USGBC LEED:</b> N/A	<b>Initial Start Date:</b> 3rd Qtr. 2015 <b>Revised Start Date:</b> <b>Initial End Date:</b> 2nd Qtr 2045 <b>Revised End Date:</b>
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**Description:** This funding provides for the payment of the 2015-2017 Revenue Bonds. The moneys are transferred to the Clean Water Financing Authority Debt Service Payment Fund. Funding beyond the 2015-2019 CIP will be included in the future CIP after the projects have been identified.

---

<b>Project Name:</b> Lagoons and Drying Beds Retirement <b>5-Year CIP Budget:</b> \$12,220,000 <b>Total Budget:</b> \$31,660,000 <b>Council District:</b> 4 <b>USGBC LEED:</b> N/A	<b>Initial Start Date:</b> 1st Qtr. 2016 <b>Revised Start Date:</b> <b>Initial End Date:</b> 2nd Qtr. 2025 <b>Revised End Date:</b>
--	--

**Description:** This project will decommission the use of the existing sludge storage lagoons and open air solar drying beds for post digestion processing through a phased approach. It involves successively turning over and emptying the existing lagoons of their biosolids contents in coordination with commissioning of the new biosolids dewatering facility. The project does not address follow up earthwork or rehabilitation needs to prepare the site for future development.

---

<b>Project Name:</b> Master Plan Updates <b>5-Year CIP Budget:</b> \$3,000,000 <b>Total Budget:</b> \$3,000,000 <b>Council District:</b> 4 <b>USGBC LEED:</b> N/A	<b>Initial Start Date:</b> 4th Qtr. 2016 <b>Revised Start Date:</b> <b>Initial End Date:</b> 4th Qtr. 2018 <b>Revised End Date:</b>
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**Description:** This project will review and update the Plant Master Plan, periodically, to ensure program goals and objectives are being met and to incorporate any major changes which may be triggered by operational, regulatory, technological, and economic conditions.

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**Water Pollution Control**  
**2015-2019 Proposed Capital Improvement Program**  
**Summary of Projects that Start after 2014-2015**

---

<b>Project Name:</b>	New Disinfection Facilities	<b>Initial Start Date:</b>	2nd Qtr. 2019
<b>5-Year CIP Budget:</b>	\$370,000	<b>Revised Start Date:</b>	
<b>Total Budget:</b>	\$55,620,000	<b>Initial End Date:</b>	1st Qtr. 2027
<b>Council District:</b>	4	<b>Revised End Date:</b>	
<b>USGBC LEED:</b>	N/A		

**Description:** This project constructs a new disinfection facility (currently assumed to be based on ultraviolet (UV) technology) to replace the existing sodium hypochlorite disinfection facility. It may also expand the existing chlorine contact basins to accommodate future peak hour wet weather flows and construct a new on-site hypochlorite generation facility. This project would only be triggered if new regulations concerning emerging contaminants are issued by the Regional Water Board within the next 2-3 NPDES permit cycles, and additional studies confirm future flow projections.

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<b>Project Name:</b>	Secondary Clarifier Rehabilitation Demonstration	<b>Initial Start Date:</b>	1st Qtr. 2017
<b>5-Year CIP Budget:</b>	\$2,030,000	<b>Revised Start Date:</b>	
<b>Total Budget:</b>	\$2,080,000	<b>Initial End Date:</b>	2nd Qtr. 2020
<b>Council District:</b>	4	<b>Revised End Date:</b>	
<b>USGBC LEED:</b>	N/A		

**Description:** The Plant has 26 secondary clarifiers and 16 nitrification clarifiers configured with peripheral mix liquor feed channel, and either central or peripheral launders. This project rehabilitates one secondary (BNR1) clarifier and retrofits it to receive a new baffle configuration based on computational fluid dynamic (CFD) modeling results. The new configuration is expected to improve clarifier performance and efficiency.

---

<b>Project Name:</b>	Thermal Drying Facility	<b>Initial Start Date:</b>	1st Qtr. 2019
<b>5-Year CIP Budget:</b>	\$2,590,000	<b>Revised Start Date:</b>	
<b>Total Budget:</b>	\$132,010,000	<b>Initial End Date:</b>	4th Qtr. 2023
<b>Council District:</b>	4	<b>Revised End Date:</b>	
<b>USGBC LEED:</b>	N/A		

**Description:** This project will construct a new thermal drying facility and support systems to replace the existing sludge storage lagoons and open air solar drying beds. The size, type, design, and technology selected for the new drying facility will depend on an engineering study currently underway that includes updated research on the market for biosolids, available disposal alternatives, and a business case evaluation of capital and operational costs for various alternatives. All new thermal drying units and ancillary equipment will be housed in an odor-controlled building.

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## Water Pollution Control

### 2015-2019 Proposed Capital Improvement Program

#### **Summary of Reserves**

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<b>Project Name:</b>	Equipment Replacement Reserve	<b>Initial Start Date:</b>	N/A
<b>5-Year CIP Budget:</b>	\$5,000,000	<b>Revised Start Date:</b>	
<b>Total Budget:</b>	\$5,000,000	<b>Initial End Date:</b>	N/A
<b>Council District:</b>	4	<b>Revised End Date:</b>	
<b>USGBC LEED:</b>	N/A		

**Description:** This reserve provides for unforeseen replacement and rehabilitation of equipment which, due to age, wear, or obsolescence, must be replaced for the efficient operation of the WPCP.

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# Water Pollution Control

## 2015-2019 Proposed Capital Improvement Program

### Explanation of Funds

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Revenues and expenditures for the operation and maintenance of the San José-Santa Clara Water Pollution Control Plant are accounted for by the City of San José, as administering agency, through the San José-Santa Clara Water Pollution Control Plant Operating Fund (Operating Fund) and the San José-Santa Clara Treatment Plant Capital Fund (Capital Fund).

Revenues from Tributary Agencies of the San José-Santa Clara Water Pollution Control Plant are recorded directly into the Treatment Plant Operating and Capital Funds, respectively. The Tributary Agencies include the City of Milpitas, City of Cupertino, Burbank and Sunol Sanitary Districts, County Sanitation District No. 2-3, and West Valley Sanitation District.

Tributary Agencies are assessed for their share of annual operation, maintenance, equipment, and facilities replacement and capital costs, based on their respective flow and strength of sewage conveyed to the Plant.

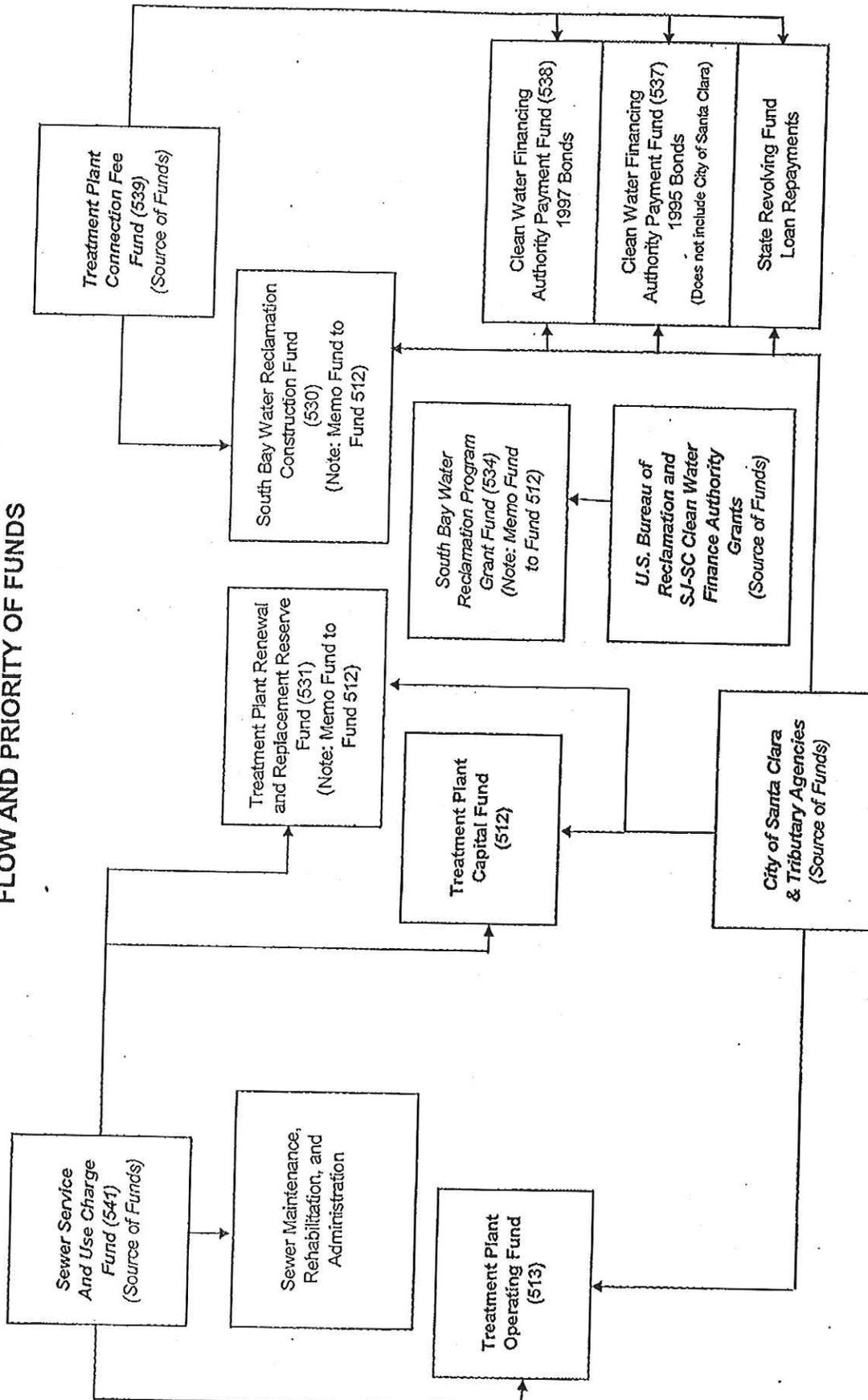
The San José Sewer Service and Use Charge Fund was established in the San José Municipal Code Section 15.12.640 in August 1959. This fund is the depository of revenues

from Sewer Service and Use Charges received from residential, commercial, and industrial users of the sanitary sewer system. A portion of these moneys are transferred to the Treatment Plant Operating and Capital Funds to pay for the City of San José's share of operating and capital costs of the Water Pollution Control Plant.

The Santa Clara Sewer Revenue Fund was established by Resolution Number 916 of the City Council of Santa Clara in October 1960. Like the City of San José, revenues from this fund are transferred directly to the Treatment Plant Operating and Capital Funds.

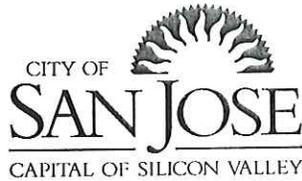
The Treatment Plant Capital Fund provides all moneys used for capital projects. Included in this fund is the Treatment Plant Renewal and Replacement Fund. This fund was established to satisfy the Water Pollution Control Plant's federal and State grant agreements as well as to comply with bond covenants. Also included in the Treatment Plant Capital Fund is the American Recovery and Reinvestment Act (ARRA) Water Program/SJ Area Water Reclamation and Reuse Memo Fund, which accounts for ARRA 2009 money for activities related to South Bay Water Recycling projects.

# WATER POLLUTION CONTROL PLANT FLOW AND PRIORITY OF FUNDS



The arrows indicate the flow of funds from each of the various sources to the fund in which the revenues are expended.

JE



# Memorandum

**TO: TREATMENT PLANT ADVISORY  
COMMITTEE**

**FROM: Kerrie Romanow**

**SUBJECT: 2014-2015 PROPOSED  
OPERATING BUDGET**

**DATE: May 9, 2014**

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This memorandum serves to transmit the San José/Santa Clara Regional Wastewater Facility Proposed 2014-2015 Operating and Maintenance Budget. The anticipated operating and maintenance budget and agency contributions were discussed with staff representatives from the tributary agencies on March 10<sup>th</sup>. The Proposed Operating and Maintenance Budget is provided to the Treatment Plant Advisory Committee's review and for a recommendation to the San José City Council for approval.

If you should have any questions, please contact Joanna De Sa at 408-635-2039.

/s/  
KERRIE ROMANOW  
Director, Environmental Services

**PROPOSED**

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

700 Los Esteros Road  
San José, California 95134

**2014-2015**

**Operating & Maintenance Budget**

Submitted by  
Kerrie Romanow, Director  
Environmental Services Department  
City of San José

**TO: Treatment Plant Advisory Committee**

Chuck Reed  
Kansen Chu  
Jose Esteves  
John M. Gatto  
Pat Kolstad  
Jennifer Maguire  
Jamie Matthews  
Madison Nguyen  
Chuck Page

(Chair) Mayor, City of San José  
Councilmember, City of San José  
Mayor, City of Milpitas  
Board member, Cupertino Sanitation District  
Councilmember, City of Santa Clara  
Deputy City Manager, City of San José  
Mayor, City of Santa Clara  
Vice-Mayor, City of San José  
Board member, West Valley Sanitation District

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

700 Los Esteros Road  
San José, California 95134

**2014-2015**

**PROPOSED**

**Operating & Maintenance Budget**

Environmental Services Department  
City of San José

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

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

**BUDGET SUMMARY**

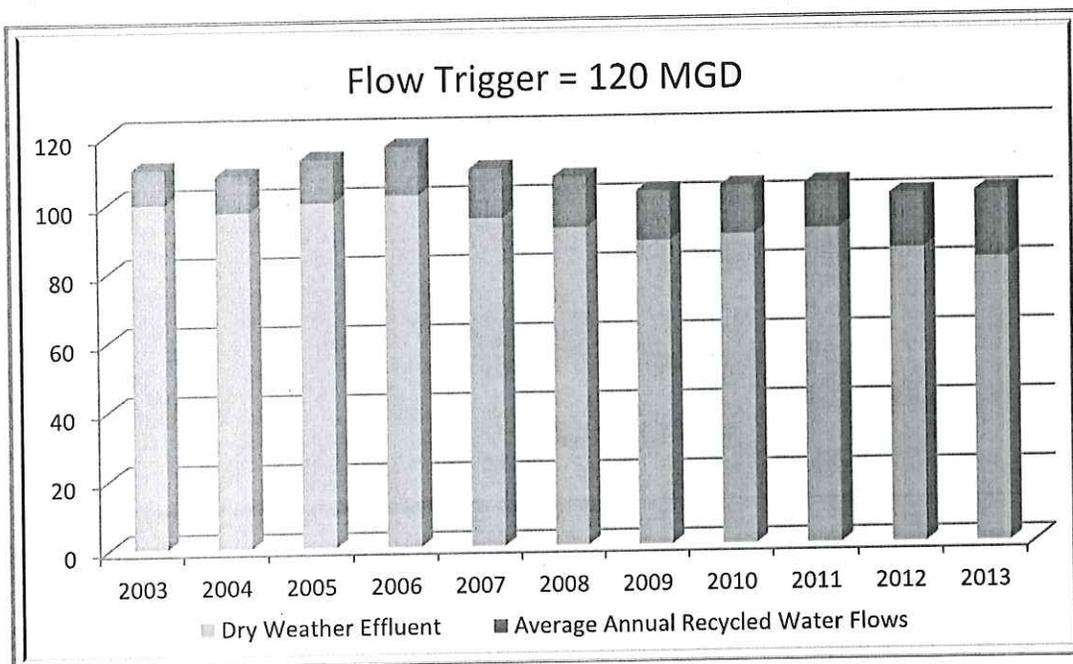
	Adopted 13-14	Proposed 14-15	% Change
Treatment Plant Operating Fund Budget	84,117,705	91,053,834	8.2%
ESD Authorized Positions	347.01	354.15	2.1%

**BUDGET HIGHLIGHTS 2014-2015**

- Additional staffing resources are recommended to assist the Plant Capital Improvement Program
- Additional Plant Attendant positions are recommended to assist with lower level tasks and to create a new point of entry into the wastewater treatment field.
- Additional funding is recommended for Plant Safety improvements
- Additional funding is recommended for the addition of heavy equipment in the Residual Solids Management program
- Additional funding is recommended to support preventative maintenance projects Plant-wide
- Additional funding is recommended to modernize the Plant Computer Control Room



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



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

**TREATMENT PLANT OPERATING FUND**  
**BUDGET SUMMARY**

Budget Summary	2012-2013	2013-2014	2014-2015	2014-2015
	Actual Expenses	Adopted Budget	Base Budget	Proposed Budget
Personal Services	38,438,094	43,735,011	47,521,521	48,202,876
Non-personal Expenses	23,461,441	27,667,518	28,666,023	29,881,798
Equipment	494,150	900,000	900,000	1,450,000
Inventory	350,940	400,000	400,000	400,000
<b>Department Expenses</b>	<b>62,744,625</b>	<b>72,702,529</b>	<b>77,487,544</b>	<b>79,934,674</b>
Overhead	6,610,459	8,380,904	7,880,195	8,000,024
City Hall Debt Service	948,041	1,068,233	1,092,295	1,092,295
Workers' Compensation	412,008	600,000	645,000	645,000
City Services	1,052,177	1,366,039	1,381,841	1,381,841
<b>City Expenses</b>	<b>9,022,685</b>	<b>11,415,176</b>	<b>10,999,331</b>	<b>11,119,160</b>
<b>TOTAL EXPENSES</b>	<b>\$71,767,310</b>	<b>\$84,117,705</b>	<b>\$88,486,875</b>	<b>\$91,053,834</b>

**ESTIMATED COST DISTRIBUTION**

2014-15 Estimated Total Gallons Treated (MG)	(1) Percent of Total Sewage Treated	City / District	2014-15 Projected
25,635.433	65.493	City of San Jose	\$59,633,888
5,434.499	13.898	City of Santa Clara	\$12,654,662
31,069.932	79.391	Sub-Total	\$72,288,549
3,175.220	8.264	West Valley Sanitation District	\$7,524,688
1,936.100	5.144	Cupertino Sanitary District	\$4,683,809
2,264.498	5.966	City of Milpitas	\$5,432,272
361.255	0.956	Sanitation District # 2 - 3	\$870,475
105.535	0.279	Burbank Sanitary District	\$254,040
7,842.608	20.609	Sub-Total	\$18,765,284
38,912.540	100.0	TOTAL	\$91,053,834

(1) Composite of four parameters (flow, BOD, SS, ammonia). Source 2014-15 Revenue Program.

# San José/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

## OVERVIEW

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**T**his year's Water Pollution Control Plant Operating Budget recommends an 8.2% increase over the 2013-2014 Adopted Budget. This increase is largely due to increased overhead, staffing, and non-personal costs.

Additional cost increases include higher than anticipated electrical costs as the treatment facility has experienced greater down time of generators and diminished efficiency of the methane capture and distribution system which will be of significant focus in the near-term capital budgets. Increased costs for safety improvements, equipment, and preventative maintenance programs are also included in this proposed budget.

The San José/Santa Clara Water Pollution Control Plant (Plant) and the Environmental Services Department continue to experience significant personal services savings due to the high number of vacancies as unprecedented levels of retirements and attrition outstrip the ability to recruit new staff. In 2013-2014 additional staffing in the form of Plant Attendants were added to the Plant to create a new point of entry into wastewater classifications. In 2014-2015 additional Plant Attendants are recommended to further supplement the workforce at the Plant and to provide a "pipeline" of interested staff available, and interested into applying for other higher level classifications across the Plant. Additional staffing for the Capital Improvement Program is also recommended to ensure smooth implementation of the capital program.

The following sections provide budget proposal descriptions and a breakdown by program of all associated expenditures and detail specific budgets.

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

**OVERVIEW CONTINUED**

**DEPARTMENT BUDGET SUMMARY**

Budget Summary	2012-2013 Actual	2013-2014 Adopted	2014-2015 Base	2014-2015 Proposed	% Change
<b>Dollars by Program</b>					
WPCP Operations and Maintenance	43,535,198	47,240,787	51,584,642	53,886,369	14.1%
Watershed Protection	8,247,393	9,696,524	10,195,651	10,195,651	5.1%
South Bay Water Recycling	3,049,104	4,459,961	4,465,005	4,317,280	(3.2%)
Plant Capital Improvement Pgm	2,081,492	4,067,415	3,392,963	3,484,029	(14.3%)
Mgmt + Admin Svcs	2,795,704	3,852,506	4,255,452	4,301,315	11.6% <sup>1</sup>
Regulatory Compliance and Safety	1,096,472	1,747,794	2,022,285	2,118,285	21.2% <sup>2</sup>
Office of Sustainability	565,605	894,851	878,030	878,030	(1.9%)
Communications	627,072	742,691	693,516	753,715	1.5%
Management Information Systems	746,586				
<b>Total</b>	\$ 62,744,625	\$ 72,702,529	\$ 77,487,544	\$ 79,934,674	9.9%
<b>Dollars by Category</b>					
<b>Personal Services</b>					
Salaries	21,513,615	25,540,982	26,946,133	27,457,241	7.5%
Pension	11,336,262	12,690,448	15,221,028	15,289,952	20.5%
Medical	3,639,333	4,851,915	4,702,694	4,804,017	(1.0%)
Overtime	1,948,884	651,666	651,666	651,666	0.0%
<b>Subtotal</b>	\$ 38,438,094	\$ 43,735,011	\$ 47,521,521	\$ 48,202,876	10.2%
<b>Non-Personal/Equipment</b>					
Energy	6,043,460	5,500,000	6,730,000	6,730,000	22.4%
Supplies & Materials	4,670,495	4,620,064	4,611,445	4,688,020	1.5%
Chemicals	1,648,430	2,655,000	2,655,000	2,655,000	0.0%
Contractual Services	7,728,893	10,666,310	10,750,013	11,639,740	9.1%
All Others	4,215,252	5,526,144	5,219,565	6,019,038	8.9%
<b>Subtotal</b>	\$ 24,306,531	\$ 28,967,518	\$ 29,966,023	\$ 31,731,798	9.5%
<b>Total</b>	\$ 62,744,625	\$ 72,702,529	\$ 77,487,544	\$ 79,934,674	9.9%
<b>Authorized Positions</b>	347.82	347.01	344.51	354.15	2.06%

- 1) Increase due to the reorganization of Management & Information Services into the Management & Administrative Services Program
- 2) Increase due to the reorganization within the Department to include additional personnel and budget from other programs

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

**Budget Proposals**

Proposed Program Changes	Positions	Treatment Plant Appropriations
<b>1. Water Pollution Control Plant Vehicles</b>		<b>550,000</b>
<p>This action provides funding to purchase an additional Caterpillar 980 Front Loader to move weighted tie down bins at each end of the sludge lagoons when the dredges need to be pulled over. This will increase the front loader fleet to two at the Water Pollution Control Plant and will be used to reduce back and forth driving which will minimize deterioration and damage to the unpaved levee roads. (Ongoing costs: \$0)</p>		
<b>2. Water Pollution Control Plant Filter Maintenance</b>		<b>475,000</b>
<p>This action provides funding to rehabilitate three tertiary filters that are used in the normal course of wastewater treatment and for recycled water production. Filtration is provided by 16 Dual Media filters that remove suspended solids from the secondary process effluent. Rehabilitation is needed for three filters to ensure secondary effluent properly flows through the filter before it is disposed into the Bay or reused through the recycled water system. (Ongoing costs: \$0)</p>		
<b>3. Water Pollution Control Plant Capital Improvement Program Staffing</b>	<b>4.00</b>	<b>287,183</b>
<p>This action adds 1.0 Wastewater Operations Superintendent, 1.0 Principal Engineer, 1.0 Associate Engineering Technician, and 1.0 Geographic Systems Specialist II positions at the Water Pollution Control Plant (Plant) for various capital improvement projects. The City Council-approved Plant Master Plan identifies nearly \$1.0 billion in Plant capital improvements over the next 10-15 years. The Wastewater Operations Superintendent will provide operational expertise to Capital Improvement Program (CIP) staff during project planning and construction. The Principal Engineer will serve as a key member of the CIP project delivery team and will be responsible for managing engineering support services for various capital projects. The Associate Engineering Technician will assist with plan and submittal reviews, bidding, preparation of contract documents, and other miscellaneous duties related to project management support. The Geographic Systems Specialist II will identify and locate buried underground utilities and provide support to reduce the backlog of projects related to interior and underground infrastructure. (Ongoing costs: \$338,284)</p>		

# San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

## Budget Proposals (cont'd)

Proposed Program Changes	Positions	Treatment Plant Appropriations
<b>4. Water Pollution Control Plant Safety Support</b>		<b>375,000</b>
<p>This action provides funding for industrial health sampling services used to assess health hazards associated with industrial operations, asbestos sampling and monitoring services, confined space rescue team services that are required by OSHA, and safety consultant services to provide additional safety resources. (Ongoing costs: \$375,000)</p>		
<b>5. Water Pollution Control Plant Wastewater Attendant Staffing</b>	<b>6.00</b>	<b>299,610</b>
<p>This action adds 9.0 Wastewater Attendant positions and eliminates 2.0 vacant Assistant Heavy Equipment Operators and 1.0 Maintenance Worker I to help address chronic vacancies for Water Pollution Control Plant (Plant) Mechanic positions by: 1) creating additional points of entry into careers at the Plant, and 2) help obtain a qualified candidate pool for existing Wastewater Operator Trainee, Apprentice Wastewater Mechanic, Industrial Electrician, and Instrument Control Technician positions. The Wastewater Attendants will perform lower level tasks and will learn various job functions at the Plant. (Ongoing costs: \$361,238)</p>		
<b>6. Water Pollution Control Plant Process Control Upgrades</b>		<b>250,000</b>
<p>This action provides funding for Water Pollution Control Plant (Plant) Process Control Room system upgrades. The control room requires an update due to the changing monitoring systems installed throughout the Plant that comply with the Plant's operating permit. The new monitoring system control stations include tilting large flat panel displays, computers, power-adjustable tables, ergonomic chairs, and control panels. The control room is occupied 24 hours a day, 365 days a year and staff monitor and direct the operation of the Plant from the control room using the renovated distributed control system. (Ongoing costs: \$0)</p>		
<b>7. Water Pollution Control Plant Power and Air System Support</b>		<b>150,000</b>
<p>This action provides funding to repair and operate blowers that provide air throughout the Water Pollution Control Plant (Plant), control tools, and treatment plant processes. Additionally, funding will be provided to repair critical gas compressors used to compress digester gas that fuel engines and generate electrical power for the Plant. (Ongoing costs: \$150,000)</p>		

# San José/Santa Clara Water Pollution Control Plant

Environmental Services Department

## Budget Proposals (cont'd)

Proposed Program Changes	Positions	Treatment Plant Appropriations
<b>8. Water Pollution Control Plant Capital Improvement Program Outreach and Support</b>	<b>0.50</b>	<b>60,199</b>
<p>This action adds 0.5 Marketing &amp; Public Outreach Representative II for a three-year period (limit-dated to June 30, 2017) to the Communications Division to support critical outreach projects in the Water Pollution Control Plant (Plant) CIP. Outreach efforts will include the dissemination of capital project information at the Plant. This outreach will be extremely important as the City will be implementing Plant capital improvements of nearly \$1.0 billion over the next 10-15 years. (Ongoing costs: \$64,243)</p>		
<b>9. Nine Par Landfill Groundwater Contamination Clean-Up</b>		<b>96,000</b>
<p>This action provides funding for an extraction well and holding tanks at the former Nine Par landfill site to remove a concentrated area of the solvent trichloroethylene (TCE). The former landfill is located directly across Los Esteros Road (Plant buffer lands), and a clean-up plan for this chemical concentration is required by the Regional Water Quality Control Board. (Ongoing costs: \$0)</p>		
<b>10. Water Pollution Control Plant Fiscal Staffing</b>	<b>1.00</b>	<b>85,282</b>
<p>This action adds 1.0 Accountant II position in the Administrative Services Division effective January 1, 2015, to support the Water Pollution Control Plant (Plant) Fiscal Unit. This position will perform accounting functions and develop internal controls that will be necessary to support the large Plant CIP in the next 10-15 years. This position will provide additional budgetary support for an expanded Plant capital program, including managing and tracking the external financing for the Plant capital projects. (Ongoing costs: \$139,471)</p>		
<b>11. Electrical Vehicle Lease Renewal</b>		<b>6,000</b>
<p>This action provides funding for two years to extend the lease on two Mitsubishi iMiev electric plug-in vehicles. The current lease expires June 30, 2014, and renewing these vehicles will allow the City's fleet program to continue to provide a low-cost, environmentally friendly transportation solution for local City business activity such as offsite meetings, inspections, and local travel needs. (Ongoing costs: \$6,000)</p>		

# San José/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

## Budget Proposals (cont'd)

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Proposed Program Changes	Positions	Treatment Plant Appropriations
<b>12. Environmental Services Department Administrative Services Support and Watershed Protection Division Staffing</b>	<b>(0.66)</b>	<b>(39,419)</b>

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This action eliminates 0.66 vacant Office Specialist II position in the Administrative Services Division. The duties of the Office Specialist II position have been redistributed among other clerical and administrative staff within the division. (Ongoing savings: \$39,968)

<b>13. Sewer Service Conservation Program Elimination</b>		<b>(147,725)</b>
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This action eliminates funding for wastewater flow reduction efforts in the Tributary service areas that are no longer necessary as a result of significantly reduced water flows to the bay. This includes a cost sharing agreement with the Santa Clara Valley Water District that reduces indoor water conservation, water efficient technology program used to incentivize businesses to replace water-using equipment with technologies or equipment that discharge less water to the sanitary sewer, outreach efforts in the Tributary service area to reduce wastewater flows to the bay, and a reduction in programs for schools/educators to educate youth about water conservation. (Ongoing savings: \$147,725)

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<b>2014-2015 Total Department Proposals</b>	<b>10.84</b>	<b>2,447,130</b>
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**San José/Santa Clara Water Pollution Control Plant**  
*Environmental Services Department*

**PROGRAM:**

WASTEWATER MANAGEMENT

**RESPONSIBLE MANAGER:**

JOANNA DE SA

**PROGRAM PURPOSE AND DESCRIPTION**

Wastewater Management provides for the constant operations and maintenance of the San José/Santa Clara Water Pollution Control Plant. The program is staffed with personnel from operations, maintenance, and engineering disciplines to assure 100% availability of critical equipment and to provide process adjustments on a continuing basis for maximum process efficiency and reliability.

<b>PERSONNEL SUMMARY</b>				
<b>Full Time Positions</b>	<b>2012-13</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2014-2015</b>
	<b>Actual</b>	<b>Adopted</b>	<b>Base</b>	<b>Proposed</b>
Air Conditioning Mech	3.00	3.00	3.00	3.00
Analyst II C	1.00	1.00	1.00	1.00
Assist Hvy Dsl Eq Op Mech	3.00	3.00	3.00	1.00
Assoc Engineer		1.00	1.00	1.00
Assoc Engineering Tech	2.00	2.00	2.90	2.90
Deputy Dir U	1.00	1.00	1.00	1.00
Division Manager	3.00	3.00	3.00	3.00
Electrician	8.00	0.90		
Electrician Supervisor	1.00	1.00		
Engineerg Technician II	2.85	2.85	1.85	1.85
Geographic Systms Spec II	1.00	1.00	1.00	2.00
Groundswoker	0.50	0.95	0.95	0.95
Heavy Diesel Equip Op/Mec	13.00	13.00		
Heavy Diesel Equip Supvr	1.00	1.00		
Heavy Equip Oper	5.00	5.00	5.00	5.00
Industrial Electrician		6.30	7.20	7.20
Industrial Electrician Supervisor			1.00	1.00
Info Systs Analyst	1.00			
Instrument Control Supvr	1.00	0.90	0.90	0.90
Instrument Control Technician	8.00	7.50	7.50	7.50
Maintenance Assistant	1.00	1.00	1.00	1.00
Maintenance Superintend	2.00	2.85	0.95	0.95
Maintenance Supervisor	1.00	1.00	1.00	1.00
Maintenance Worker I	3.00	2.00	2.00	1.00
Network Engineer		1.00	1.00	1.00
Office Specialist II	1.00	2.00	2.00	2.00
Painter Supvr WPCP	1.00	1.00	1.00	1.00
Painter WPCP	6.00	6.00	6.00	6.00
Plant Asst Gen Ops Supvr	1.00			
Plant Ast Operations Manager I		4.00		
Plant Attendant	2.00	9.00		

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

PERSONNEL SUMMARY (continued)				
Full Time Positions	2012-13	2013-2014	2014-2015	2014-2015
	Actual	Adopted	Base	Proposed
Plant Mechanic	25.10	17.75		
Plant Mechanical Supvr	1.85	5.00		
Plant Operator I		3.00		
Plant Operator II		15.00		
Plant Operator III		14.00		
Plant Operator	38.00			
Plant Shift Supervisor I		1.00		
Plant Shift Supervisor II	6.00	6.00		
PlantAst Operations Manager II		2.00		
Prin Office Specialist	1.00	1.00	1.00	1.00
Process & Systems Spec II	1.00	1.00	1.00	1.00
Secretary	1.00	1.00	1.00	1.00
Senior Industrial Electrician		0.90		
Senr Air Cond Mechanic	1.00	1.00	1.00	1.00
Senr Analyst	2.00	3.00	2.00	2.00
Senr Custodian	1.00			
Senr Electrician	2.00	0.90		
Senr Engineer	2.00	2.00	2.00	2.00
Senr Engineering Tech	2.00	3.00	3.00	3.00
Senr Geographic Syst Spec	1.00	1.00	1.00	1.00
Senr Hvy Dsl Eq Oper Mech	3.00	3.00		
Senr Hvy Equipment Oper	2.00	2.00	2.00	2.00
Senior Industrial Electrician			1.80	1.80
Senr Instrument Control Tech	2.00	1.80	1.80	1.80
Senr Maintenance Worker	0.95	0.95	0.95	0.95
Senr Painter	1.00	1.00	1.00	1.00
Senr Plant Mechanic	5.80	8.00		
Senr Plant Operator I		2.00		
Senr Plant Operator II	13.00	11.00		
Senr Process & Syst Spec	2.00	2.00	2.00	2.00
Supervg Applicat Analyst		1.00	1.00	1.00
Supply Clerk	1.00	1.00	1.00	1.00
Systems Control Supv	1.00			
Warehouse Supervisor	0.88	0.88	0.88	0.88
Warehouse Worker I	1.76	1.76	1.76	1.76
Warehouse Worker II	1.76	1.76	1.76	1.76
Wastewater Attendant			9.00	18.00
Wastewater Maintenance Supt			1.90	1.90
Wastewater Mechanic I			6.85	6.85
Wastewater Mechanic II			23.90	23.90
Wastewater Mechanical Supvr I			1.00	1.00
Wastewater Mechanical Supvr II			5.00	5.00
Wastewater Operations Supt I			1.00	1.00
Wastewater Operations Supt II			5.00	6.00
Wastewater Operator I			4.00	4.00
Wastewater Operator II			12.00	12.00
Wastewater Operator III			16.00	16.00
Wastewater Ops Foreperson I			13.00	13.00
Wastewater Ops Foreperson II			7.00	7.00
Wastewater Senior Mechanic I			1.00	1.00
Wastewater Senior Mechanic II			10.00	10.00
<b>Total Full-Time Positions</b>	<b>194.45</b>	<b>200.95</b>	<b>199.85</b>	<b>207.85</b>

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

DETAILED PROGRAM BUDGET				
Detail/Category	2012-13	2013-2014	2014-2015	2014-2015
	Actual	Adopted	Base	Proposed
Salaries-Reg-Full Time	11,817,550	14,444,671	15,535,353	15,891,435
Salaries-Reg-Part Time	310,365			
Salaries - Overtime	1,892,495	599,573	599,573	599,573
Other Personnel				
Benefits: Retirement Contrib	6,446,252	7,011,943	8,610,355	8,658,468
Other Fringe Benefits	2,199,837	2,895,917	2,854,506	2,941,038
<b>Sub Total</b>	<b>22,666,500</b>	<b>\$ 24,952,104</b>	<b>\$ 27,599,787</b>	<b>\$ 28,090,514</b>
Utilities: Gas	1,880,834	2,000,000	2,300,000	2,300,000
Utilities: Electricity	3,521,085	2,800,000	3,730,000	3,730,000
Supplies and Materials	4,130,896	3,928,827	3,845,950	3,922,450
Stores Fund - Stores	7,071			
Comm Expnse: Telephone-Telegrh	79,149	43,805	43,805	43,805
Comm Expnse: Postage	2,925	6,000	6,000	6,000
Print/Adv-Outside Vendors	2,047	5,750	5,750	5,750
Duplicating-Stores Fund				
Utilities: Other	185,169	139,000	139,000	139,000
Chemicals	1,648,430	2,655,000	2,655,000	2,655,000
Rent: Equipment & Vehicles	412,401	331,424	329,395	335,395
Trans/Travel: In County	802	14,144	14,144	14,144
Trans/Travel: Out of County	7,628	28,395	28,395	28,395
Trans/Travel: Out of State	7,134	51,069	51,069	51,069
Training	188,247	310,882	108,960	110,460
Mileage Reimbursement	6,019	150	150	150
Vehicle Operating Costs	531,503	647,948	588,948	588,948
Dues & Subscriptions	1,067,450	1,013,300	1,013,300	1,013,300
Computer Data Processing	452,473	354,000	354,000	606,000
Prof & Consultant Svcs	6,070,616	6,644,397	7,456,397	8,381,397
Books				
Insurance	143,540	564,592	564,592	564,592
Taxes	50,898			
Judgement and Claims	3,000			
Capital Outlay				
Machnry/Equipmt: Machinery	469,378	750,000	750,000	1,300,000
<b>Sub Total</b>	<b>\$ 20,868,697</b>	<b>\$ 22,288,683</b>	<b>\$ 23,984,855</b>	<b>\$ 25,795,855</b>
<b>Combined Totals</b>	<b>\$ 43,535,198</b>	<b>\$ 47,240,787</b>	<b>\$ 51,584,642</b>	<b>\$ 53,886,369</b>

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

**PROGRAM:**

WATERSHED PROTECTION

**RESPONSIBLE MANAGER:**

NAPP FUKUDA

**PROGRAM PURPOSE AND DESCRIPTION**

Provides environmental enforcement and technical support functions to support Department programs, enforce Federal, State, and local regulations pertaining to industrial and commercial waste discharges to the sanitary system. The Source Control/Pretreatment Program provides engineering evaluation, permitting, inspection, and monitoring of industrial waste dischargers, maintains a source reduction program, and ensures that industrial discharges to the San José/Santa Clara Water Pollution Control Plant are in compliance with all applicable industrial waste ordinances within San José and the tributary agencies. The Watershed Enforcement Program provides inspection and investigation of food service establishments to ensure proper management of Fats, Oils, and Grease at their facility to reduce discharges to the sanitary system. Lastly, the Laboratory Services Program provides analytical support to monitor wastewater treatment processes and NPDES compliance and support related special projects.

<b>PERSONNEL SUMMARY</b>				
<b>Full Time Positions</b>	<b>2012-13</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2014-2015</b>
	<b>Actual</b>	<b>Adopted</b>	<b>Base</b>	<b>Proposed</b>
Analyst II C	0.75	0.75	0.75	0.75
Aquatic Toxicologist	1.00	1.00	1.00	1.00
Assoc Engineer	1.00	1.00	1.00	1.00
Assoc Environ Serv Spec				
Biologist	1.00	1.00	1.00	1.00
Chemist	8.00	8.00	8.00	8.00
Deputy Dir U	0.75	0.75	0.75	0.75
Environment Insp, Assistant	3.60	3.60	3.00	3.00
Environment Inspector I	0.60			
Environment Inspector II	17.80	17.40	19.00	19.00
Environment Inspector, Sr	2.00	2.00	2.00	2.00
Environment Serv Prog Mgr	2.80	1.30	1.50	1.50
Environment Serv Spec	2.00	2.00	2.00	2.00
Environmental Laboratory Mgr	1.00	1.00	1.00	1.00
Environmental Laboratory Supvr	2.00	2.00	2.00	2.00
Laboratory Tech I				
Laboratory Tech II	13.00	13.00	13.00	13.00
Microbiologist	2.00	2.00	2.00	2.00
Office Specialist II	2.28	2.28	2.28	2.28
Prin Office Specialist	0.85	0.85	0.85	0.85
Sanitary Engineer	3.00	3.00	3.00	3.00
Senr Engineer				
Senr Office Specialist	1.52	1.52	1.52	1.52
Staff Specialist	0.76	0.76	0.76	0.76
Supervg Environ Serv Spec	1.00	1.00	1.00	1.00
<b>Total Full-Time Positions</b>	<b>68.71</b>	<b>66.21</b>	<b>67.41</b>	<b>67.41</b>

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

<b>DETAILED PROGRAM BUDGET</b>				
<b>Detail/Category</b>	<b>2012-13 Actual</b>	<b>2013-2014 Adopted</b>	<b>2014-2015 Base</b>	<b>2014-2015 Proposed</b>
Salaries-Reg-Full Time	4,143,249	4,729,124	4,969,069	4,969,069
Salaries-Reg-Part Time	27,392			
Salaries - Overtime	11,779	27,733	27,733	27,733
Other Personnel	-			
Benefits: Retirement Contrib	2,276,123	2,513,205	2,786,762	2,786,762
Other Fringe Benefits	703,002	850,805	809,602	809,602
<b>Sub Total</b>	<b>7,161,546</b>	<b>\$ 8,120,867</b>	<b>\$ 8,593,166</b>	<b>\$ 8,593,166</b>
<b>Supplies and Materials</b>				
Supplies and Materials	452,652	492,198	567,075	567,075
Comm Expnse: Telephne-Telegrph	18,983	34,550	34,550	34,550
Comm Expnse: Postage	3,653	11,500	11,500	11,500
Print/Adv-Outside Vendors	6,015	33,250	31,490	31,490
Rent: Land & Buildings	1,375	1,250	1,250	1,250
Rent: Equipment & Vehicles	27,024	25,000	37,029	37,029
Trans/Travel: In County	229	12,575	12,575	12,575
Trans/Travel: Out of County	2,435	29,234	29,234	29,234
Trans/Travel: Out of State	1,910	35,200	33,200	33,200
Training	10,101	43,680	45,602	45,602
Mileage Reimbursement	2,003	5,200	5,200	5,200
Vehicle Operating Costs	20,025	25,052	25,052	25,052
Dues & Subscriptions	7,723	21,537	23,297	23,297
Computer Data Processing	37,904	66,250	66,250	66,250
Prof & Consultant Svcs	493,816	589,181	529,181	529,181
Machnry/Equint: Machinery	-	150,000	150,000	150,000
<b>Sub Total</b>	<b>\$ 1,085,847</b>	<b>\$ 1,575,657</b>	<b>\$ 1,602,485</b>	<b>\$ 1,602,485</b>

# San José/Santa Clara Water Pollution Control Plant

*Environmental Services Department*

**PROGRAM:**

SOUTH BAY WATER RECYCLING

**RESPONSIBLE MANAGER:**

JOANNA DE SA

**PROGRAM PURPOSE AND DESCRIPTION**

This program is responsible for coordinating the operations, maintenance and capital improvement of the water recycling system in the three cities it serves; coordinating with the Santa Clara Valley Water District to facilitate regional recycled water Master Planning and the inclusion of purified water into the recycled water distribution system; providing customer support and training in conjunction with local water retailers; planning and implementing SBWR system improvements; facilitating compliance with local and state regulations; and implementing practices which result in increased water reuse and wastewater diversion.

<b>PERSONNEL SUMMARY</b>				
<b>Full Time Positions</b>	<b>2012-13</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2014-2015</b>
	<b>Actual</b>	<b>Adopted</b>	<b>Base</b>	<b>Proposed</b>
Analyst II C	0.30	0.30	0.30	0.30
Assoc Construction Insp	0.70	0.70	0.70	0.70
Assoc Engineer	2.40	2.15	2.15	2.15
Assoc Engineering Tech	1.20	1.00	1.10	1.10
Cross Connection Spec	0.30	0.30	0.30	0.30
Division Manager	0.20	0.20	0.20	0.20
Electrician	0.05	0.15		
Engineer II	0.45	0.20	0.20	0.20
Engineerg Technician II	0.40	0.40	0.40	0.40
Environment Serv Prog Mgr		1.00	1.00	1.00
Environment Serv Spec	2.75	2.75	1.00	1.00
Environmental Laboratory Mgr	1.00			
Groundswoker	0.50	0.05	0.05	0.05
Industrial Electrician		0.70	0.80	0.80
Instrument Control Supvr		0.10	0.10	0.10
Instrument Control Technician		0.50	0.50	0.50
Maintenance Superintendent	0.30	0.25	0.15	0.15
Maintenance Supervisor	0.20	0.20	0.20	0.20
Plant Mechanic	0.90	0.25		
Plant Mechanical Supvr	0.15			
Prin Construction Inspect	0.30	0.30	0.30	0.30
Senior Industrial Electrician		0.10	0.20	0.20
Senr Construction Insp	0.30	0.30	0.30	0.30
Senr Electrician		0.10		
Senr Engineer	0.40	0.40	0.40	0.40
Senr Engineering Tech	1.20	1.00	1.00	1.00
Senr Instrument Control Tech		0.20	0.20	0.20
Senr Maintenance Worker	0.05	0.05	0.05	0.05
Senr Plant Mechanic	0.20			
Senr Water Systems Tech	0.30	0.15	0.15	0.15
Supervg Environ Serv Spec	1.00	1.00	1.00	1.00
Wastewater Maintenance Supt			0.10	0.10
Wastewater Mechanic I			0.15	0.15
Wastewater Mechanic II			0.10	0.10
Water Meter Reader	0.15	0.15	0.15	0.15
Water Systems Technician	0.90	0.45	0.50	0.50
<b>Total Full-Time Positions</b>	<b>16.60</b>	<b>15.40</b>	<b>13.75</b>	<b>13.75</b>

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

<b>DETAILED PROGRAM BUDGET</b>				
Detail/Category	2012-13	2013-2014	2014-2015	2014-2015
	Actual	Adopted	Base	Proposed
Salaries-Reg-Full Time	835,247	1,225,628	1,142,363	1,142,363
Compensated Absence	4,009			
Salaries-Reg-Part Time	40,918			
Salaries - Overtime	21,383	12,217	12,217	12,217
Benefits: Retirement Contrib	464,042	633,762	730,310	730,310
Other Fringe Benefits	140,213	231,066	222,827	222,827
<b>Sub Total</b>	<b>1,505,812</b>	<b>\$ 2,102,673</b>	<b>\$ 2,107,717</b>	<b>\$ 2,107,717</b>
Utilities: Electricity	641,542	\$ 700,000	\$ 700,000	\$ 700,000
Supplies and Materials	35,976	82,375	82,375	80,575
Stores Fund - Stores				
Comm Expnse: Telephne-Telegrph	4,718	12,500	12,500	10,700
Comm Expnse: Postage	26	3,350	3,350	2,000
Print/Adv-Outside Vendors	5,053	13,844	13,844	11,720
Utilities: Other	189	500	500	500
Rent: Equipment & Vehicles	1,143	3,000	3,000	3,000
Trans/Travel: In County	56	3,950	3,950	3,500
Trans/Travel: Out of County	1,240	7,900	7,900	5,200
Trans/Travel: Out of State	2,489	7,900	7,900	7,000
Training	6,354	10,800	10,800	9,000
Mileage Reimbursement	2,556	3,750	3,750	2,400
Vehicle Operating Costs	13,928	38,000	38,000	38,000
Dues & Subscriptions	54,374	42,278	42,278	41,000
Computer Data Processing	8,537	17,100	17,100	16,200
Prof & Consultant Svcs	708,178	1,410,041	1,410,041	1,278,768
PW Capital Support Charge	1,244			
Capital Outlay	30,916			
Machnry/Equimt: Machinery	24,774			
<b>Sub Total</b>	<b>\$ 1,543,292</b>	<b>\$ 2,357,288</b>	<b>\$ 2,357,288</b>	<b>\$ 2,209,563</b>
<b>Combined Totals</b>	<b>\$ 3,049,104</b>	<b>\$ 4,459,961</b>	<b>\$ 4,465,005</b>	<b>\$ 4,317,280</b>

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

**PROGRAM:** MGMT & ADMINISTRATIVE SERVICES  
**RESPONSIBLE MANAGER:** LINDA CHARFAUROS

PROGRAM PURPOSE AND DESCRIPTION

Provides support services including: financial and accounting services, human resources, workforce development, information technology services, contract administration, grant administration, capital improvement and operating budget management, and tributary agency relations.

Management Information Services Combined with Management and Administrative Services in FY 2012-2013

<b>PERSONNEL SUMMARY</b>				
<b>Full Time Positions</b>	<b>2012-13</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2014-2015</b>
	<b>Actual</b>	<b>Adopted</b>	<b>Base</b>	<b>Proposed</b>
Account Clerk II	0.65	0.66	0.66	0.66
Accountant II	0.65	0.66	0.66	1.66
Accounting Tech	1.30	1.32	1.32	1.32
Administrative Assist C	0.65	0.66	0.66	0.66
Administrative Officer	0.65	0.66	0.66	0.66
Analyst II C	2.60	2.64	2.64	2.64
Assist DirU	0.65	0.66	0.66	0.66
Dir Environmental Serv U	0.65	0.66	0.66	0.66
Division Manger		0.83	0.83	0.83
Information Sys Analyst	0.50	1.24	1.28	1.28
Network Engineer	0.69			
Network Technician II	1.38	1.36	1.34	1.34
Office Specialist II	1.95	1.98	1.98	1.32
Prin Accountant	0.65	0.66	0.66	0.66
Prin Office Specialist	1.30	1.32	1.32	1.32
Senr Account Clerk	2.62	2.64	2.64	2.64
Senr Accountant	2.60	2.64	2.64	2.64
Senr Analyst	1.95	1.98	1.98	1.98
Senior Process & Syst Specilaist	0.69	0.68	0.67	0.67
Staff Specialist	0.65	0.66	0.66	0.66
Staff Technician	1.30	1.32	1.32	1.32
Supervg Applicat Analyst	0.66	0.66	0.52	0.52
Systems Apps Prognr II	1.85	1.37	1.40	1.40
<b>Total Full-Time Positions</b>	<b>26.59</b>	<b>27.26</b>	<b>27.16</b>	<b>27.50</b>

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

<b>DETAILED PROGRAM BUDGET</b>				
<b>Detail/Category</b>	<b>2012-13 Actual</b>	<b>2013-2014 Adopted</b>	<b>2014-2015 Base</b>	<b>2014-2015 Proposed</b>
Salaries-Reg-Full Time	2,003,731	2,063,124	2,158,718	2,203,028
Salaries-Reg-Part Time	14,001			
Salaries - Overtime	21,296	12,143	12,143	12,143
Other Personnel	9,306			
Benefits: Retirement Contrib	983,230	1,124,758	1,438,481	1,439,672
Other Fringe Benefits	266,372	336,537	331,443	329,305
<b>Sub Total</b>	<b>\$ 3,297,938</b>	<b>\$ 3,536,562</b>	<b>\$ 3,940,785</b>	<b>\$ 3,984,148</b>
Supplies and Materials	20,517	33,060	33,030	33,780
Comm Expnse: Telephone-Telegrph	26,808	30,722	30,716	30,716
Comm Expnse: Postage	9,785	15,180	15,180	15,180
Print/Adv-Outside Vendors	19	4,471	4,463	4,463
Rent: Equipment & Vehicles	7,551	20,548	20,537	20,537
Trans/Travel: In County	680	1,320	1,320	1,320
Trans/Travel: Out of County	379	2,640	2,640	2,640
Trans/Travel: Out of State	1,823	1,980	1,980	1,980
Training	14,933	26,991	26,861	27,611
Mileage Reimbursement	1,041	1,763	1,757	1,757
Vehicle Operating Costs	21,752			
Dues & Subscriptions	30,709	8,091	8,089	8,089
Computer Data Processing	50,088	78,940	77,856	78,856
Prof & Consultant Svcs	58,268	90,238	90,238	90,238
<b>Sub Total</b>	<b>\$ 244,352</b>	<b>\$ 315,944</b>	<b>\$ 314,667</b>	<b>\$ 317,167</b>
<b>Combined Totals</b>	<b>\$ 3,542,290</b>	<b>\$ 3,852,506</b>	<b>\$ 4,255,452</b>	<b>\$ 4,301,315</b>

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

**PROGRAM:**

PLANT CIP

**RESPONSIBLE MANAGER:**

JULIA NGUYEN

**PROGRAM PURPOSE AND DESCRIPTION**

This program provides for capital project planning and implementation at the Water Pollution Control Plant. Significant capital investments are planned for every process area of the Plant to address critical aging infrastructure, future regulatory requirements, and improved performance needs.

<b>PERSONNEL SUMMARY</b>				
<b>Full Time Positions</b>	<b>2012-13</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2014-2015</b>
	<b>Actual</b>	<b>Adopted</b>	<b>Base</b>	<b>Proposed</b>
Analyst II C	1.00	1.00	1.00	1.00
Assoc Engineer	6.30	6.30	4.80	4.80
Assoc Engineering Tech	0.30	0.30	0.30	0.60
Deputy DirU	1.00	1.00	1.00	1.00
Division Manager	1.00	1.00	1.00	1.00
Office Specialist II	2.00	1.00	1.00	1.00
Principal Engineer	1.00	1.00	1.00	1.50
Sanitary Engineer	3.90	3.60	3.00	3.00
Senr Construction Insp	0.40	0.40	0.40	0.40
Senr Engineer	2.90	2.50	2.00	2.00
Senr Engineering Tech	1.50	0.40	0.30	0.30
Staff Specialist	1.00	1.00	1.00	1.00
<b>Total Full-Time Positions</b>	<b>22.30</b>	<b>19.50</b>	<b>16.80</b>	<b>17.60</b>

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

<b>DETAILED PROGRAM BUDGET</b>				
<b>Detail/Category</b>	<b>2012-13</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2014-2015</b>
	<b>Actual</b>	<b>Adopted</b>	<b>Base</b>	<b>Proposed</b>
Salaries-Reg-Full Time	1,087,102	1,615,708	1,473,109	1,537,416
Compensated Absence	39,209			
Salaries-Reg-Part Time	35,903			
Salaries - Overtime	(73)			
Benefits: Retirement Contrib	564,319	701,075	717,842	731,520
Other Fringe Benefits	159,099	278,501	224,881	235,462
<b>Sub Total</b>	<b>\$ 1,885,558</b>	<b>\$ 2,595,284</b>	<b>\$ 2,415,832</b>	<b>\$ 2,504,398</b>
Supplies and Materials	14,007	24,890	29,131	29,881
Stores Fund - Stores				
Comm Expnse: Telephone	19,337	3,891	3,500	3,500
Comm Expnse: Postage	201	1,650	1,000	1,000
Print/Adv-Outside Vendors	1,655	38,250	12,000	12,000
Rent: Land & Buildings				
Rent: Equipment & Vehicles	9,883		23,000	23,000
Trans/Travel: In County	12	4,500	1,500	1,500
Trans/Travel: Out of County	34	9,000	3,000	3,000
Trans/Travel: Out of State	7,245	19,000	8,500	8,500
Training	8,252	10,900	17,000	17,750
Mileage Reimbursement	719	2,500	1,500	1,500
Vehicle Operating Costs	2,008		5,000	5,000
Dues & Subscriptions	2,017	36,550	5,000	5,000
Computer Data Processing	14,276	21,000	17,000	18,000
Prof & Consultant Svcs	104,122	1,300,000	850,000	850,000
PW CAP Support Charge	12,164			
<b>Sub Total</b>	<b>\$ 195,933</b>	<b>\$ 1,472,131</b>	<b>\$ 977,131</b>	<b>\$ 979,631</b>
<b>Combined Totals</b>	<b>\$ 2,081,492</b>	<b>\$ 4,067,415</b>	<b>\$ 3,392,963</b>	<b>\$ 3,484,029</b>

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

**PROGRAM:** REGULATORY COMPLIANCE & SAFETY  
**RESPONSIBLE MANAGER:** RENE EYERLY

PROGRAM PURPOSE AND DESCRIPTION

Provides general regulatory compliance for wastewater discharge and air emissions for the San José/Santa Clara Water Pollution Control Plant; closed landfill compliance; and environmental health and safety (OSHA) to the wastewater program, through a variety of programs as required by local, state and federal regulations. The desired outcome is to protect environmental and public health, create a safe working environment for employees, and maintain compliance with all local, state and federal regulations pertaining to environmental compliance and occupational safety.

<b>PERSONNEL SUMMARY</b>				
<b>Full Time Positions</b>	<b>2012-13</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2014-2015</b>
	<b>Actual</b>	<b>Adopted</b>	<b>Base</b>	<b>Proposed</b>
Assoc Engineer	1.00	0.30	0.30	0.30
Assoc Environ Serv Spec	0.96	0.96	1.00	1.00
Biologist	2.70	2.70	2.73	2.73
Environment Compl Officer	0.40	0.40	0.63	0.63
Environment Serv Prog Mgr		0.90	0.91	0.91
Environment Serv Spec	2.60	2.25	3.26	3.26
Senr Analyst	0.60	0.60	1.00	1.00
Senr Engineer	1.00	1.00	1.00	1.00
Supervg Environ Serv Spec	1.90	0.90	0.91	0.91
<b>Total Full-Time Positions</b>	<b>11.16</b>	<b>10.01</b>	<b>11.74</b>	<b>11.74</b>

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

<b>DETAILED PROGRAM BUDGET</b>				
Detail/Category	2012-13	2013-2014	2014-2015	2014-2015
	Actual	Adopted	Base	Proposed
Salaries-Reg-Full Time	517,057	813,527	996,703	996,703
Salaries-Reg-Part Time	11,378			
Salaries - Overtime	225			
Benefits: Retirement Contrib	290,086	386,541	538,488	538,488
Other Fringe Benefits	85,395	153,514	176,157	176,157
<b>Sub Total</b>	<b>\$ 904,141</b>	<b>\$ 1,353,582</b>	<b>\$ 1,711,348</b>	<b>\$ 1,711,348</b>
Supplies and Materials	14,375	30,431	25,575	25,575
Stores Fund - Stores				
Comm Expnse: Telephne-Telegrph	5,712	251	231	231
Comm Expnse: Postage	396	288	268	268
Print/Adv-Outside Vendors	1,051	245	225	225
Duplicating-Stores Fund				
Rent: Land & Buildings		210	210	210
Rent: Equipment & Vehicles		65	65	65
Trans/Travel: In County	134	567	518	518
Trans/Travel: Out of County	1,081	1,927	1,765	1,765
Trans/Travel: Out of State		4,050	3,685	3,685
Training	1,184	6,500	4,664	4,664
Mileage Reimbursement	2,292	1,020	939	939
Vehicle Operating Costs	267			
Dues & Subscriptions	665	57,258	51,318	51,318
Computer Data Processing	14,029	1,800	1,638	1,638
Prof & Consultant Svcs	149,690	289,600	219,836	315,836
Taxes	1,455			
<b>Sub Total</b>	<b>\$ 192,331</b>	<b>\$ 394,212</b>	<b>\$ 310,937</b>	<b>\$ 406,937</b>
<b>Combined Totals</b>	<b>\$ 1,096,472</b>	<b>\$ 1,747,794</b>	<b>\$ 2,022,285</b>	<b>\$ 2,118,285</b>

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

**PROGRAM:**

**OFFICE OF SUSTAINABILITY**

**RESPONSIBLE MANAGER:**

**RENE EYERLY**

**PROGRAM PURPOSE AND DESCRIPTION**

Provides facilitation and technical expertise to City departments and the community for implementation of Green Vision goals. Staff leads programs on energy and water efficiency, renewable energy technologies, and wastewater beneficial use, and supports programs on zero waste, transportation and fuel alternatives, green jobs, and ultimately, greenhouse gas emissions.

<b>PERSONNEL SUMMARY</b>				
<b>Full Time Positions</b>	<b>2012-13</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2014-2015</b>
	<b>Actual</b>	<b>Adopted</b>	<b>Base</b>	<b>Proposed</b>
Environment Serv Prog Mgr	0.41		0.42	0.42
Environment Serv Spec	0.82	1.74	2.12	2.12
Environment Sustainability Mgr	0.46	0.37	0.42	0.42
Supervg Environ Serv Spec	1.82	2.24	1.69	1.69
<b>Total Full-Time Positions</b>	<b>3.51</b>	<b>4.35</b>	<b>4.65</b>	<b>4.65</b>

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

<b>DETAILED PROGRAM BUDGET</b>				
Detail/Category	2012-13	2013-2014	2014-2015	2014-2015
	Actual	Adopted	Base	Proposed
Salaries-Reg-Full Time	302,467	390,091	428,399	428,399
Salaries-Reg-Part Time	4,343			
Salaries - Overtime	75			
Benefits: Retirement Contrib	169,818	179,651	274,823	274,823
Other Fringe Benefits	39,152	58,995	51,382	51,382
<b>Sub Total</b>	<b>\$ 515,856</b>	<b>\$ 628,737</b>	<b>\$ 754,604</b>	<b>\$ 754,604</b>
Supplies and Materials	900	3,617	4,105	4,105
Stores Fund - Stores				
Comm Expnse: Telephne-Telegrph	60	284	323	323
Comm Expnse: Postage	5	309	350	350
Print/Adv-Outside Vendors	458	625	710	710
Duplicating-Stores Fund				
Trans/Travel: In County	283	592	672	672
Trans/Travel: Out of County	53	1,004	1,139	1,139
Trans/Travel: Out of State				
Training	(128)	3,651	4,145	4,145
Mileafge Reimbursement	447	654	742	742
Vehicle Operating Costs		2,000	2,000	2,000
Dues & Subscriptions	11,380	11,100	12,600	12,600
Computer Data Processing	632	21,425	24,320	24,320
Prof & Consultant Svcs	35,659	220,853	72,320	72,320
<b>Sub Total</b>	<b>\$ 49,748</b>	<b>\$ 266,114</b>	<b>\$ 123,426</b>	<b>\$ 123,426</b>
<b>Combined Totals</b>	<b>\$ 565,605</b>	<b>\$ 894,851</b>	<b>\$ 878,030</b>	<b>\$ 878,030</b>

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

**PROGRAM:** COMMUNICATIONS  
**RESPONSIBLE MANAGER:** JENNIE LOFT

PROGRAM PURPOSE AND DESCRIPTION

This program manages the media relations and public outreach needs for the San José/Santa Clara Water Pollution Control Plant, the wastewater pre-treatment, pollution prevention, and recycled water programs. This includes responding to media inquiries and seeking media coverage; developing and maintaining best management practice materials including information to regulated businesses; publicizing and conducting community events to collect pharmaceuticals, mercury thermometers, and fats/oils/grease; and supporting outreach efforts and providing information to recycled water customers.

<b>PERSONNEL SUMMARY</b>				
<b>Full Time Positions</b>	<b>2012-13</b>	<b>2013-2014</b>	<b>2014-2015</b>	<b>2014-2015</b>
	<b>Actual</b>	<b>Adopted</b>	<b>Base</b>	<b>Proposed</b>
Analyst II C	0.50	0.37	0.35	0.35
Marketing/Public Outrch Mgr	0.50	0.37	0.35	0.35
Marketing/Public Outrch Rep I	0.50			
Marketing/Public Outrch Rep II	2.00	1.85	1.75	2.25
Program Manager II	0.50	0.37	0.35	0.35
Staff Specialist	0.50	0.37	0.35	0.35
<b>Total Full-Time Positions</b>	<b>4.50</b>	<b>3.33</b>	<b>3.15</b>	<b>3.65</b>

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

<b>DETAILED PROGRAM BUDGET</b>				
Detail/Category	2012-13	2013-2014	2014-2015	2014-2015
	Actual	Adopted	Base	Proposed
Salaries-Reg-Full Time	282,225	259,109	242,419	288,828
Salaries-Reg-Part Time	28,161			
Salaries - Overtime	1,702			
Benefits: Retirement Contrib	142,392	139,513	123,967	129,909
Other Fringe Benefits	46,262	46,580	31,896	38,244
<b>Sub Total</b>	<b>\$ 500,742</b>	<b>\$ 445,202</b>	<b>\$ 398,282</b>	<b>\$ 456,981</b>
Supplies and Materials	1,172	24,666	24,204	24,579
Comm Expnse: Telephne- Telegraph	300	315	229	229
Comm Expnse: Postage	-	14,000	14,000	14,000
Print/Adv-Outside Vendors	16,207	130,200	130,200	130,200
Rent: Land & Buildings	2,000			
Trans/Travel: In County	216	654	477	477
Trans/Travel: Out of County	17	148	108	108
Training	255	2,956	2,156	2,531
Milcage Reibursement	233			
Dues & Subscriptions	(2,614)	583	425	425
Computer Data Processing		1,967	1,435	2,185
Prof & Consultant Svcs	108,545	122,000	122,000	122,000
<b>Sub Total</b>	<b>\$ 126,330</b>	<b>\$ 297,489</b>	<b>\$ 295,234</b>	<b>\$ 296,734</b>
<b>Combined Totals</b>	<b>\$ 627,072</b>	<b>\$ 742,691</b>	<b>\$ 693,516</b>	<b>\$ 753,715</b>

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

***Performance Measures-Treatment Plant***

	<b>2012-2013 Actual</b>	<b>2013-2014 Target</b>	<b>2013-2014 Estimated</b>	<b>2014-2015 Target</b>
☉ Millions of gallons per day discharged to the Bay during average dry weather season State order: 120 mgd or less*	85 mgd	<120 mgd	82 mgd	<120 mgd
☉ % of time pollutant discharge requirements are met or surpassed	100%	100%	100%	100%
☉ # of requirement violations				
-Pollutant discharge	0	0	0	0
-Air emissions	0	0	0	0
☉ % of significant industrial facilities in consistent compliance with federal pretreatment requirements.	95.7%	90%	91%	90%
💰 Cost per million gallons treated	\$1,150	\$1,300	\$1,270	\$1,300

*Changes to Performance Measures from 2013-2014 Adopted Budget: Yes<sup>1</sup>*

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

<sup>1</sup> Changes to Performance Measures from 2013-2014 Adopted Budget:

- ✗ "% of customers (permitted dischargers) satisfied or very satisfied with service, based on reliability and pre-treatment services" was deleted because the measure does not provide meaningful information about the program. Permitted dischargers ratings could be dependent upon their compliance status. For example, a discharger who received a violation may be inclined to erroneously rate service as poor strictly because a violation was received, not because service was poor. Furthermore, data previously collected was inaccurately stated. It is anticipated that the 2015-2016 Proposed Operating Budget will include revised Performance Measures that will provide more detailed information regarding the services and/or programs provided by the San José – Santa Clara Water Pollution Control Plant.

***Activity and Workload Highlights***

	<b>2012-2013 Actual</b>	<b>2013-2014 Forecast</b>	<b>2013-2014 Estimated</b>	<b>2014-2015 Forecast</b>
Average millions of gallons per day treated	105.7	116	107	107
Total population in service area*	1,364,000	1,391,400	1,391,400	1,405,300

*Changes to Activity & Workload Highlights from 2013-2014 Adopted Budget: No*

\* The San José/Santa Clara Water Pollution Control Plant (Plant) is a regional wastewater treatment facility serving eight South Bay cities and four sanitation districts including: San José, Santa Clara, Milpitas, Cupertino Sanitation District (Cupertino), West Valley Sanitation District (Campbell, Los Gatos, Monte Sereno and Saratoga), County Sanitation Districts 2-3 (unincorporated), and Burbank Sanitary District (unincorporated).

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

***Performance Measures-Recycled Water***

	<b>2012-2013 Actual</b>	<b>2013-2014 Target</b>	<b>2013-2014 Estimated</b>	<b>2014-2015 Target</b>
 Millions of gallons of recycled water delivered annually	4,346	4,000	5,050	5,000
 % of time recycled water quality standards are met or surpassed	100%	100%	99.9%	100%
 % of wastewater influent recycled for beneficial purposes during the dry weather period*	15%	12%	18%	15%
 Cost per million gallons of recycled water delivered	\$1,382	\$2,306	\$1,475	\$1,830
 % of recycled water customers rating service as good or excellent based on reliability, water quality, and responsiveness**	N/A	85%	85%	85%

*Changes to Performance Measures from 2013-2014 Adopted Budget: No*

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

\*\* No survey was conducted in 2012-2013 due to availability of staffing resources. Data for this measure was collected from a new survey conducted in early 2014, and those results are reflected in the 2013-2014 Estimated column.

***Activity and Workload Highlights***

	<b>2012-2013 Actual</b>	<b>2013-2014 Forecast</b>	<b>2013-2014 Estimated</b>	<b>2014-2015 Forecast</b>
Total number of South Bay Water Recycling customers	724	725	749	775

*Changes to Activity & Workload Highlights from 2013-2014 Adopted Budget: No*

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

***Performance Measures- Conservation***

	<b>2012-2013 Actual</b>	<b>2013-2014 Target</b>	<b>2013-2014 Estimated</b>	<b>2014-2015 Target</b>
☉ (Energy) % of energy used at the Water Pollution Control Plant that is renewable*	57%	60%	38%*	40%

*Changes to Performance Measures from 2013-2014 Adopted Budget: No*

\* The 2013-2014 Estimated and 2014-2015 Target are based on improved data interpretation and a more accurate calculation approach for deriving percent of renewable energy used at the Water Pollution Control Plant.

***Activity and Workload Highlights***

	<b>2012-2013 Actual</b>	<b>2013-2014 Forecast</b>	<b>2013-2014 Estimated</b>	<b>2014-2015 Forecast</b>
Green Vision Activity and Workload Highlights will be established as part of the 2015-2016 Proposed Operating Budget				

*Changes to Activity & Workload Highlights from 2013-2014 Adopted Budget: Yes<sup>1</sup>*

<sup>1</sup> Changes to Activity and Workload Highlights from 2013-2014 Adopted Budget:

- × “# of United Nations Urban Environmental Accords Implemented (of 21 total Actions)” was deleted from the Environmental Services Department because the tracking of progress on the UN Accords is redundant and no longer needed. The reporting of the UN Accords has been replaced by the Green Vision annual report. It is anticipated that the 2015-2016 Proposed Operating Budget will include revised Performance Measures that relate to the City’s Green Vision goals.

8A

**City Manager's Contract Approval Summary**  
 For Procurement and Contract Activity between \$100,000 and \$1.08 Million for Goods and \$100,000 and \$270,000 for Services

APRIL 1, 2014 - APRIL 30, 2014

Description of Contract Activity <sup>1</sup>	Fiscal Year	Req#/ RFP#	PO#	Vendor/Consultant	Original \$ Amount	Start Date	End Date	Additional \$ Amount	Total \$ Amount	Comments
NEW:										
TRACTOR - JLG G12-55A TELEHANDLER	FY13-14	18919		TOYOTA MATERIAL HANDLING	\$151,500	5/18/14	6/14			MAINTENANCE - TELESCOPIC ALL TERRAIN FORKLIFT
DIFUSER MEMBRANE REPLACEMENT	FY13-14	19047		ENVIRONMENTAL DYNAMICS INC	\$105,192	5/14	6/14			
CONSULTANT SERVICES (PROGRAM MGMT, DEVELOPMENT OF BID DOC & CONSTRUCTABILITY REVIEW AND ADDITIONAL SERVICES) - REPLACE B2 & B3 FILTER BACKWASH VALVES & VALVE ACTUATORS AND ADJOINING PIPING	FY13-14		AC21247	CH2M HILL	\$93,882	3/11/14	6/30/15	\$20,754	\$114,636	SERVICE ORDER #12 AMENDMENT (MASTER AGREEMENT TERM 3/25/08 - 6/30/13, MASTER AGREEMENT EXT 6/30/15)
ONGOING:										
COATING REHABILITATION SERVICES OF FIVE (5) CLARIFIER TANKS	FY13-14	18673			\$800,000	5/21/14	5/20/15			

<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)