



# Treatment Plant Advisory Committee Administrative Hearing

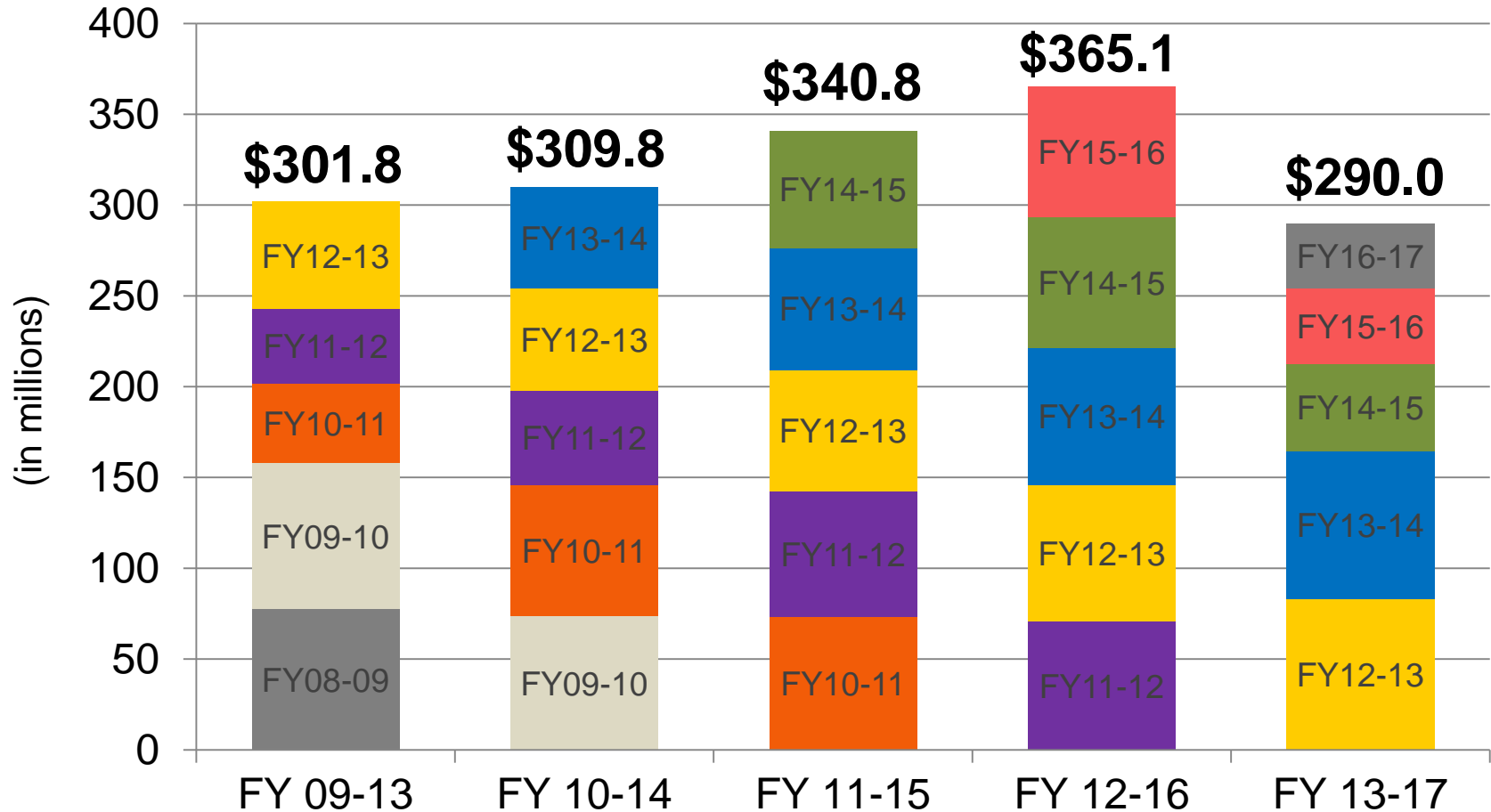
March 24, 2016



San José-  
Santa Clara  
Regional  
Wastewater  
Facility

# Adopted Five-Year CIPs Were Consistent

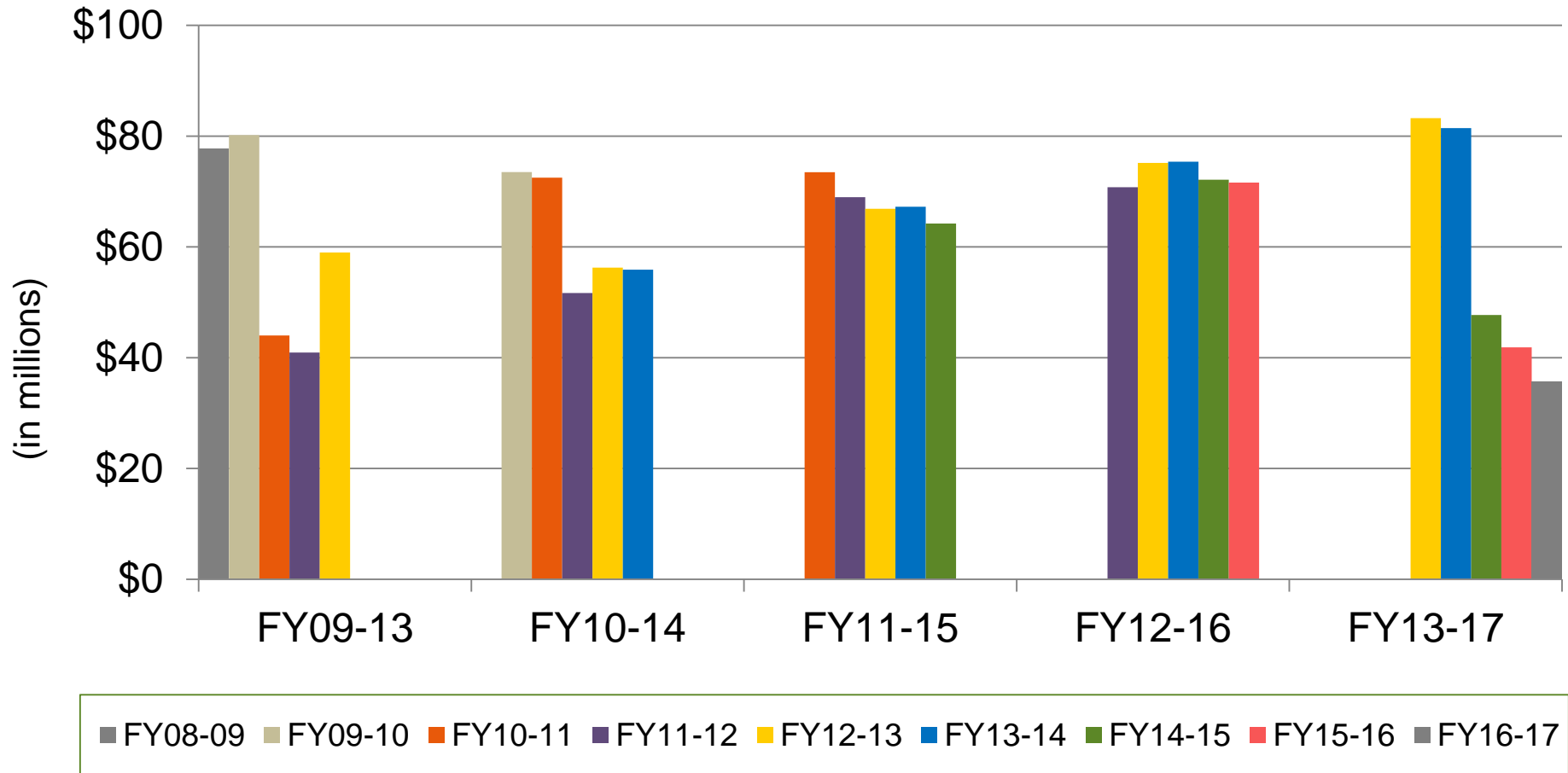
Source: Adopted 2009-2013, 2010-2014, 2011-2015, 2012-2016, 2013-2017 CIPs,  
Source of Funds & Use of Funds



Note: Does not include Reserves and Ending Fund Balance

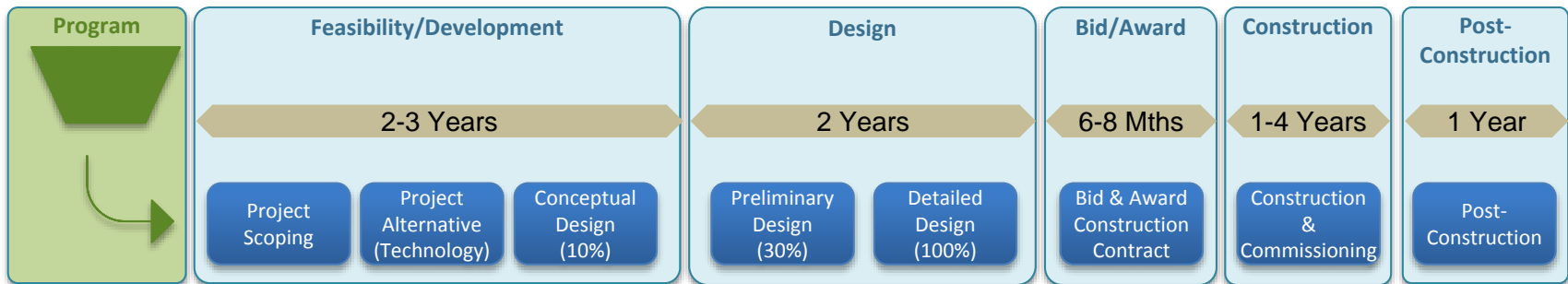
# Year-on-Year Comparison

## Adopted Five-Year CIPs



*Note: Does not include Reserves or Ending Fund Balance*

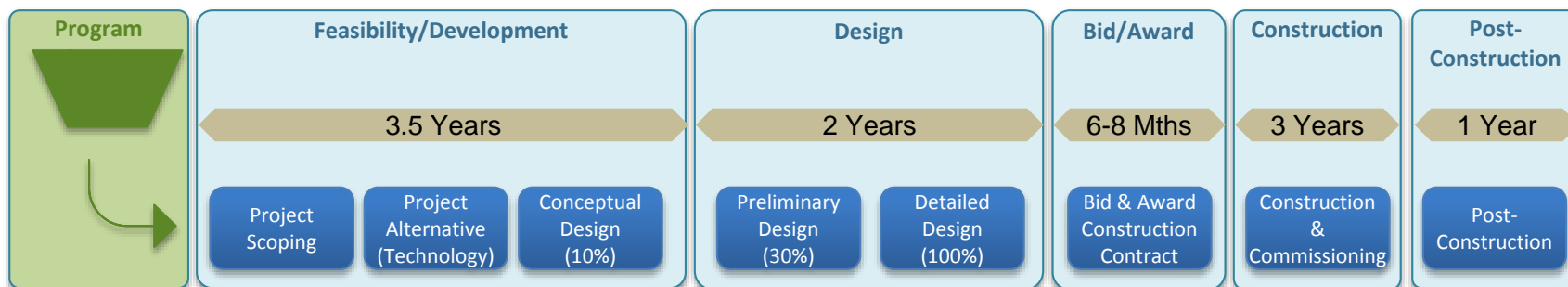
# Project Delivery Cycle & Cost Estimates



PDM Stages	Project Scoping	Conceptual Design	Preliminary Design	Detailed Design	Bid & Award
AACE Estimate Class	Class 5	Class 4	Class 3	Class 2	Class 1
Expected Level of Accuracy	-50% to +100%	-30% to +50%	-20% to +30%	-15% to +20%	-10% to +15%

Basis of Methodology: AACE International – Cost Estimate Classification\*

# Example - Digester Upgrade & Thickener Facilities



PDM Stages	Project Scoping	Conceptual Design (10%)	Preliminary Design (30%)	Detailed Design (60-90-100)%	Bid/Award (incl. pre-qualification)
AACE Estimate Class	Class 5	Class 4	Class 3	Class 2	Class 1
Engineer's Estimate	-	\$68.1M	\$78.6M	\$83.4M (60%) \$85.0M (90%)	TBD*

\* Bids ranging from \$109 to \$129 million currently being evaluated for responsiveness.

# High Level of Transparency



The screenshot shows the 'Budget' page on the San Jose CA website. The header includes the logo 'sanjoseca.gov', a search bar, and navigation links for Home, City Services, Departments, Follow Us, and Sign up. Below the header is a navigation bar with categories: Community, Business, Visitors, Government, and Environment. The main content area is titled 'Budget Office' and includes a breadcrumb trail: Home > Government > Departments & Offices > Departments & Offices A-C > Office of the City Manager > Offices > City Manager's Budget Office. The page features a 'City Manager's Budget Office' section with a sub-section 'Responsibilities of the Budget Office'. A list of fiscal years is provided on the left side of the page.

**Available Online**  
Adopted CIPs including  
budget documents archive

**Financial Transparency**  
Audited Comprehensive  
Financial Annual (CAFR)  
Reports



The screenshot shows the 'Finance' page on the San Jose CA website. The header includes the logo 'sanjoseca.gov', a search bar, and navigation links for Home, City Services, Departments, Follow Us, and Sign up. Below the header is a navigation bar with categories: Community, Business, Visitors, Government, and Environment. The main content area is titled 'Finance' and includes a breadcrumb trail: Home > Government > Departments & Offices > Departments & Offices D-H > Finance > Reports. The page features a 'Reports' section with a list of reports: Comprehensive Annual Financial Report (CAFR), Comprehensive Annual Debt Report (CADR), Quarterly Investment Report, Purchasing Quarterly Contract Report, and City-Wide Cost Allocation Plan (CAP). Each report has a link to the most recent report and a link to view previous reports.

# Detailed Information on CIP

## Water Pollution Control Capital Program 2016-2020 Adopted Capital Improvement Program Overview

### 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

### 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)	108
DRY METRIC TONS OF BIOSOLIDS PAUL-BED EACH YEAR	45,100

### AVERAGE MONTHLY PRODUCTION

planning, develop-  
ment. On Ma-  
y 2016-Santa Clara

## 2015-2016 CAPITAL BUDGET

## 2016-2020 CAPITAL IMPROVEMENT PROGRAM

## WATER POLLUTION CONTROL

(CIP) provid-  
ed forwarded to  
agency based  
Plant  
system; de-  
service related  
sewer service  
City Se-  
rvice, R  
WATER POLLUTION CONTROL  
and policies  
adequate oper-  
ation govern-  
safety, energy  
compliance with

## Water Pollution Control Capital Program 2016-2020 Adopted Capital Improvement Program Overview

### PROGRAM HIGHLIGHTS

#### 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. Based on the potential closure of the Newby Island landfill in 2025, potential changes to biosolids regulations, and odor impacts to the surrounding community, the Plant Master Plan

lagoons and solar drying beds to new enclosed  
In November 2014, staff presented a biosolids  
that recommended converting the anaerobic  
(PAD), proceeding with mechanical dewatering.  
City Council approved proceeding with TPAD  
directed staff to return with more information  
in spring 2015. In June 2015, the City Council  
lagoon; and drying bed retirement project.

lase of the digester rehabilitation, construction  
ment of the existing lagoons and drying beds.

## Water Pollution Control 2016-2020 Adopted Capital Improvement Program Detail of Construction Projects

### 10. Digester and Thickener Facilities Upgrade

**OSB:** Environmental and Utility Services  
**OSB Outcome:** Reliable Utility Infrastructure  
**Department:** Environmental Services  
**OSB District:** 4  
**Location:** Water Pollution Control Plant

**Initial Start Date:** 3rd Qtr. 2006  
**Revised Start Date:** 3rd Qtr. 2008  
**Initial Completion Date:** 2nd Qtr. 2009  
**Revised Completion Date:** 4th Qtr. 2025

**Description:** This project will rehabilitate up to ten anaerobic digesters through a phased approach. This first phase rehabilitates four digesters. The project also rehabilitates and modifies six dissolved air flotation units, pressure saturation tanks, pipes, pumps, and ancillary equipment. A new odor control system, blending tank, primary sludge screening facility, heat exchangers, waste biogas flare, and polymer dosing facility will be constructed. The digester gas conveyance and tunnel systems will also be upgraded.

**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)

Cost Elements	Prior	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	5-Year	Beyond	Project
	Years	Appn.	Estimate						Total	5-Year	Total
Development	880	113	113					1,191	389	2,382	
Design	1,844	13,867	13,852	548				548	6,388	22,430	
Bid & Award		80	80					80	117	198	
Construction	1		89,858	712	344			90,714	55,753	146,468	
Final Construction					16	32		48	630	687	
<b>TOTAL</b>		<b>2,815</b>	<b>14,080</b>	<b>13,785</b>	<b>90,296</b>	<b>712</b>	<b>380</b>	<b>32</b>	<b>1,191</b>	<b>92,581</b>	<b>63,284</b>

#### FUNDING SOURCE SCHEDULE (\$000)

	2014-15	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	5-Year	Beyond	Project
	Appn.	Fund						Total	5-Year	Total
San Jose-Santa Clara Treatment Plant Capital Fund	2,515	14,080	13,785	90,296	712	380	32	1,191	92,581	63,284
<b>TOTAL</b>	<b>2,515</b>	<b>14,080</b>	<b>13,785</b>	<b>90,296</b>	<b>712</b>	<b>380</b>	<b>32</b>	<b>1,191</b>	<b>92,581</b>	<b>63,284</b>

#### ANNUAL OPERATING BUDGET IMPACT (\$000)

	15	11
	Operating	508
<b>TOTAL</b>	<b>600</b>	<b>634</b>

#### Major Changes in Project Cost:

2008-2012 CIP-increase of \$1.6M based on revised estimates. 2009-2013 CIP-increase of \$84.0M due to increased scope. 2010-2014 CIP-increase of \$11.5M due to inclusion of digester gas line replacement. 2011-2015 CIP-decrease of \$34.0M due to decrease in the number of digesters. 2012-2016 CIP-decrease of \$23.3M due to realignment of project. 2013-2017 CIP-increase of \$34.2M due to revision of estimation methodology. 2014-2018 CIP-increase of \$57.3M to align with the Master Plan recommendation. 2015-2019 CIP-increase of \$18.3M due to revised project validation cost estimate. 2015-2020 CIP-increase of \$31.4M due to conversion to thermophilic digestion and inclusion of scope from other projects.

#### Notes:

This project corresponds to Plant Master Plan Project Nos. 45 -E3 and Validation Project PG-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  
**Initial Project Budget:** \$1,000,000

**Appn. #:** 4127  
**USOBC LEED:** N/A

	2016-2020 CIP Cost	Estimated Completion
dewatering to replace our sand open	\$60.4 million	3 <sup>rd</sup> Quarter 2020
obic digesters, heating systems, t. Modify air for co- upgrades. od gas line, and new Convert four o thermophilic	\$92.6 million	4 <sup>th</sup> Quarter 2025
ing sludge in solar drying setting	\$4.4 million	2 <sup>nd</sup> Quarter 2020

# Detailed Information on CIP

Available Online  
Adopted Source of Funds  
and Use of Funds

## Water Pollution Control 2016-2020 Adopted Capital Improvement Program Source of Funds (Combined)

SOURCE OF FUNDS	Estimated 2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	5-Year Total
<b>San José-Santa Clara Treatment Plant Capital Fund (512)</b>							
Beginning Fund Balance	122,434,440	126,559,357	18,573,357	25,233,357	28,929,357	39,512,357	126,559,357 *
Sale of Bonds				178,000,000	90,000,000	28,000,000	296,000,000
<b>Revenue from Other Agencies:</b>							
<b>Federal Government</b>							
- SBWR Master Plan Grant	439,000						
- U. S. Bureau of Reclamation Grant	250,000	250,000	250,000	250,000			
<b>Water Pollution Control Plant User Agencies</b>							
- 2005 Bond Debt Repayment	1,216,000	1,221,000	1,070,000	165,000			
- 2015-2018 Bond Debt Service Repayment		576,000	603,000	43,196,000			
- Equipment Replacement			580,000	580,000			
- State Revolving Fund Loan Repayment	1,374,000	1,374,000	1,374,000	1,374,000			
- WPCP Projects	21,341,000	11,553,000	15,382,000	15,774,000			
<b>Contributions, Loans and Transfers from: Special Funds</b>							
- Transfer for 2015-2016 Debt Service from the Sewer Service and Use Charge Fund (541)		980,000	1,041,000	5,268,000			
- Transfer from the Sewage Treatment Plant Connection Fee Fund (539)	3,090,000	3,090,000	3,090,000	3,090,000			
- Transfer from the Sewer Service and Use Charge Fund (541)	48,000,000	30,722,000	31,800,000	31,799,000			
<b>Interest Income</b>	569,000	1,272,000	2,224,000	3,846,000			

991 - A

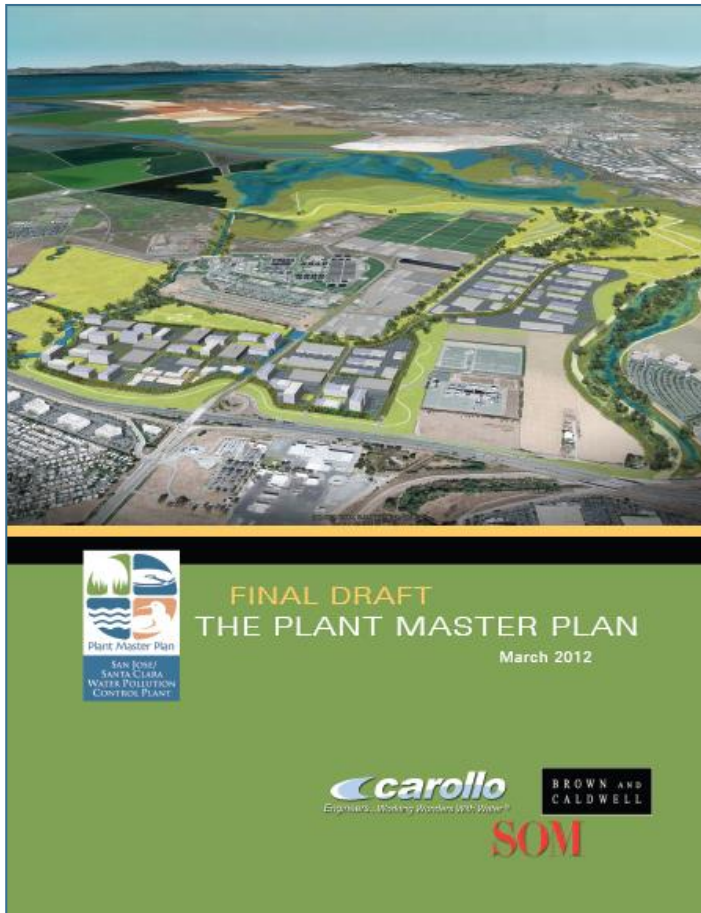
## Water Pollution Control 2016-2020 Adopted Capital Improvement Program Use of Funds (Combined)

USE OF FUNDS (CONTD.)	Estimated 2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	5-Year Total
<b>Construction Projects</b>							
<b>Tertiary Wastewater Treatment</b>							
Alternative Filter Technology Field Verification						81,000	81,000
Final Effluent Pump Station & Stormwater Channel Improvements						902,000	902,000
New Disinfection Facilities New Filter Complex	27,000				653,000	299,000	952,000
7. Filter Rehabilitation	853,000	1,361,000	5,741,000	481,000	25,201,000	240,000	33,024,000
8. Outfall Bridge and Levee Improvements	300,000	1,083,000	1,331,000	209,000	6,489,000	320,000	9,412,000
<b>Total Tertiary Wastewater Treatment</b>	<b>1,180,000</b>	<b>2,444,000</b>	<b>7,072,000</b>	<b>690,000</b>	<b>32,323,000</b>	<b>1,842,000</b>	<b>44,371,000</b>
<b>Biosolids</b>							
Dissolved Air Flotation Rehabilitation and Odor Control FOG Receiving	205,000					313,000	313,000
9. Digested Sludge Dewatering Facility	1,754,000	1,430,000	12,175,000	48,240,000	3,235,000	3,315,000	68,395,000
10. Digester and Thickener Facilities Upgrade	13,765,000	90,286,000	712,000	360,000	32,000	1,191,000	92,581,000
11. Lagoons and Drying Beds Retirement		443,000	1,158,000	112,000	2,022,000	659,000	4,394,000
<b>Total Biosolids</b>	<b>15,724,000</b>	<b>92,159,000</b>	<b>14,045,000</b>	<b>48,712,000</b>	<b>5,289,000</b>	<b>5,478,000</b>	<b>165,683,000</b>
<b>Electrical Systems and Power Generation</b>							
12. Combined Heat and Power Equipment Repair and Rehabilitation	15,919,000	795,000	120,000				915,000
13. Energy Generation Improvements	25,312,000	16,600,000	42,018,000	28,282,000	1,400,000		88,300,000

991 - A



# Extensive Project Information Provided



**Available Online**  
Plant Master Plan  
Technical Memorandums  
Project Descriptions  
Planning Level Cost & Schedule

# Extensive Project Information Provided

http://www.sanjoseca.gov/Archive.aspx?AMID=15

San Jose, CA - Official Web...

View Favorites Tools Help

Community Business Visitors Government Environment

Department Home Home > Archive Center

Blogs Calendar City Facilities Frequently Asked Questions Hot Topics Local Resources Most Requested News Releases Department News Briefs Notify Me Program Directory

Environmental Services – Regional Wastewater Facility – CIP Document Library [All Archives](#)

- Upcoming Procurements**  
Mar 2016 to Aug 2016
- Monthly Status Report - January 2016**  
Capital Improvement Program CIP San Jose Regional Wastewater Facility Monthly Status Report
- Monthly Status Report - December 2015**  
Capital Improvement Program CIP San Jose Regional Wastewater Facility Monthly Status Report
- Vendor Open House Information - November 2015**  
This document contains information shared during an event held on November 4, 2015 at the San José-Santa Clara Regional Wastewater Facility to inform interested consultants and contractors about upcoming procurements. The document includes the presentation, a handout on upcoming procurements, and a list of event attendees. Dates and amounts in the document are estimates based on the best information available prior to the event and, as such, are subject to change.
- Monthly Status Report - November 2015**  
Capital Improvement Program CIP San Jose Regional Wastewater Facility Monthly Status Report
- Monthly Status Report - October 2015**  
Capital Improvement Program CIP San Jose Regional Wastewater Facility Monthly Status Report
- Monthly Status Report - September 2015**  
Capital Improvement Program CIP San Jose Regional Wastewater Facility Monthly Status Report
- Monthly Status Report - August 2015**  
Capital Improvement Program CIP San Jose Regional Wastewater Facility Monthly Status Report
- Monthly Status Report - July 2015**  
Capital Improvement Program CIP San Jose Regional Wastewater Facility Monthly Status Report

## Available Online Project Package Descriptions Upcoming Procurements

gov/Archive.aspx? AMID=15

San Jose, CA - Official Web... San Jose, CA - Official Website...

Help

- Monthly Status Report - August 2014**
- Monthly Status Report - July 2014**
- Monthly Status Report - June 2014**
- Monthly Status Report - May 2014**
- Monthly Status Report - April 2014**
- Project Descriptions 25 March 2014**  
This document contains information that should be viewed as preliminary in nature, providing basic data for CIP project planning and should not be extrapolated beyond this use. The initial implementation step for each project will involve scoping, which includes more detailed analysis of project needs and alternative approaches. All cost, schedule and scope information will be refined accordingly.
- Validation Process Tech Memo 11 March 2014**  
This document contains information that should be viewed as preliminary in nature, providing basic data for CIP project planning and should not be extrapolated beyond this use. The initial implementation step for each project will involve scoping, which includes more detailed analysis of project needs and alternative approaches. All cost, schedule and scope information will be refined accordingly.
- Monthly Status Report - March 2014**
- Monthly Status Report - February 2014**
- Semiannual Status Report January-June 2014**
- Semiannual Status Report July-December 2013**
- Semiannual Status Report January-June 2013**
- Semiannual Status Report July-December 2012**

San José City Hall  
200 E. Santa Clara St.  
San José, CA 95113  
408 535-3500 Main  
408 294-9337 TTY  
Directions

The City of San José is committed to open and honest government and strives to consistently meet the community's expectations by providing excellent service, in a positive and timely manner, and in the full view of the public.

About sanjoseca.gov  
Careers  
Mobile Site  
Print Friendly  
My Connection

Code of Ethics  
Open Government  
Whistleblower Hotline  
Accessibility Instructions  
Powered by CIVICPLUS

Contact Us  
Newsroom  
Site Map  
Employee Web Mail  
Employee Login

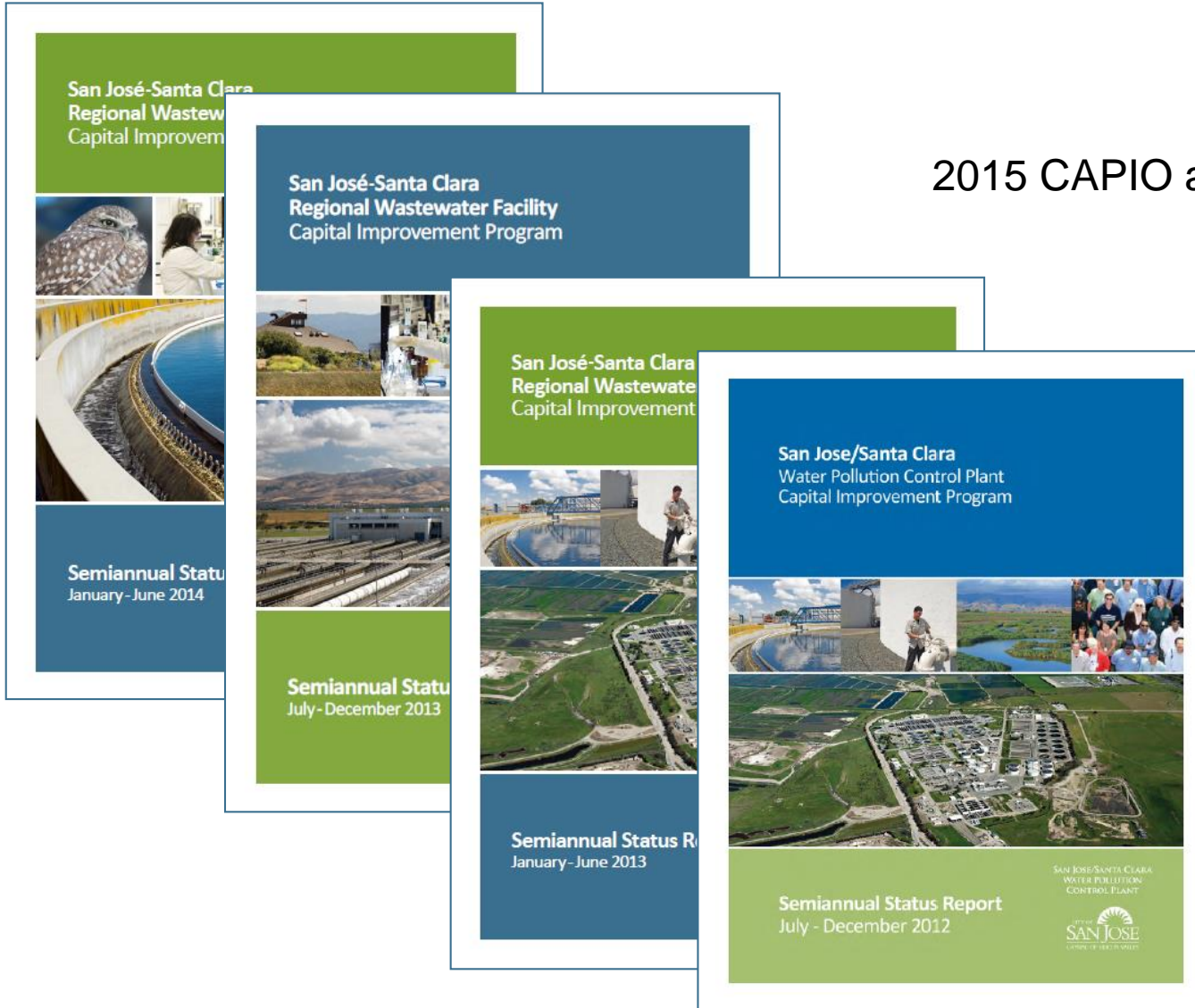
CITY OF SAN JOSE  
CAPITAL OF SILICON VALLEY

Select Language

Program Reports  
RWF Semiannual Status Reports  
CIP External Monthly Status Reports

# RWF CIP Semiannual Status Reports

2015 CAPIO award winner



# CIP External Monthly Program Status Reports

**Reporting Transparency**  
**23 External Monthly Status**  
**Reports Issued To Date**

**San José-Santa Clara Regional Wastewater Facility**

**Capital Improvement Program Monthly Status Report for April 2015**  
 June 4, 2015

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 or RWF) for the period of April 2015.

**Report Contents**

Project Delivery Model	2
Program Summary	3
Program Performance Summary	4
Program Cost Performance	5
Project Performance	6
Project Profile	7
Regional Wastewater Facility Treatment – Current Treatment Process Flow Diagram	10
Regional Wastewater Facility Treatment – Proposed Treatment Process Flow Diagram	12
Active Construction Projects – Aerial Plan	14

**San José-Santa Clara Regional Wastewater Facility**

**Capital Improvement Program Monthly Status Report for July 2015**  
 June 5, 2015

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 July 2015.

**Report Contents**

Project Delivery Model	2
Program Summary	3
Program Performance Summary	4
Program Cost Performance	5
Project Performance	6
Project Profile	7
Regional Wastewater Facility Treatment – Current Treatment Process Flow Diagram	10
Regional Wastewater Facility Treatment – Proposed Treatment Process Flow Diagram	12
Active Construction Projects – Aerial Plan	14

**San José-Santa Clara Regional Wastewater Facility**

**Capital Improvement Program Monthly Status Report for October 2015**  
 June 5, 2015

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 October 2015.

**Report Contents**

Project Delivery Model	2
Program Summary	3
Program Performance Summary	4
Program Cost Performance	5
Project Performance	6
Project Profile	7
Regional Wastewater Facility Treatment – Current Treatment Process Flow Diagram	10
Regional Wastewater Facility Treatment – Proposed Treatment Process Flow Diagram	12
Active Construction Projects – Aerial Plan	14

**San José-Santa Clara Regional Wastewater Facility**

**Capital Improvement Program Monthly Status Report for January 2016**  
 June 5, 2016

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 January 2016.

**Report Contents**

Project Delivery Model	2
Program Summary	3
Program Performance Summary	4
Program Cost Performance	5
Project Performance	6
Project Profile	7
Regional Wastewater Facility Treatment – Current Treatment Process Flow Diagram	10
Regional Wastewater Facility Treatment – Proposed Treatment Process Flow Diagram	12
Active Construction Projects – Aerial Plan	14

**San José-Santa Clara Regional Wastewater Facility**

**Capital Improvement Program Monthly Status Report for October 2014**  
 June 5, 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 October 2014.

**Report Contents**

Project Delivery Model	2
Program Summary	3
Program Performance Summary	4
Program Cost Performance	5
Project Performance	6
Project Profile	7
Regional Wastewater Facility Treatment – Current Treatment Process Flow Diagram	10
Regional Wastewater Facility Treatment – Proposed Treatment Process Flow Diagram	12
Active Construction Projects – Aerial Plan	14

**San José-Santa Clara Regional Wastewater Facility**

**Capital Improvement Program Monthly Status Report for July 2014**  
 June 5, 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 July 2014.

**Report Contents**

Project Delivery Model	2
Program Summary	3
Program Performance Summary	4
Program Cost Performance	5
Project Performance	6
Project Profile	7
Regional Wastewater Facility Treatment – Current Treatment Process Flow Diagram	10
Regional Wastewater Facility Treatment – Proposed Treatment Process Flow Diagram	12
Active Construction Projects – Aerial Plan	14

**San José-Santa Clara Regional Wastewater Facility**

**Capital Improvement Program Monthly Status Report for December**  
 June 5, 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 December 2014.

**Report Contents**

Project Delivery Model	2
Program Summary	3
Program Performance Summary	4
Program Cost Performance	5
Project Performance	6
Project Profile	7
Regional Wastewater Facility Treatment – Current Treatment Process Flow Diagram	10
Regional Wastewater Facility Treatment – Proposed Treatment Process Flow Diagram	12
Active Construction Projects – Aerial Plan	14

# Awards & Distinctions

- GFOA Distinguished Budget Presentation Award: 26 of the last 26 years (including 2015-2016)
- Certificate of Recognition for Budget Preparation: 13 of the last 13 years (including 2015-2016)
- CA Society of Municipal Finance Officers – Excellence in Operational Budgeting: 16 of the last 16 years (including 2015-2016)
- CA Society of Municipal Finance Officers – Excellence in Capital Budgeting: 13 of the last 13 years (including 2015-2016)
- ICMA Center for Performance Measurement: Award of Distinction 2002-2003 through 2007-2008 (6 years), Award of Excellence 2008-2009 through 2015-2016 (8 years)
- 28 consecutive years of GFOA Certificate of Achievement for Excellence in Financial Reporting for Comprehensive Annual Financial Report