# SAN JOSÉ/SANTA CLARA TREATMENT PLANT ADVISORY COMMITTEE

JAMIE MATTHEWS, CHAIR SAM LICCARDO, VICE CHAIR PIERLUIGI OLIVERIO, MEMBER DAVID SYKES, MEMBER MANH NGUYEN, MEMBER PAT KOLSTAD, MEMBER JOSE ESTEVES, MEMBER STEVEN LEONARDIS, MEMBER JOHN GATTO, MEMBER

# REVISED AGENDA/TPAC

4:30 p.m. December 10, 2015 Room 1734

- 1. ROLL CALL
- 2. <u>APPROVAL OF MINUTES</u>
  - A. November 19, 2015
- 3. UNFINISHED BUSINESS/REQUEST FOR DEFERRALS
- 4. <u>DIRECTOR'S REPORT</u>
  - A. Directors Report (verbal)
    - Monthly Progress Report
- 5. <u>AGREEMENTS/ACTION ITEMS</u>
  - A. <u>San José- Santa Clara Regional Wastewater Facility Ten-Year Funding Strategy</u> Report Update

#### Staff Recommendation:

Accept the status report on the Ten-Year Funding Strategy for the San José-Santa Clara Regional Wastewater Facility Capital Improvement Program, and approve staff's recommendation of projects for which to seek State Revolving Fund loans.

The proposed recommendation is scheduled for Council Consideration on December 15, 2015.

B. <u>Master Consultant Agreement with Kennedy/Jenks Consultants, Inc. for</u>
<u>Engineering Services for "#7448- Filter Rehabilitation Project" at the San José-Santa Clara Regional Wastewater Facility</u>

#### Staff Recommendation:

Approve a master consultant agreement with Kennedy/Jenks Consultants, Inc. To provide engineering Services for the "#7448- Filter Rehabilitation Project" at

the San José- Santa Clara Regional Wastewater Facility from the date of execution through June 30, 2023, in a total amount not to exceed \$4,950,000, subject to appropriation of funds.

The proposed recommendation is scheduled for Council consideration on December 15, 2015.

# 6. OTHER BUSINESS/CORRESPONDENCE

A. The 2015 Annual Report on Plant Operational and Reserve Capacity for all Agencies

# 7. STATUS OF ITEMS PREVIOUSLY RECOMMENDED FOR APPROVAL BY TPAC

A. <u>San José- Santa Clara Regional Wastewater Facility Master Agreements</u>
Amendments

#### Staff Recommendations:

- (a) General discussion of interests and concerns related to the proposed amendments to the Master Agreement for the San José-Santa Clara Regional Wastewater Facility; and
- (b) Direct staff to return with the draft Amendment and Restatement of the Master Agreements to include amendments that would be necessary to secure State Revolving Fund loans and short term financing for the Tributary Agencies' obligation for the capital projects in FY 15-16; and
- (c) Direct staff to coordinate with the City of Santa Clara to evaluate the scope of the proposed amendments, and return to the City Council with recommendations on whether to proceed with negotiations, and a process and budget to negotiate the amendments as part of the mid-year budget process.

# The recommendation was accepted by Council on December 1, 2015.

B. Approval of Final Proposer Ranking and Authorization to Negotiate the Design-Build Contract for the Cogeneration Facility Project at the San José-Santa Clara Regional Wastewater Facility

# Staff Recommendation:

# Adopt a resolution:

- (a) Approving the final proposer ranking for design-build firms for the Cogeneration Facility at the San José Santa Clara Regional Wastewater Facility.
- (b) Authorizing the City Manager to negotiate the design-build contract for the Cogeneration Facility Project with CH2M HILL Engineers, Inc. (CH2M HILL)
- (c) Authorizing the City Manager to terminate negotiations with CH2M HILL, and to negotiate the design-build contract for the Cogeneration Facility Project with the second-ranked proposer, in the event that the City Manager

- determines that the City and CH2M HILL cannot agree upon the terms of the design-build contract.
- (d) Finding the Initial Study and Mitigated Negative Declaration for the San José-Santa Clara Regional Wastewater Facility (RWF) Cogeneration Project is complete, and was prepared in compliance with the California Environmental Quality Act (CEQA), and incorporating environmental mitigation measures as set forth in the Mitigation Monitoring and Reporting program for the project.

# The resolution was accepted by Council on December 1, 2015.

C. <u>Second Amendment for Legal Services Agreement for Regional Wastewater</u> Facility Capital Program

#### Staff Recommendation:

Adopt a resolution authorizing the City Attorney to execute a Second Amendment to the legal services agreement with Hawkins, Delafield & Wood LLP, to modify the initial term of December 1, 2014 through December 1, 2015, to December 1, 2014 through June 20, 2016, to coincide with the fiscal year appropriations which will increase the amount available in the initial term to \$700,000, and to modify the number of option terms from two terms to one term, without increasing the total maximum amount of compensation of \$1,000,000 available under the contract, subject to appropriation of funds by City Council, to support the San José-Santa Clara Regional Wastewater Facility ("RWF") capital improvement program.

# The recommendation was accepted by Council on December 1, 2015.

D. <u>Master Consultant Agreement with CDM Smith Inc. for Engineering and Construction Management Services for the "7701- Headworks Project" at the San José- Santa Clara Regional Wastewater Facility</u>

#### Staff Recommendation:

Approve a master consultant agreement with CDM Smith Inc. to provide engineering and construction management services for the Headworks Improvements (including Headworks Critical Improvements) and New Headworks at the San José-Santa Clara Regional Wastewater Facility for a period beginning on the date of execution through December 31, 2022 in a total amount not to exceed \$9,670,000, subject to the appropriation of funds.

# The award was approved by Council on December 1, 2015.

E. Report on Bids and Award of Contract for 7946- Process Water Pumps
Replacement Project

# Staff Recommendation:

(a) Award of a construction contract for 7946 – Process Water Pumps Replacement Project to the low bidder, Anderson Pacific Engineering Construction, Inc., in the amount of \$382,100

(b) Approval of a construction contingency of 15 percent in the amount of \$57.315.

# The award was approved by Council on December 1, 2015.

# F. Execute An Open Purchase Order with ABB Inc.

#### Staff Recommendation:

Authorize the City Manager to:

- (a) Execute an Open Purchase Order with ABB Inc. (Wickliss, OH) for hardware repair, replacement, and rebuilding services for the Distributed Control Systems (DCS) at the Regional Wastewater Facility, for the term December 1, 2015 through November 30, 2016 in an amount not to exceed \$750,000 per year; and
- (b) Execute change orders to purchase additional parts and services subject to the appropriation of funds; and
- (c) Execute additional purchase orders for the subsequent annual purchase of hardware repair, replacement, and rebuilding services through November 30, 2018 subject to the appropriation of funds.

# The purchase order was approved by Council on December 1, 2015.

# G. <u>Clean Water State Revolving Fund Loan Application</u>

#### Staff Recommendation:

Adopt the following resolutions:

- (a) Authorize the City Manager to execute and deliver documents to the State Water Resources Control Board to complete the financial assistance application for a Clean Water State Revolving Fund Loan to finance the Digester and Thickener Facilities Upgrade Project at the San José-Santa Clara Water Pollution Control Plant;
- (b) Declare the official intent of the City of San José to reimburse itself for certain capital expenditures related to the Digester and Thickener Facilities Upgrade Project from the proceeds of the Clean Water State Revolving Fund Financing Agreement Project Funds; and
- (c) Pledge revenues received from the San José Sewer Service and Use Charge, the City of Santa Clara, and from Outside Users that are deposited into the San José-Santa Clara Treatment Plant Fund pursuant to San José Municipal Code Chapter 4.80 and written agreements with these agencies for each agency's share of the capital cost including repayment of any and all Clean Water State Revolving Fund financings for the Digester and Thickener Facilities Upgrade Project.

The proposed resolution was adopted by Council on November 10, 2015.

# 8. REPORTS

A. There are no items to report.

# 9. MISCELLANEOUS

A. The next TPAC meeting is January 14, 2016, at 4:30 p.m. City Hall, Room 1734.

# 10. OPEN FORUM

# 11. ADJOURNMENT

NOTE: If you have any changes or questions, please contact Melrose Cacal, Environmental Services (408) 975-2547.

To request an accommodation or alternative format for City-sponsored meetings, events or printed materials, please contact Melrose Cacal (408) 975-2547 or (408) 294-9337 (TTY) as soon as possible, but at least three business days before the meeting/event.

<u>Availability of Public Records</u>. 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 JOSÉ/SANTA CLARA TREATMENT PLANT ADVISORY COMMITTEE

City Hall, Council Chambers Thursday, November 19, 2015 at 4:00 p.m.

# 1. ROLL CALL

Minutes of the Treatment Plant Advisory Committee convened this date at 4:08p.m. Roll call was taken, with the following members in attendance:

**Committee members:** Jose Esteves, John Gatto, Pat Kolstad, Sam Liccardo, Jamie Matthews, Manh Nguyen, Pierluigi Oliverio, Dave Sykes, Steven Leonardis.

# 2. APPROVAL OF MINUTES

A. October 8, 2015

Item 2.A was approved to note and file.

Ayes – 8 (Esteves, Gatto, Kolstad, Liccardo, Matthews, Nguyen, Oliverio, Sykes)

Navs - 0

**Absent** – 1 (Leonardis)

David Wall spoke on this item.

# 3. <u>UNFINISHED BUSINESS/REQUEST FOR DEFERRALS</u>

# 4. DIRECTORS REPORT

A. Directors Report (verbal)

Monthly progress report

There was no report. Kerrie Romanow introduced board members of the Burbank Sanitary District: Michelle Kaelker-Boor and Rene Prupes.

# 5. <u>AGREEMENTS/ACTION ITEMS</u>

A. San José- Santa Clara Regional Wastewater Facility Master Agreements

Amendments

Recommendation:

- (a) General discussion of interests and concerns related to the proposed amendments to the Master Agreement for the San José-Santa Clara Regional Wastewater Facility; and
- (b) Direct staff to return with the draft Amendment and Restatement of the Master Agreements to include amendments that would be necessary to secure State Revolving Fund loans and short term financing for the Tributary Agencies' obligation for the capital projects in FY 15-16; and

(c) Direct staff to coordinate with the City of Santa Clara to evaluate the scope of the proposed amendments, and return to the City Council with recommendations on whether to proceed with negotiations, and a process and budget to negotiate the amendments as part of the FY 2016-2017 budget.

# This item is scheduled for consideration by the City Council on December 1, 2015.

Staff (Nina Hawk, Jon Newby, and Richard Tanaka) from the Tributary Agencies made a presentation, followed by Kerrie Romanow, Director of the Environmental Services Department. The Cupertino and Burbank Sanitary District representatives expressed their desire to participate in financing, and request to begin negotiations on the proposed changes to the Master Agreement from the Tributary Agencies as part of the amendment to extend the term of the Agreements. There was general discussion that the scope of proposed changes from the Tributary Agencies would require extensive negotiations, and of the impact of a delay to extending the term of the Master Agreements on the timeline to deliver the upcoming Digester Rehabilitation project, and to the City's ability to execute a state revolving fund loan on behalf of all agencies by Spring 2016. TPAC discussed the timeline for negotiating the various proposals. Staff indicated that before they could proceed with negotiations, they would need time and resources to adequately analyze and solicit feedback from both the San José and Santa Clara city councils.

Michelle Kaelker-Boor of the Burbank Sanitary District, Angela Chen of the Cupertino Sanitary District, and David Wall spoke on this item.

On a motion by Committee Member Liccardo and a second by Committee Member Kolstad, to recommend approval of the Staff recommendations (a) & (b), and to modify recommendation (c) to the 2015-2016 Mid-Year Budget instead of FY 2016-2017.

Ayes – 5 (Kolstad, Liccardo, Matthews, Nguyen, Sykes) Nayes – 3 (Esteves, Gatto, and Leonardis) Absent -1 (Oliverio)

B. <u>Approval of Final Proposer Ranking and Authorization to Negotiate the Design-Build Contract for the Cogeneration Facility Project at the San José-Santa Clara Regional Wastewater Facility</u>

Staff Recommendation:

Adopt a resolution:

(a) Approving the final proposer ranking for design-build firms for the Cogeneration Facility at the San José – Santa Clara Regional Wastewater Facility.

- (b) Authorizing the City Manager to negotiate the design-build contract for the Cogeneration Facility Project with CH2M HILL Engineers, Inc. (CH2M HILL)
- (c) Authorizing the City Manager to terminate negotiations with CH2M HILL, and to negotiate the design-build contract for the Cogeneration Facility Project with the second-ranked proposer, in the event that the City Manager determines that the City and CH2M HILL cannot agree upon the terms of the design-build contract.
- (d) Finding the Initial Study and Mitigated Negative Declaration for the San José-Santa Clara Regional Wastewater Facility (RWF) Cogeneration Project is complete, and was prepared in compliance with the California Environmental Quality Act (CEQA), and incorporating environmental mitigation measures as set forth in the Mitigation Monitoring and Reporting program for the project.

This item is scheduled for consideration by the City Council on December 1, 2015.

David Wall spoke on this item.

On a motion by Committee Member Sykes and a second by Committee Member Kolstad, to recommend approval of the staff recommendation for Item 5.B.

Ayes – 6 (Esteves, Kolstad, Leonardis, Liccardo, Matthews, Nguyen, Sykes) Nayes – 1 (Gatto) Absent -1 (Oliverio)

C. <u>Second Amendment for Legal Services Agreement for Regional Wastewater</u> Facility Capital Program

Recommendation to:

Adopt a resolution authorizing the City Attorney to execute a Second Amendment to the legal services agreement with Hawkins, Delafield & Wood LLP, to modify the initial term of December 1, 2014 through December 1, 2015, to December 1, 2014 through June 20, 2016, to coincide with the fiscal year appropriations which will increase the amount available in the initial term to \$700,000, and to modify the number of option terms from two terms to one term, without increasing the total maximum amount of compensation of \$1,000,000 available under the contract, subject to appropriation of funds by City Council, to support the San José-Santa Clara Regional Wastewater Facility ("RWF") capital improvement program.

This item is scheduled for consideration by the City Council on December 1, 2015.

On a motion by Committee Member Sykes and a second by Committee Member Leonardis, to recommend approval of the staff recommendation for Item 5.C.

Ayes – 8 (Esteves, Gatto, Kolstad, Leonardis, Liccardo, Matthews, Nguyen, Sykes)
Nayes – 0
Absent -1 (Oliverio)

D. Master Consultant Agreement with CDM Smith Inc. for Engineering and
Construction Management Services for the "7701- Headworks Project" at the
San José- Santa Clara Regional Wastewater Facility
Recommendation to:

Approve a master consultant agreement with CDM Smith Inc. to provide engineering and construction management services for the Headworks Improvements (including Headworks Critical Improvements) and New Headworks at the San José-Santa Clara Regional Wastewater Facility for a period beginning on the date of execution through December 31, 2022 in a total amount not to exceed \$9,670,000, subject to the appropriation of funds.

This item is scheduled for consideration by the City Council on December 1, 2015.

David Wall spoke on this item.

On a motion by Committee Member Leonardis and a second by Committee Member Liccardo, to recommend approval of the staff recommendation for Item 5.D.

Ayes – 8 (Esteves, Gatto, Kolstad, Leonardis, Liccardo, Matthews, Nguyen, Sykes)
 Nayes – 0
 Absent -1 (Oliverio)

E. Report on Bids and Award of Contract for 7946- Process Water Pumps
Replacement Project

Staff Recommendation:

- 1. Award of a construction contract for 7946 Process Water Pumps Replacement Project to the low bidder, Anderson Pacific Engineering Construction, Inc., in the amount of \$382,100
- 2. Approval of a construction contingency of 15 percent in the amount of \$57,315.

This item is scheduled for consideration by the City Council on December 1, 2015.

On a motion by Committee Member Kolstad and a second by Committee Member Liccardo, to recommend approval of the staff recommendation for Item 5.E.

Ayes – 8 (Esteves, Gatto, Kolstad, Leonardis, Liccardo, Matthews, Nguyen, Sykes)
Nayes – 0
Absent -1 (Oliverio)

# F. Execute An Open Purchase Order with ABB Inc.

Authorize the City Manager to:

- (a) Execute an Open Purchase Order with ABB Inc. (Wickliss, OH) for hardware repair, replacement, and rebuilding services for the Distributed Control Systems (DCS) at the Regional Wastewater Facility, for the term December 1, 2015 through November 30, 2016 in an amount not to exceed \$750,000 per year; and
- (b) Execute change orders to purchase additional parts and services subject to the appropriation of funds; and
- (c) Execute additional purchase orders for the subsequent annual purchase of hardware repair, replacement, and rebuilding services through November 30, 2018 subject to the appropriation of funds.

This item is scheduled for consideration by the City Council on December 1, 2015.

On a motion by Committee Member Leonardi and a second by Committee Member Sykes, to recommend approval of the staff recommendation for Item 5.F.

Ayes – 8 (Esteves, Gatto, Kolstad, Leonardis, Liccardo, Matthews, Nguyen, Sykes)
 Nayes – 0
 Absent -1 (Oliverio)

# G. Clean Water State Revolving Fund Loan Application

Staff Recommendation:

Adopt the following resolutions:

- (a) Authorize the City Manager to execute and deliver documents to the State Water Resources Control Board to complete the financial assistance application for a Clean Water State Revolving Fund Loan to finance the Digester and Thickener Facilities Upgrade Project at the San José-Santa Clara Water Pollution Control Plant;
- (b) Declare the official intent of the City of San José to reimburse itself for certain capital expenditures related to the Digester and Thickener Facilities Upgrade Project from the proceeds of the Clean Water State Revolving Fund Financing Agreement Project Funds; and
- (c) Pledge revenues received from the San José Sewer Service and Use Charge, the City of Santa Clara, and from Outside Users that are deposited into the San José-Santa Clara Treatment Plant Fund pursuant to San José Municipal Code Chapter 4.80 and written agreements with these agencies for each agency's share of the capital cost including repayment of any and all Clean Water State

Revolving Fund financings for the Digester and Thickener Facilities Upgrade Project.

This item was considered by Council on November 10, 2015.

On a motion by Committee Member Liccardo and a second by Committee Member Leonardis, to recommend ratification of the staff recommendation for Item 5.G.

Ayes – 8 (Esteves, Gatto, Kolstad, Leonardis, Liccardo, Matthews, Nguyen, Sykes)
Nayes – 0
Absent -1 (Oliverio)

# 6. <u>OTHER BUSINESS/CORRESPONDENCE</u>

A. Request to Provide Presentation at November 19, 2015 Treatment Plant Advisory Committee Meeting

The Tributary Agencies submitted a request to provide a presentation regarding the Master Agreements for Item 5.A.

David Wall spoke on this item.

# 7. STATUS OF ITEMS PREVIOUSLY RECOMMENDED FOR APPROVAL BY TPAC

A. <u>San José – Santa Clara Regional Wastewater Facility Capital Improvement Program</u> Semiannual Status Report

Staff Recommendation:

Accept the semiannual status progress report on the San José-Santa Clara Regional Wastewater Facility Capital Improvement Program (CIP) for the period January through June 2015.

The proposed report was accepted by Council on October 27, 2015.

David Wall spoke on this item.

B. <u>Odor Control Implementation Plan for San José–Santa Clara Regional Wastewater</u> Facility

Staff Recommendation:

(a) Adopt the Odor Control Implementation Plan for the San José-Santa Clara Regional Wastewater Facility (RWF).

- (b) Direct staff to proceed with implementation of the Phase I odor control improvements, except for the odor control improvements for the Digested Sludge Dewatering Facility project, to achieve the adopted odor goals at the approved fence line for the RWF.
- (c) Defer odor control improvements for the Digested Sludge Dewatering Facility project to mitigate on-site impacts at the southern odor fence line for the purpose of promoting development along the southern fence line until alternate funding sources can be identified to pay for the improvements.
- (d) Defer consideration of the Phase II odor control improvements until the decommissioning of the lagoons and drying beds has been completed.
- (e) Defer consideration of the Phase III odor control improvements until the extent of public access at Pond A18 and the proposed shoreline levee has been determined.

Ashwini Kantak and Jay Witherspoon presented on this item.

# The proposed implementation plan was accepted by Council on October 27, 2015.

David Wall spoke on this item.

# C. Purchase of California Carbon Allowances for 2014

## Staff Recommendation:

Adoption of a resolution authorizing the City Manager to negotiate and execute an agreement between the City of San José and a carbon credit seller approved by the California Air Resources Board for the purchase of California Carbon Allowances for the San José-Santa Clara Regional Wastewater Facility as part of the California Cap-and-Trade Program for an amount not to exceed \$320,000.

# The proposed resolution was accepted by Council on October 20, 2015.

David Wall spoke on this item.

# D. <u>First Amendment to the Master Agreement with Haley & Aldrich for Environmental Support Services</u>

# Staff Recommendation:

Approve the First Amendment to the Master Agreement with Haley & Aldrich, for environmental consulting services, increasing the amount of compensation by \$200,000, for a total agreement not to exceed \$450,000, with no extension on the term of the agreement, which expires on March 1, 2017.

The proposed amendment was accepted by Council on October 20, 2015.

David Wall spoke on this item.

# E. <u>Pond A18 and Shoreline Levee</u>

# Staff Recommendation:

Direct staff to enter into discussions with the Santa Clara Valley Water District on the terms of a memorandum of understanding related to Pond A18 and the Shoreline Levee to facilitate the implementation of the Shoreline Levee Study.

# The proposed directive was accepted by Council on October 20, 2015.

David Wall spoke on this item.

# F. Clean Water State Revolving Fund Loan Application Information Memorandum

# Staff Recommendation:

Accept the informational memo regarding the status of the City's application to the State Water Resource Control Board for Clean Water State Revolving fund loan for the Digester and Thickener Facilities Upgrade project.

The recommendation was adopted by Council on November 10, 2015.

All Items under section 7 were approved to note and file.

Ayes – 8 (Esteves, Gatto, Kolstad, Leonardis, Liccardo, Matthews, Nguyen, Sykes) Nayes – 0 Absent -1 (Oliverio)

# 8. <u>REPORTS</u>

# 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.

Ayes – 8 (Esteves, Gatto, Kolstad, Leonardis, Liccardo, Matthews, Nguyen, Sykes)
 Nayes – 0
 Absent -1 (Oliverio)

# 9. <u>MISCELLANEOUS</u>

A. The next TPAC meeting is December 10, 2015, at 4:30 p.m. City Hall, Room 1734.

# 10. PUBLIC COMMENT

David Wall spoke on several items.

# 11. ADJOURNMENT

A. The Treatment Plant Advisory Committee adjourned at 5:45 p.m.

Jamie Matthews, Chair TREATMENT PLANT ADVISORY COMMITTEE





# Capital Improvement Program Monthly Status Report for October 2015

December 3, 2015

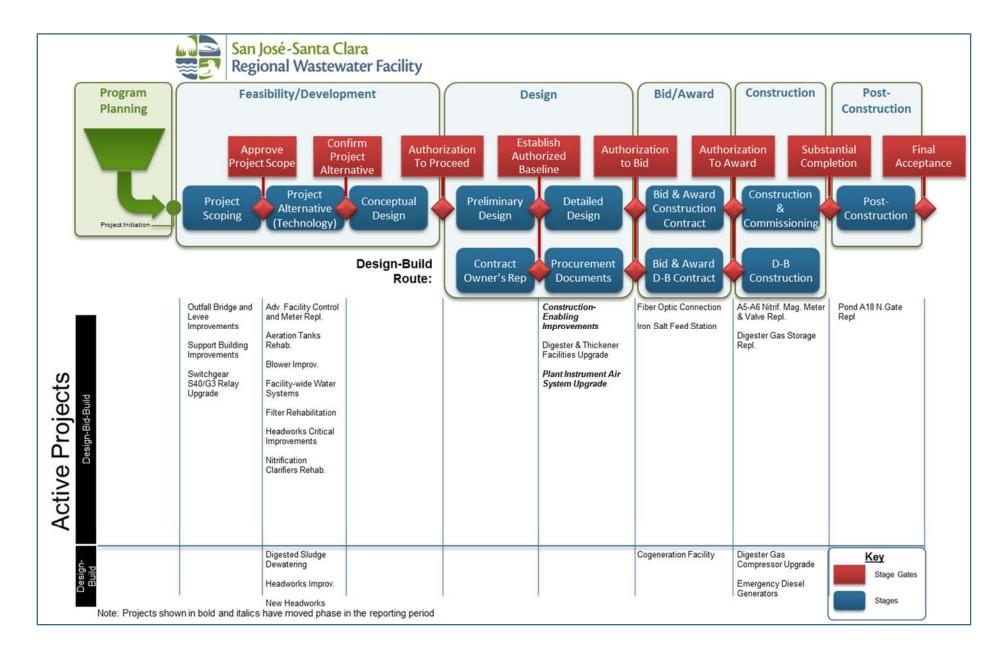
This report provides a summary of the progress and accomplishments of the Capital Improvement Program (CIP) for the San José-Santa Clara Regional Wastewater Facility (Wastewater Facility or RWF) for the period of October 2015.

# **Report Contents**

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# **Project Delivery Model**





# **Program Summary**

#### October 2015

In October, the CIP progressed on multiple fronts, including the successful advancement of one programmatic study and two projects through the Project Delivery Model (PDM) stage gate process. The projects that advanced were Construction-Enabling Improvements; Plant Instrument Air System Upgrade (both Establish Authorized Baseline stage gate); and the Architectural Guidelines Programmatic Study (Final Acceptance stage gate).

The CIP also met a number of key procurement milestones. Staff advertised a Request for Qualifications (RFQ) for the Advanced Facility Control and Meter Replacement Project, which will replace and upgrade critical flow meters, actuators, sensors, controls, and monitoring equipment throughout the RWF.

Staff received construction bids for the Iron Salt Feed Station Project. A contract award is scheduled for January 2016. Demonstrations of the short-listed vendor software packages for the Design and Construction Management Software (DCMS) procurement were held; Staff anticipates an award recommendation in spring 2016. A pre-proposal meeting and consultant site walk for the Nitrification Clarifiers Rehabilitation RFQ were also held this month.

The Digester and Thickener Facilities Upgrade Project reached the 90 percent design submission milestone. Contractor prequalification for the project was completed and a listing of prequalified contractors was posted on BidSync. This project is scheduled to be advertised in January 2016.

Staff presented recommendations from the Odor and Corrosion Strategy Study to the Transportation and Environmental Committee (T&E), Treatment Plant Advisory Committee (TPAC) and City Council (Council) this month. The study's three main elements are: validation of the odor goal assumed in the Plant Master Plan (PMP); establishing an odor fence line at which the adopted odor goal is to be met; and development of an Odor Implementation Plan (OIP) to meet adopted odor goals. All elements of the strategy were approved.

In addition, construction work continued at the RWF for a number of CIP projects including the Emergency Diesel Generators, Digester Gas Compressor Upgrade, and Digester Gas Storage Replacement. The DCS Fiber Optics Network Expansion Project was accepted this month.

#### **Look Ahead**

In November, staff will continue to move forward on numerous efforts related to consultant and design-build procurements for CIP projects including the Cogeneration Facility; Headworks Improvements; New Headworks; Facility Wide Water Systems Improvement; Filter Rehabilitation; Nitrification Clarifiers Rehabilitation; and Advanced Facility Control and Meter Replacement. RFQ documents will be issued for the Aeration and Blower Rehabilitation project in December.

Procurements for a number of programmatic services are also expected to advance, including General Engineering Services; DCMS; Value Engineering and Peer Review Services; System Integration Services; Construction Management Services; and Audit Services. RFQ documents will be issued for Value Engineering and Peer Review Services in November and for Construction Management Services and Audit Services in December.

Staff will advance recommendations to TPAC and Council to approve final proposer ranking and authorize the City Manager to negotiate the design-build contract for the Cogeneration Project and approve a consultant award for the Headworks projects in November and December, respectively. Recommendations on Clean Water State Revolving Fund (SRF) loan applications and proposed amendments to the RWF Master Services Agreement to secure SRF funding will also be presented.

Three projects will seek to advance through stage gates in November: Iron Salt Feed Station (Authorization to Award) and two programmatic studies:Traffic Circulation and Impact Study and Automation Master Plan Guidelines (both Final Acceptance).

The Digester Gas Storage Replacement Project is scheduled to achieve Beneficial Use in late November.

Formal project management training for all CIP project managers and project engineers will continue, with sessions on scheduling planned for November 2015 and January 2016.

The third annual Vendor Open House will take place at the RWF on November 4. Previous CIP open house events were held in 2012 and 2014.



# **Program Highlight – Odor and Corrosion Control Study**

As part of the 2013 Plant Master Plan's (PMP's) strategic vision for the RWF, in August 2014 the City initiated the RWF Odor and Corrosion Control Study. The study's main elements were (1) to validate the odor goal assumed in the PMP; (2) establish an odor fence line at which the odor goal is to be met; and (3) develop an odor control implementation plan.

The study was substantially completed in June 2015 with recommendations to provide odor control improvements for Headworks 2; future Headworks 3; East Primary Clarifiers; Dissolved Air Flotation Tanks; and a future Digested Sludge Dewatering Facility. This facility will replace existing sludge lagoons and drying beds during the Phase 1 (2015-2029) PMP implementation plan. The study also recommended future consideration of optional odor control improvements for the Primary Effluent Equalization Basin and Aeration Basins (BNR1).

The primary focus of the CIP Phase 1 odor control improvements is to enable the City to meet the adopted odor goal at the RWF odor fence line. The figure below shows the odor fence line (solid orange line), the extent of odor impacts after the implementation of Phase 1 (yellow line), and the optional future fence lines (dashed orange lines). The optional fence lines will be considered at a later date based on future use of the land currently used for sludge lagoons and drying beds once these facilities are decommissioned; and on the extent of future public access to Pond A18 and adjacent land. Approximately \$47 million will be needed in capital improvements to implement Phase 1 odor control improvements. The Odor and Corrosion Control Study was completed on time and within budget.



Figure 1—The yellow line shows odor impacts of all potential RWF odor sources within the odor fence line (solid orange line) after Phase 1 odor control implementation.

# **Program Performance Summary**

Eight key performance indicators (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. An additional KPI has been added for FY15-16 to measure project stage gate compliance.

# **Program Key Performance Indicators – Fiscal Year 2015-2016**

	_	Year to Date		Fiscal Year End			
KPI	Target	Actual	Status	Trend	Forecast	Status	Trend
Stage Gates	80%	100%			100%		
_		(9/9) <sup>1</sup>			(28/28)		
Measurement: Percentage Criteria: Red: < 70%: Ambe			at successful	ly pass each st	age gate.		
Schedule	85%	50%			25%		
Gonodaio	0070	(1/2)			(1/4)		
Measurement: Percentage Criteria: Red: < 75%; Ambe			months of ap	proved baselin	e Beneficial Use M	lilestone.	
Budget	90%	100%			83%		
Buugot	0070	$(4/4)^2$			(5/6)		
Measurement: Percentage Criteria: Red: < 80%; Ambe			within the ap	oproved baseli	ne budget.		
Expenditure	\$154M	70M			\$193M³		
Measurement: CIP Fiscal Year 15/16 committed costs. Committed cost meets or exceeds 70% of planned Budget (70% of \$220M = \$154M							
Procurement	80%	100%			100%		
		(6/6)4			(17/17)		
Measurement: Number of consultant and contractor procurements for initiated projects and program-wide services advertised compared to planned for the fiscal year. Criteria: Red: < 70%; Amber: 70% to 79%; Green: >=80%							
Safety	0	0		-	0		<b></b>
Measurement: Number of OSHA reportable incidents associated with CIP construction for the fiscal year.  Criteria: Red: > 2; Amber: 1 to 2; Green: zero incidents							
Environmental	0	0		<b></b>	0		<b></b>
Measurement: Number of permit violations caused by CIP construction for the fiscal year.  Criteria: Red: > 2; Amber: 1 to 2; Green: zero incidents							
Staffing <sup>5</sup>	80%	100% (1/0)		-	86% (25/29)		<b></b>
Measurement: Number of planned positions filled for the fiscal year.  Criteria: Red: < 70%; Amber: 70% to 79%; Green: >=80%							

# **Notes**

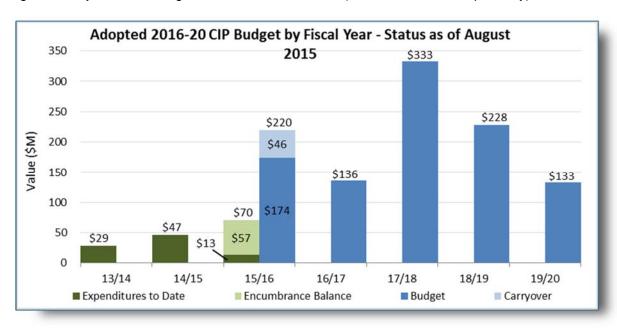
- 1. For the Stage Gate KPI Year to Date (YTD), the number of completed stage gates increased from six to nine. The following projects/studies successful completed their stage gates in October Construction-Enabling Improvements, Plant Instrument Air System Upgrade, and Architectural Guidelines.
- For the Budget KPI YTD, four out of four projects were completed within the approved baseline budget. These four projects are Fire Main replacement –
  Phase III Project, which was accepted in July 2015, Training Trailer Replacement Project, which was accepted in August 2015, Handrail Replacement
  Project, which was accepted in October 2015.
- 3. The FYE Forecast Expenditure increased since the Iron Salt Feed project construction contract and the Cogeneration project Black &Veatch design-build service order amounts are higher than the original budget estimate.
- 4. For the Procurement KPI Year to Date, the number of procurements increased from five to six. The Consultant Services for the Advanced Facility Control & Meter Replacement Project was advertised in October 2015.
- 5. The City Staffing level KPI for planned recruitments for positions that are vacant at the start of the fiscal year, KPI measured quarterly; all other KPIs measured are monthly. KPI measurement does not account for staff turnover throughout the fiscal year.

# **Program Cost Performance**

This section provides a summary of CIP cost performance for all construction projects and non-construction activities for FY15-16 and the 2016-2020 CIP.

# Adopted 2016-2020 CIP Expenditure and Encumbrances

To accommodate the proposed increase in expenditures and encumbrances over the next five years, the City is implementing a long-term financial strategy to fund needed, major capital improvements while minimizing the impact to ratepayers. FY 13-14 and FY14-5 expenditures have been adjusted to reflect the CIP portion of the 512 funding, excluding South Bay Water and Urgent and Unscheduled Cost (\$2.6M and \$1.5M respectively).



#### **Notes**

<u>Expenditure:</u> Actual cost expended, either by check to a vendor or through the City's Financial System for expense such as Payroll or non-personal expenses that do not require a contract.

<u>Encumbrance</u>: Financial commitments, such as purchase orders or contracts, which are committed to a vendor, consultant, or contractor. The encumbrance reserves the funding within the appropriation and project.

Encumbrance Balance: The amount of the remaining encumbrance committed after payments.

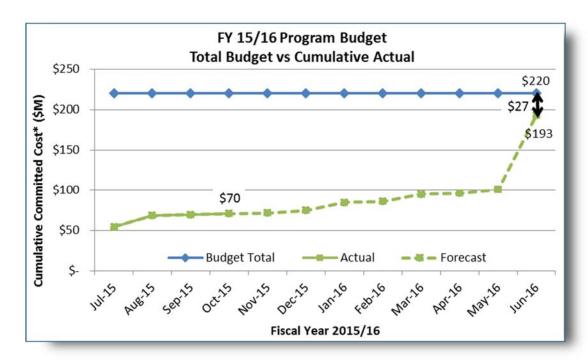
Budget: Adopted FY 2016-2020 Budget. This is new funding plus rebudgeted funds.

<u>Carryover</u>: Encumbrance Balances at the end of a FY become Carryover Funding. This is different from rebudgets, in that this is done automatically in order to utilize the funding previously committed, but not yet paid.



# Fiscal Year 2015-2016 Program Budget Performance

The fiscal year program budget is \$220 million. The budget amount of \$220 million represents the 2015-2016 budget of \$174 million plus carryover of \$46 million. The budget amount excludes Reserves, Ending Fund Balance, South Bay Water Recycling, Public Art, and Urgent and Unscheduled Rehabilitation items.



<sup>\*</sup>Committed costs are expenditures and encumbrance balances, including carryover (encumbrance balances from the previous fiscal year).



# **Project Performance**

There are currently five active projects in the construction or post-construction phase with a further 19 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 tables 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 Performance – Baselined Projects**

Project Name	Phase	Estimated Beneficial Use Date <sup>1</sup>	Cost Performance	Schedule Performance
Pond A18 Northern Gate Structure	Post-Construction	Aug 2015 <sup>3</sup>	N/A <sup>4</sup>	N/A <sup>4</sup>
Digester Gas Storage Replacement	Construction	Nov 2015		
A5-A6 Nitrification Mag. Meter & Valve Replacement	Construction	Mar 2016	•	•
Emergency Diesel Generators	Construction	Aug 2016		
Digester Gas Compressor Upgrade	Construction	Sep 2016		

# KEY:

Cost:	On Budget	>1% Over Budget
Schedule:	On Schedule	>2 months delay

#### **Notes**

- 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. Beneficial Use dates are being reviewed as part of project schedule reviews.
- An explanation of cost and schedule variances on specific projects identified in this table is provided on page 12.
- 3. Actual Beneficial Use Date
- 4. Due to the emergency nature of the Pond A18 Northern Gate Replacement project, cost and schedule performance measurement criteria have not been applied.

# **Project Performance – Pre-Baselined Projects**

Project Name	Phase	Estimated Beneficial Use Date <sup>1</sup>
Fiber Optic Connection	Bid & Award	Jul 2016
Iron Salt Feed Station	Bid & Award	Mar 2017
Cogeneration Facility	Procurement	Mar 2019
Construction-Enabling Improvements	Design	Nov 2016
Plant Instrument Air System Upgrade	Design	Jan 2018
Digester & Thickener Facilities Upgrade	Design	Jun 2019
Headworks Critical Improvements	Feasibility/Development	Apr 2017
Blower Improvements <sup>2</sup>	Feasibility/Development	Jan 2019
Switchgear S40/G3 Relay Upgrade	Feasibility/Development	Jan 2020
Adv. Facility Control & Meter Replacement	Feasibility/Development	May 2020
Headworks Improvements	Feasibility/Development	Jan 2021
Outfall Bridge and Levee Improvements	Feasibility/Development	Jun 2021
Facilitywide Water Systems Improvements	Feasibility/Development	Dec 2021
Digested Sludge Dewatering Facility	Feasibility/Development	Dec 2021
Filter Rehabilitation	Feasibility/Development	Feb 2022
New Headworks	Feasibility/Development	Jun 2022
Nitrification Clarifiers Rehabilitation	Feasibility/Development	Aug 2022
Aeration Tanks Rehabilitation <sup>2</sup>	Feasibility/Development	Sep 2023
Support Building Improvements	Feasibility/Development	Jan 2027

#### **Notes**

- 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. Beneficial Use dates are being reviewed as part of project schedule reviews.
- 2. The Aeration Tanks and Blower Rehabilitation project has been split into two separate projects: (1) Blower Improvements and (2) Aeration Tanks Rehabilitation.

# Significant Accomplishments

The projects below are described under different "packages." In the CIP, packages are groups of projects organized within the same treatment process area.

## **Biosolids Package**

#### Digester and Thickener Facilities Upgrade

The detailed design continued this month, with the design consultant submitting 90 percent completion level design documents. The project team completed the prequalification process for preselection of qualified construction contractors. Staff posted a listing of prequalified contractors to BidSync.

# Digester Gas Storage Replacement

The contractor addressed outstanding construction items and ordered parts for upgrading the davit crane system. The contractor also prepared a startup and commissioning plan, with a tentative start and commissioning date of early November 2015.

## **Facilities Package**

#### Cogeneration Facility

On October 7, an eight-member panel conducted design-builder interviews and selected CH2M Hill/Overaa as the top-ranked firm. Staff will recommend approval of the proposer ranking and authorization to negotiate the contract to TPAC on November 19 and Council on December 1.

## **Liquids Package**

#### Iron Salt Feed Station

This month, staff received project bids, held a stage gate for approval of the bids, and obtained approval pending reallocation of funds from other projects and Council approval. Staff anticipates that the contract will be recommended to TPAC and Council for award in January 2016.

#### Advanced Facility Control and Meter Replacement

The RFQ was advertised on October 14, 2015 and proposals are due on November 18, 2015.

## Power and Energy

#### Digester Gas Compressor Upgrade

Construction of the new compressor building has been completed. The forms for the pipe bridge columns, cooling tower, and chiller housekeeping pads have been formed. Construction is 40 percent complete.

#### Plant Instrument Air System Upgrade

The 50 percent design review was completed and the project successfully passed the Establish Baseline stage gate in October. The consultant has been developing the 90 percent detailed design, which is due in February 2016.

#### **Programmatic Studies**

## **Architectural Guidelines**

Staff presented final Architectural Guidelines at the Final Acceptance stage gate meeting in October. A plan was proposed and accepted to conduct briefings for staff and consultants on guideline details.

## Automation Master Plan (AMP) and Process Control Approach

Staff received the AMP implementation plan and prepared comments for modifications by the consultant. Staff prepared material for final acceptance of the AMP at a stage gate meeting in early November.

# Traffic Circulation and Impacts

Staff reviewed and returned final comments to the consultant on the Traffic Management Plan. The study is still on schedule to be completed in November.

#### Flood Protection Study

Staff completed review of the draft Flood Protection Guidelines for future RWF projects. One additional alternative will be evaluated, which will move study completion to January 2016.



# **Explanation of Project Performance Issues**

# A5-A6 Nitrification Magnetic Meter & Valve Replacement

In September 2014, during startup, the project team discovered that the actuators that had been specified and installed were incompatible with the available power supply. Engineering staff determined it would be cost more to modify the electrical system than to order and install compatible actuators. In addition, O&M staff requested that the actuators match the custom actuators used in the other 14 clarifiers. The City pursued various options to resolve the issue and has recently requested a proposal from the contractor to install new actuators based on a revised specification. The existing funding will not likely be sufficient and the project will need Council approval for additional funds. Lead time of between 14 to 16 weeks will be required for ordering custom-built actuators. Contractor mobilization, actuator installation, wiring, troubleshooting and punch list-sign off will take a minimum of three weeks. Beneficial Use is expected by March 2016.

# **Digester Gas Compressor Upgrade**

During the course of the design portion of this design-build project, it was determined that some of the equipment for this project would need to meet the explosion-proof classification of Class 1, Division 1 of the National Electric Code. This classification was more stringent than what was originally called for in the bid documents. Cost and schedule impacts were received from contractor, Anderson Pacific. In June, Council approved additional project funding and a three-month time extension due to a motor upgrade. Beneficial Use is expected by September 2016.

# **Digester Gas Storage Replacement**

During a comprehensive review of the gas storage tank design submitted by the design consultant, Brown and Caldwell, it was noted that the removable piston legs used in the subcontractor's proposed design did not meet design standards and could cause problems with the tank's intended use. The contractor was granted a three-month, no-cost time extension to September 28 to complete design modifications to the gas holder support structure. Several owner-requested changes were evaluated during the pre-startup period, resulting in three additional change orders for additional minor work. All work requiring welding or other spark-producing activities was completed prior to the introduction of gas. The tank has successfully passed its required leakage test and is currently being commissioned. The project is within budget, and Beneficial Use is expected by the end of November 2015.



# **Project Profile**

### **Construction-Enabling Improvements Project**

An increased volume of CIP-related construction activity is placing new demands on existing RWF infrastructure. This \$3.8M project will provide the necessary infrastructure to support increased construction activity across the RWF site. It will coordinate demands on traffic, security, and space while minimizing impacts to ongoing facility operations.

A major feature of the Construction-Enabling Improvements Project is a new "construction only" guarded entrance at the intersection of Zanker Road and Mike Tocce Lane along the southern boundary of the site. This entrance will allow worker and truck traffic to more safely and efficiently approach RWF site parking and staging areas from Highway 237 without disrupting daily plant operations.

The project also provides worker parking; contractor staging areas; a security and badging trailer for workers; security lighting; and fencing along with utility connections to support temporary contractor trailers. In addition, the project provides trailer space for the CIP Construction Management Team adjacent to the existing temporary trailer site at the Environmental Services Building.

As a cost-savings measure, existing infrastructure will be reused wherever possible.

Designed by the City's Public Works staff along with a local consultant, the project will commence construction during the summer of 2016.

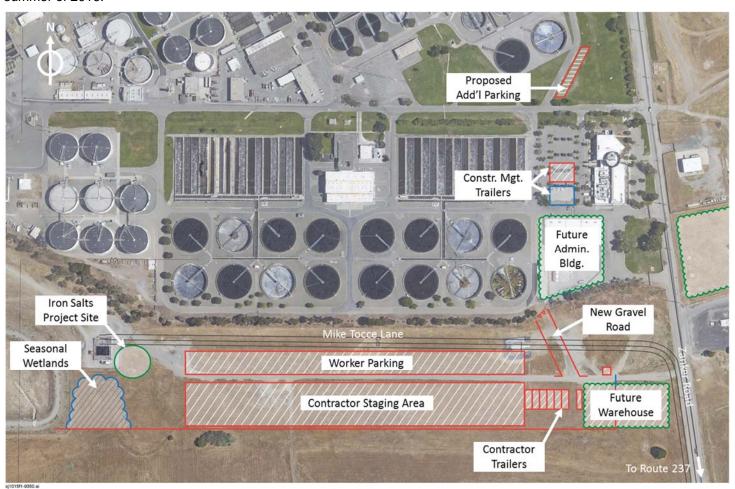


Figure 2 - Construction-Enabling Improvements Project Site Layout

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# Regional Wastewater Facility Treatment – Current Treatment Process Flow Diagram

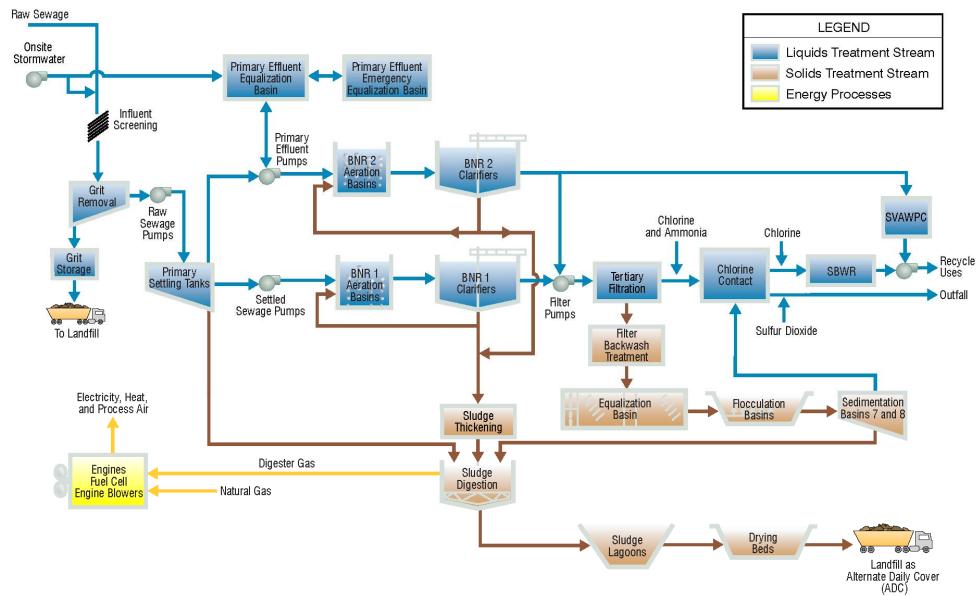


Figure 3 — Current Treatment Process Flow Diagram



# Regional Wastewater Facility Treatment – Proposed Treatment Process Flow Diagram

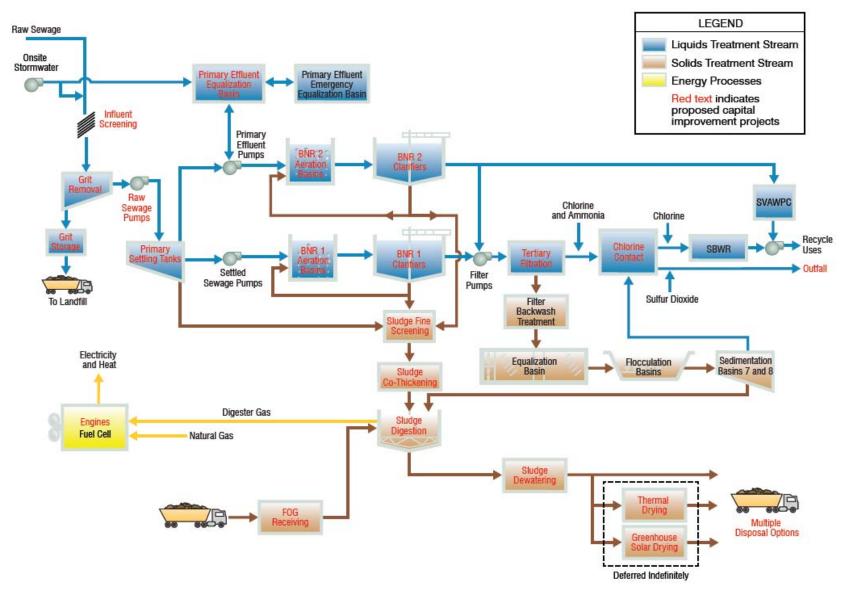


Figure 4 — Proposed Treatment Process Flow Diagram



# **Active Construction Projects – Aerial Plan**



Figure 5 - Active Construction Projects



T&E AGENDA: 12/07/2015 ITEM: (d) 5



# Memorandum

TO: TRANSPORTATION AND ENVIRONMENT COMMITTEE

FROM: Kerrie Romanow

SUBJECT: SEE BELOW

**DATE:** November 20, 2015

Approved '

D.DSyl

Date

11/24/15

**SUBJECT:** 

SAN JOSÉ-SANTA CLARA REGIONAL WASTEWATER FACILITY TEN-YEAR FUNDING STRATEGY REPORT UPDATE

# **RECOMMENDATION**

Accept the status report on the Ten-Year Funding Strategy for the San José-Santa Clara Regional Wastewater Facility Capital Improvement Program, and approve staff's recommendation of projects for which to seek State Revolving Fund loans.

# **OUTCOME**

Provide an update to the Transportation and Environment (T&E) Committee on the status of the funding strategies used to cover the cost of the ten-year, \$1,400,000,000 Regional Wastewater Facility Capital Improvement Program, and confirmation of Council approval of staff's approach to State Revolving Fund financing.

# **EXECUTIVE SUMMARY**

This staff report on the status of the Ten-Year Funding Strategy for the San José-Santa Clara Regional Wastewater Facility Capital Improvement Program provides an update on the activities that have occurred since Council approval of the funding strategy on June 2, 2015. This report also includes criteria used to evaluate the eligibility and practicability of funding certain projects through State Revolving Fund (SRF) loans.

In the last six months, staff met with and provided regular updates and correspondence to Santa Clara and Tributary Agency representatives on the status and next steps related to terms of and establishing a Commercial Paper (CP) program, SRF loans, and long-term debt. In October, draft Master Agreement amendments needed to secure SRF loans were sent to all tributary agencies, with responses from the agencies requested by November 20, 2015. Also in October, staff from the Tributary Agencies provided red lined Master Agreements to jointly request specific, substantive changes to the existing Master Agreements which will require time for

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careful evaluation and additional costs to negotiate a more comprehensive amendment to the Master Agreement. In February 2015, the SRF loan process was initiated upon submission of the General Information Package for the Digester and Thickener Facilities Upgrade (Digester) Project. The final application for the Digester Project will be submitted in November. Staff is working with external financial advisors to secure CP or similar short-term financing program, and continuing to work on the Master Agreement amendments to facilitate financing.

# **BACKGROUND**

The San José-Santa Clara Regional Wastewater Facility Ten-Year Funding Strategy was presented to and approved by the Treatment Plant Advisory Committee (TPAC) on May 14, 2015 and by the San José City Council on June 2, 2015. This funding strategy was comprised of a ten year funding forecast, guiding principles and fiscal best practices, and preliminary funding scenarios. The estimated forecast indicated annual expenditures ranging from \$150,000,000 to \$320,000,000 in the ten year period. Capital costs over the ten year period were estimated at \$1,400,000,000. As indicated in the Ten-Year Funding Strategy memo and report, funding future capital improvements at the Regional Wastewater Facility (RWF) will require a combination of cash and debt financing, with the City, Santa Clara, and the Tributary Agencies potentially taking on a substantial amount of debt in future years. With approval of the Ten-Year Funding Strategy, Council approved the following recommendations:

- Approve staff recommendation to have all agencies contribute to a 60-day operating reserve beginning in FY 2016-17; direct staff to continue to work with all agencies on optimal reserve levels for operational purposes.
- Direct staff to pursue State Revolving Fund loans for RWF capital improvement projects to the maximum extent possible.
- Direct staff to continue to work with City of Santa Clara (Santa Clara) and all tributary agencies to confirm participation in a commercial paper program and/or long term revenue bonds through the Clean Water Financing Authority (CWFA), by August 2015.
- Direct staff to work with Santa Clara and all Tributary Agencies to amend the 1983 Master Agreement to incorporate terms related to operating reserve contributions, as well as terms related to financing of the RWF improvements through the CWFA.

# <u>ANALYSIS</u>

Since TPAC recommended and Council approved the Ten-Year Funding Strategy, staff engaged representatives from Santa Clara and the tributary agencies to provide regular progress updates and requested feedback. In the last six months, staff met with and provided regular updates and correspondence to Santa Clara and agency representatives, including the following:

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May 14, 2015 & June 2, 2015	Ten-Year Funding Strategy approved
May 18-22, 2015	Meetings with each agency to discuss their funding needs
May 19, 2015	Ten year forecast of CIP and O&M allocations for all
1.200/ 13, 2011	agencies based on two scenarios: cash contributions only and
	participation in a commercial paper program distributed to
7	each agency
May 20, 2015	Estimated cash flow for CIP expenditures and encumbrances,
	by quarter, for the next three fiscal years distributed to each
-2.7.1	agency
June 25, 2015	Estimated first quarter CIP billing for each agency distributed
July 6, 2015	Commercial Paper Term Sheet and FAQs emailed to agencies
August 19, 2015	RWF CIP Ten Year Funding Strategy, Agency Participation
	in External Financing memo and Participation Form
	distributed to Santa Clara and tributary agencies
August 31, 2015	Deadline for agencies to submit to San Jose their External
	Financing Participation Form
September 10, 2015	TPAC Information Memo – Status of RWF CIP: update on
	status of the ten year funding strategy
September 11, 2015	Extended deadline to September 15, 2015 for agencies to
	submit to San Jose their External Financing Participation
	Form
October 1, 2015	TPAC Information Memo – Clean Water State Revolving
	Fund Loan Application – providing the status of the SRF
	Loan application process
October 22, 2015	Master Agreement amendments distributed to Burbank,
	Cupertino, Milpitas and West Valley
November 4, 2015	Staff presentation to Cupertino Sanitation District and
	Burbank Sanitary District Boards

The following sections provide information on the progress achieved on each Council directive related to the RWF CIP Ten Year Funding Strategy.

# **Operating Reserves**

Included in the proposed Master Agreement amendments is the requirement that each agency fund its proportional share of operating reserves. Beginning in fiscal year 2016-2017, each agency would be required to proportionally fund its portion of a 60-day operating reserve, pending approved Master Agreement amendments.

Each agency's proportionate share of the 60-day operating reserve would be invoiced on the July 1, 2016 bills to Santa Clara and the tributary agencies should the proposed Master Agreement amendments be approved.

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# State Revolving Fund Loans

The Clean Water State Revolving Fund Loan Program (CWSRF or SRF) is designed to help California meet the goals of the Federal Clean Water Act (33 U.S.C.A. 1251 et seq.). The program is funded by federal grants and State bond funds. The purpose of the SRF loan program is to implement the Clean Water Act and various state laws by providing financial assistance for the construction of facilities or implementation of measures necessary to address water quality problems and to prevent pollution of the waters of the State. SRF loans are intended to fund construction of wastewater treatment facilities, to implement the nonpoint source (NPS) projects or programs, and to fund storm water treatment and other point source projects.

San José, Santa Clara, and the tributary agencies all expressed interest in participating in SRF loans. In February, 2015, the State Revolving Fund (SRF) loan process was initiated upon submission of the General Information Package for the Digester and Thickener Facilities Upgrade (Digester) Project. The Technical Package was submitted on August 26, 2015, and the Environmental Package was submitted on November 13, 2015. At the November 10, 2015 meeting, Council authorized the City Manager to execute and deliver documents to the State Water Resources Control Board to complete the Financial Security Package, which will be submitted by the end of November 2015. The City anticipates receiving pre-approval of the loan for the Digester Project by spring 2016.

In submitting the SRF loan application, staff from San José and Santa Clara discussed various benefits and limitations in applying for this and future SRF loans either jointly through the Clean Water Financing Authority or San José applying solely. In order to meet the timeline to obtain loan approval for the Digester Project contract award in spring 2016, the loan application was submitted by San José as opposed to a joint application with Santa Clara or through the San José-Santa Clara Clean Water Financing Authority (CWFA). Regardless of how the loan application is submitted, all agencies could be eligible to participate in SRF loan funding. Significant considerations in determining whether San José would apply solely for this and future SRF loans, or jointly with Santa Clara, include the following:

- Applying agency (ies) must pledge Sanitary Sewer revenues for repayment of the loan.
   Initial conversations with the State indicate that all Sanitary Sewer revenues would need to be pledged by San José, or by both San José and Santa Clara in the case of a joint filing. Staff will be working with the State to try and pledge only those Sanitary Sewer revenues for the RWF rather than pledging all Sanitary Sewer revenue which also funds the collection system.
- The State indicated its preference that existing debt be on parity with any new SRF loans, and any future, non-SRF debt be subordinate to the new SRF loans. Staff will work with the State to determine if certain revisions can be made to the State's requirements.
- Joint application filing for SRF loan(s) would go through the San José-Santa Clara Clean CWFA. The city councils of San José and Santa Clara are required to approve the issuance of bonds or other forms of debt by the CWFA. Sanitary Sewer revenues from

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both agencies would be pledged through CWFA and future loans for which San José or Santa Clara apply would also need to go through CWFA, and require approval by the City Councils of both cities.

As directed by TPAC and Council in May and June 2015 respectively, staff will be pursuing SRF loans to the maximum extent possible. It is important to note, however, that some projects are not eligible for this type of funding such as the Lagoons and Drying Beds Retirement (\$34,382,000) and the Record Drawings (\$14,264,000) projects. Projects with lower project costs or short asset life are eligible but are not necessarily good candidates, given the long term nature of the debt and the reporting and tracking requirements associated with the funding, in proportion to the actual cost of the project. These include Outfall Bridge and Levee Improvements (\$9,828,000), Construction Enabling Improvements (\$3,781,000), Advanced Facility Control and Meter Replacement (\$14,992,000), and Pilot for Alternative Filter Technology (\$3,258,000) because of their short asset lives and the S40 Switchgear and G3 Relay Upgrade (\$2,109,000), Plant Instrument Air System Upgrade (\$5,403,000), and Headworks Critical Improvements (\$2,487,000) because of the low total project costs.

In addition to the nine projects listed above, four projects will not access SRF funding because they are either in or about to be in construction. These include the Iron Salt Feed Station (\$7,193,000), the Digester Gas Compressor Upgrade (\$15,528,900), the Digester Gas Storage Replacement (\$3,167,610), and the Emergency Diesel Generators (\$20,141,000). In 2013, staff completed an initial assessment of SRF funding. However, since the State program at that time only offered loans for 20-year terms and had restrictions related to seniority of debt, this funding source was not pursued. In January 2014, the program was revamped to enable 30-year loan terms and there was also some indication on flexibility related to other existing debt. Although these changes made SRF funding a viable financing tool for the program, the four projects that were already advanced in their design could not be considered for SRF funding. In summary, the City will be applying for SRF financing for 19 out of 32 projects in the CIP for an approximate dollar value of \$1,244,741,500. The 13 projects not recommended for SRF funding total approximately \$136,534,510. Please see the attached Draft San José-Santa Clara Regional Wastewater Facility Capital Improvement Program State Revolving Fund Matrix for additional information (Attachment A).

It should be noted that the adopted 2016-2020 did not incorporate SRF funding since the receipt of this funding is not guaranteed. If SRF funding is approved for the Digester Project, the next five-year CIP budget will need to be adjusted accordingly, and will also require a true-up of past years' budgets. For purposes of budget planning, until SRF funding is approved for specific projects, cash funding or other type of financing will be assumed to fund these projects. Furthermore, since SRF funding is provided on a reimbursement basis for incurred expenses, San José, Santa Clara, and each of the Tributary Agencies will need to cover upfront costs either through cash or short term financing.

Over the next few months, the City will work with the State to determine if certain revisions can be made to the State's requirements relating to the priority of current outstanding debt, and the

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scope of the pledge of revenues. In addition, staff will continue working with the staff from the City of Santa Clara on the details for this and future SRF loan applications.

# Commercial Paper

As stated earlier, staff has been working with representatives from the City of Santa Clara and the tributary agencies so as to enable each agency to evaluate and finalize a funding plan for its portion of the RWF CIP. To bridge the gap until long-term financing is in place, or to cover initial expenses to be reimbursed by SRF loans, a short-term funding instrument, such as Commercial Paper program, will be used. Staff provided Santa Clara and the tributary agencies with a term sheet providing general terms related to a Commercial Paper program. Please see Attachment B. The Tributary Agencies are interested in participating in CP or some other shortterm financing instrument. However, each agency expressed this interest with caveats, and that they would make final decisions upon learning the terms and conditions of the short-term financing. This information will not be available until the City applies for these loans. San José does not require short-term financing for the current fiscal year; Santa Clara does not anticipate needing short-term financing. To finance a portion of each agency's participation in Commercial Paper or other short-term financing instruction, Master Agreement amendments have been proposed to incorporate general repayment terms and to extend the term of the Master Agreement through the anticipated repayment term. These agreements must be finalized by early 2016 to providing sufficient time to secure commercial paper or other short term financing instrument by spring 2016.

The Finance Department is working with an external financial advisor to begin the process to secure CP or some other short-term financing instrument by spring 2015.

San José does not require CP until fiscal year 2016-17 and will only establish a CP program if a Tributary Agency confirms participation and provides approved Master Agreement amendments by January 2016.

# Long Term Debt Financing

As indicated in the Ten-Year Financing Strategy report, additional operating reserves equivalent to a minimum of 365 days of Operating and Maintenance costs will be required for long-term bond financing. Santa Clara, Milpitas, and West Valley Sanitation District have indicated that they will not be participating in long term revenue bond financing. The remaining agencies (Burbank Sanitary District, County Sanitation District 2-3, and Cupertino Sanitary District) have indicated a desire to maximize financing opportunities. Because the larger agencies are not interested in partnering in long-term bond financing, the City of San José would be responsible for funding a greater percentage of the 365 day reserves. This would place a disproportionate hardship on San José rate payers. As stated in the July 29, 2015 Info Memo, due to the RWF dedicated reserve requirements, San José's participation in joint long-term bond financing was contingent on participation by Santa Clara and all Tributary Agencies. Since Santa Clara, West

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Valley Sanitation District, and Milpitas have now indicated they will not need bond financing, staff recommends all agencies begin working with their financial advisors to develop alternate long term funding plans since long term bonds will likely not be issued through CWFA. Utilization of commercial paper or other short-term financing instrument will provide each agency with more time to secure alternative long-term funding.

If San José secures long-term bonds independently, existing Sanitary Sewer reserves could count toward the 365 day operating reserves, requiring significantly less new dollars from San José rate payers to fund this reserve. Additionally, if all projects deemed eligible receive SRF loans, issuance of long-term bond financing may not be necessary.

It is important to note that in order to issue tax-exempt bonds for a capital program; the IRS requires that the issuer must have a reasonable expectation that bond proceeds will be spent within three years. As noted in the May 2015 ten-year funding strategy staff report, many of the large capital projects in the RWF CIP program are currently in the early feasibility phase and, therefore, do not have their scopes, budgets, and schedules fully defined. If Santa Clara and the Tributary Agencies separately issue bonds in early planning phases of a project, there is a risk that they may not be able to spend the bond proceeds within the required three-year window. Initial financing discussions between San José, Santa Clara, and Tributary agency staff recognized this as a substantive issue. San José will be aligning its bond issuances with refined project schedules and using cash or short term financing to enable funding early phases of projects and would recommend all agencies similarly plan to address this issue.

#### Master Agreement Amendments

In order to secure SRF loans for the Tributary Agencies, amendments to the current master agreements are needed since they expire on January 1, 2031. The term must be extended through the payback period for SRF financing obtained by San José, or Santa José and Santa Clara, on behalf of the tributary agencies. Additionally, the Master Agreement amendments must incorporate language related to a CP or similar program and enable agency borrowing in these programs. Based on prior feedback from multiple Tributary Agencies, this program is needed prior to April 1, 2016.

In October 2015, staff from the Tributary Agencies provided red lined Master Agreements to jointly request specific, substantive changes to the existing Master Agreements, beyond those discussed over the past year related to securing financing. These changes will need careful evaluation and consideration by the two owners as they would materially change the rights and obligations of the owners. Additionally, if there are to be material revisions to the Master Agreements, the two owners may want to consider additional changes. Staff is estimating about \$300,000 to \$1,000,000 in additional costs to negotiate a more comprehensive amendment to the Master Agreement. If the two owners and Tributary Agencies are amenable to incurring these additional costs, staff can bring forward a budget proposal as part of the fiscal year 2016-17 budget process. At the December 1, 2015 City Council meeting, Council will consider staff recommendations related to the Agency requests for additional Master Agreement amendments.

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November 20, 2015

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

Staff is working with external financial advisors to secure CP or similar short-term financing program, and continuing to work on the Master Agreement amendments to facilitate financing. If Tributary Agencies wish to access SRF or CP financing, staff will bring Master Agreement amendments forward in early 2016. Approval for the selected short-term financing option will be requested after procurement and negotiations are completed this winter. If the project award for the Digester project and the SRF loan agreement is awarded, it will be brought forward to Council in spring 2016.

#### PUBLIC OUTREACH/INTEREST

This memorandum will be posted on the City's website for the December 7, 2015 Transportation and Environmental Committee Agenda; will be heard at the December 10 Treatment Plant Advisory Committee meeting; and the January 12, 2016 City Council Meeting.

#### **COORDINATION**

This memo has been coordinated with City Attorney's Office, the City Manager's Budget Office and the Finance Department.

#### **CEQA**

Not a project, File No.PP10-069(a), City Organizational & Administrative Activities.

/s/ Ashwini Kantak for KERRIE ROMANOW Director, Environmental Services

For questions please contact Ashwini Kantak, Assistant Director, Environmental Services at (408) 975-2553, or Derek Hansel, Assistant Director, Finance at (408) 535-7041.

Attachment A: San José-Santa Clara Regional Wastewater Facility Capital Improvement Program State Revolving Fund Matrix

Attachment B: Commercial Paper Indicative Terms and Conditions

T&E Committee: 12/072015

Item: (d) 5

#### ATTACHMENT A

San José-Santa Clara Regional Wastewater Facility Capital Improvement Program State Revolving Fund Matrix

	#	Project Name	Total Project Estimate	for SRF?	Notes
	-	Headworks Critical Improvements	2,487,000	No	Short-term asset life
Preliminary	_	Headworks Improvements New Headworks	28,055,000 96,026,000	Yes	
	3	New Headworks	96,026,000	165	
D.:	4	East Primary Rehabilitation, Seismic Retrofit, and Odor Control	113,204,000	Yes	
Primary	5	Iron Salt Feed Station	7,193,000	No	In progress; previous decision made
	_	A college Toules & Discours Debabilitation	119,297,000	Yes	
	_	Aeration Tanks & Blower Rehabilitation Aeration Basin Future Modifications	50,277,000	Yes	
Secondary		Nitrification Clarifier Rehabilitation	50,506,000	Yes	
Coochaary	-			Yes	
	9	Secondary Clarifier Rehabilitation	26,559,000	res	
	10	Filter Rehabilitation	33,434,000	Yes	
		Alternative Filter Technology Field Verification	3,258,000	No	Pilot project
Tertiary		Final Effluent Pump Station and Stormwater Channel Improvements	47,538,000	Yes	
,,	_	New Disinfection Facilities	56,977,000	Yes	
	14	Outfall Bridge and Levee Improvements	9,828,000	No	Short-term asset life
		Digested Sludge Dewatering Facility	69,730,000	Yes	1
	16	Digester and Thickener Facilities Upgrade	107,670,000	Yes	
Biosolids	17	Additional Digester Facility Upgrades	64,475,000	Yes	
	18	FOG Receiving	12,850,000	Yes	
	19	Lagoons and Drying Beds Retirement	34,382,000	No	Not eligible for SRF
		Digester Gas Compressor Upgrade	15,528,900	No	In construction
		Digester Gas Storage Replacement	3,167,610	No	In construction
Electrical & Power		Cogeneration Facility	87,492,000	Yes	
Licolina a r arrar	23	Emergency Diesel Generators	20,141,000	No	In construction
	24	S40 Switchgear and G3 Relay Upgrade	2,109,000	Yes	
Automation	25	Advanced Facility Control and Meter Replacement	14,992,000	Yes	
Automation	23	Providence 1 doing Control and Microl Propincement	11,002,000	, 00	I.
	26	Construction-Enabling Improvements	3,781,000	No	Temporary installation / short term asset life
	27	Facility-Wide Water Systems Improvements	15,756,000	Yes	
	28	Plant Instrument Air System Upgrade	5,403,000	No	In progress; previous decision made
Site Facility	29	Support Building Improvements	54,734,000	Yes	3
	30	Tunnel Rehabilitation	27,719,000	Yes	·
	31	Yard Piping and Road Improvements	134,421,000	Yes	
Non-Construction	32	Record Drawings	14,264,000	No	Not eligible for SRF

T&E Committee: 12/07/2015 Item: (d) 5

#### ATTACHMENT B

### CITY OF SAN JOSÉ, AS ADMINISTERING AGENT OF THE SAN JOSÉ-SANTA CLARA CLEAN WATER FINANCING AUTHORITY (CWFA)

Regarding the Capital Improvement Plan (CIP) and Ten-Year Funding Strategy for the San José-Santa Clara Regional Wastewater Facility (RWF)

Proposal to Establish Commercial Paper Program for the Benefit of the Cities of San José and Santa Clara (Owners of the RWF) and the Other Users of the RWF (the Tributary Agencies)

#### **Indicative Terms and Conditions**

July 6, 2015

#### **FACILITY INFORMATION**

Issuer/Borrower: San José-Santa Clean Water Financing Authority (CWFA).

Debt Issue: CWFA Sewer Revenue Commercial Paper (CP) Notes (the "Notes").

**Security:** Pledge of revenues derived by the CWFA under amendments to the

Improvement Agreement. Amendments to the Master Agreements between

San José/Santa Clara and the Tributary Agencies will be required to

incorporate repayment obligations of each agency.

LOC Provider: San José will procure the provision of a letter of credit ("LOC") from one or

more banks through a competitive process.

**Commitment** Estimated \$200,000,000-\$300,000,000 of issuance capacity (plus 270

Amount: days' interest coverage at agreed-upon maximum rate, as typically

Credit Risks: Rating downgrades resulting in increased interest rates (bank downgrade) or

increased LOC fee (CWFA downgrade).

Alternative Interim Other interim financing alternatives exist and will be considered in

**Financing Products:** comparison with the benefits of a commercial paper program. One example

is a revolving credit agreement that functions like CP notes but where draws

are funded/loaned directly by the bank.

#### ESTIMATED COSTS

**LOC Commitment** 

ent

0.70% fixed rate (inclusive of \$250 draw fees) payable to bank quarterly in

arrears. Term of LOC = 3 years.

Program
Establishment:

Fee:

\$300,000 (e.g., note counsel, bank counsel, financial advisor fees, rating

agency reviews).

**Interest Rates:** 

1%-3%. Variable interest rate as determined by market. Notes mature in 270 days or less. (Current indicative rates for highly rated notes are (a) 0.05%, based on SIFMA weekly tax-exempt rate index and (b) 0.44%, based

on 6-month (taxable) LIBOR rate.)

**Cost Allocation:** 

CIP costs, including debt-related costs, allocated based on pro-rata contractual flow capacity of those participating in CP program, unless

otherwise amended.

<sup>&</sup>lt;sup>1</sup> As assumed in Ten-Year Funding Strategy/Financing Plan for San José 2015-2016 Proposed Budget and Forecasted Allocations by Agency presented to Treatment Plant Advisory Committee on March 12, 2015 and, as supplemented, approved by San José City Council on May 19, 2015.



### Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL FROM: Kerrie Romanow

SUBJECT: SEE BELOW

**DATE:** November 23, 2015

Approved

D.DSyL

Date

12/3/15

SUBJECT:

MASTER CONSULTANT AGREEMENT WITH KENNEDY/JENKS CONSULTANTS, INC. FOR ENGINEERING SERVICES FOR THE #7448-FILTER REHABILITATION PROJECT AT THE SAN JOSE-SANTA CLARA REGIONAL WASTEWATER FACILITY

#### RECOMMENDATION

Approve a Master Consultant Agreement with Kennedy/Jenks Consultants, Inc. to provide engineering services for the "#7448 – Filter Rehabilitation Project" at the San José-Santa Clara Regional Wastewater Facility from the date of execution through June 30, 2023, in a total amount not to exceed \$4,950,000, subject to the appropriation of funds.

#### OUTCOME

Approval of the master consultant agreement with Kennedy/Jenks Consultants, Inc. ("K/J") will provide professional engineering services for the condition assessment, alternatives analysis, design and construction of the Filter Rehabilitation Project ("Project") at the San José Santa Clara Regional Wastewater Facility¹ ("RWF"). Approval of this master consultant agreement will not result in any physical changes to the environment as Council will need to take additional actions before construction on the Project commences.

#### **EXECUTIVE SUMMARY**

The RWF's tertiary filtration process is one of the final steps of the wastewater treatment process, and is a necessary component of complying with the RWF's regulatory permit requirements. The RWF's tertiary filtration process operates at an annual average flowrate of 110 million gallons per day ("MGD"), and is the largest tertiary filtration facility in the western United States. The elements of the filtration process and much of their equipment were constructed in the 1970s and 1980s and require significant refurbishment. The Project will

<sup>&</sup>lt;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.

November 23, 2015

Subject: Master Consultant Agreement with Kennedy/Jenks Consultants, Inc. for Filter Rehabilitation

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provide critical improvements to the filtration process to enable continued regulatory compliance and operational reliability by rehabilitating its structural, mechanical, electrical, and instrumentation/control elements. The extent of these critical improvements will be determined following a comprehensive condition assessment to be performed by an engineering consultant.

Staff has completed the evaluation of the only Statement of Qualifications ("SOQ") submitted in response to a Request for Qualification ("RFQ"). It was determined that the responding engineering consultant, K/J, met the qualifications and experience requirements set forth in the RFQ. Staff has negotiated an agreement with K/J that is being recommended for award. The master agreement will have a total maximum compensation of \$4,950,000 and a term that ends June 30, 2023. After execution, K/J would proceed with specified tasks under the master consultant agreement upon issuance of service orders by the City. K/J will be compensated based on actual hourly wages times a multiplier; the multiplier will not change during the term of the agreement.

#### **BACKGROUND**

#### **Existing Filtration Unit Process Description**

The RWF currently has a tertiary filtration unit process ("filtration process") which consists of 16 granular media filters and associated ancillary equipment. The filtration process is one of the final treatment steps at the RWF that results in the production of effluent that is in compliance with the RWF's National Pollutant Discharge Elimination System ("NPDES") regulatory permit. The filtration process consists of the following major components:

- Filter Influent Pump Station;
- Supplemental Filter Influent Pump Station;
- Filter Building:
- Disinfection Tanks;
- Backwash Equalization Tanks; and
- Backwash Treatment Tanks.

Attachment A shows the location of the major filtration process components at the RWF.

The components of the filtration process and much of their equipment were constructed in the 1970s and 1980s, and require significant refurbishment. The filtration process has been operating at an annual average flow rate of 110 MGD, which is discharged to the San Francisco Bay by way of the artesian slough.

Over the last several years, RWF staff have observed a steady decline in the operational effectiveness of the filtration process. In particular, a significant amount of equipment has been deteriorating and requires increased operator attention and more frequent maintenance. Filter media is continuously dislodged from the filter cells, requiring frequent addition or "topping off"; process piping is corroded and requires repair or replacement; process valves do not fully seat, compromising the facility's ability to isolate individual cells for repair or maintenance (in

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2014 the RWF implemented an urgent project to replace three (3) backwash isolation valves that had failed and were beyond repair); the existing filter backwashing procedures are relatively inefficient and result in a high level of energy consumption.

In 2007 the City commissioned a cursory level condition assessment (Infrastructure Condition Assessment Report, CH2MHill) that documented observations on the condition of all the major elements of the filtration process. Significant sections of the report included statements in regards to much of the filtration process as being in "fair to poor" condition. Some of the more notable areas were related to seismic reliability, process mechanical (pumps, valves, piping) components, and electrical and instrumentation/controls equipment.

As a consequence of the age of the filtration process, much of the mechanical, structural, electrical, and instrumentation/controls equipment is nearing the end of its useful life, needing repair or replacement. Although regular maintenance activities have been implemented to repair certain components over the last several years, a more comprehensive project is needed to address critical deficiencies and improve operational reliability and access..

As part of the Plant Master Plan adopted by the Council on November 19, 2013, it was concluded that the filtration process will continue to be needed to ensure discharge into the San Francisco Bay is within the requirements set by the RWF's NPDES permit.

#### Filter Rehabilitation Project Description

The Project consists of implementing critical improvements to the filtration process to enable continued regulatory compliance and long-term operational reliability. In particular, this Project will rehabilitate the structural, mechanical, electrical, and instrumentation/controls components of the filtration process. The extent of the critical improvements will be determined following a comprehensive condition assessment to be performed by an engineering consultant. The Project will be delivered following the traditional design-bid-build method. The improvements are limited to the RWF filtration process, and do not extend to or affect the South Bay Water Recycling infrastructure.

#### Consultant Services

The engineering consultant's scope of services will include the following tasks:

- Condition assessment and alternatives analysis;
- Detailed design of critical improvements to the filtration process;
- Engineering services during construction and post-construction; and
- Technology pilot (optional task).

The first task involves a comprehensive condition assessment of structural, process mechanical, electrical, and instrumentation systems, along with an evaluation of the operability and maintainability of the filtration process. This assessment will identify and prioritize what specific areas need repairs or replacement. The consultant will then develop alternatives for implementing the necessary improvements to the filtration process. These alternatives will

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consider the selection of products and materials, construction sequencing strategies, and opinions of the probable cost of construction. Ultimately, the consultant will present an analysis of alternatives for improvements that help to ensure continued regulatory compliance and operational flexibility, and that fall within the allocated construction budget. As part of this task, the consultant will also study and prepare a long-term plan for the RWF's filtration process. To do so, the consultant will need to consider the implications of potential changes to regulatory requirements.

The next key task will be to design the critical improvements. This task will cover the Project's conceptual, preliminary, and detailed design stages. The objective of this task will be to develop documents suitable for bidding by construction contractors. The engineering consultant will provide support during the bidding period. During construction, the consultant will review submittals by the construction contractor and assist the City respond to requests for information by the construction contractor. The consultant will also provide as-needed engineering support during post-construction and commissioning activities for the Project.

If as part of the alternatives analysis it is determined that the City should consider a long-term technology that differs from the current technology utilized for filtration at the RWF, the consultant may be tasked with designing and setting up a technology pilot. Although this pilot will not eliminate the need for the Project and the need to implement immediate improvements to the filtration process, it will provide tangible data to inform a future filter project if needed.

The consultant will also be expected to prepare, through a subconsultant, the environmental review documents required under the California Environmental Quality Act ("CEQA") prior to the City Council's award of the construction contract for the Project and issuance of any service orders under the master consultant agreement for construction-related services. The consultant will also be tasked with obtaining the necessary permits for the Project, such as those identified through the CEQA review process, and assisting the City obtain financing from the Clean Water State Revolving Fund ("SRF").

#### **ANALYSIS**

The City issued a RFQ on June 2, 2015 seeking engineering, design, construction support, testing and commissioning services for the Project.

A non-mandatory conference and site tour attended by three prospective engineering firms was held on June 23, 2015. K/J was the only firm that submitted a SOQ by the July 14, 2015 deadline. Staff believes that the lower than expected response to the RFQ might be attributed to some firms electing to reserve their resources for other upcoming capital improvement projects at the RWF. Additionally, another competing interest may be several other large ongoing wastewater treatment and utility programs in the greater bay area that have concurrent and significant rebuild efforts underway. Some of these other agencies include, but are not limited to the City of San Mateo, the City of San Francisco (San Francisco Public Utilities Commission), the City of Sunnyvale, and the City of Sacramento (Sac Regional).

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A panel consisting of representatives from the Environmental Services Department's RWF Wastewater Management and Capital Improvement Program divisions and a senior engineering representative from a local wastewater treatment facility evaluated K/J's SOQ. The panel determined that K/J met the qualifications and experience requirements set forth in the RFQ. Evaluation of the SOQs was based on the following criteria:

Description	Weight
Responsiveness	Pass/Fail
Expertise	12%
Experience	12%
Approach	26%
Cost Form	10%
Local Business Enterprise	5%
Small Business Enterprise	5%
Interview	30%
TOTAL	100%

Based on SOQ evaluation, K/J's score was as follows:

Rank	Firm	Expertise	Experience	Approach	Cost	LBE	SBE	Interview	Total*
NA	K/J	9.33	9.00	22.33	10	5	0	NA	55.67

<sup>\*</sup>Out of 70 maximum points possible

K/J qualified as a Local Business Enterprise (LBE) but not as a Small Business Enterprise (SBE).

Although interviews were not held, staff met with proposed team members to further confirm K/J is qualified to perform the consultant services for this Project. Based on the results of SOQ evaluation and this meeting, staff recommends approval of a master consultant agreement with K/J. K/J is regionally recognized for their expertise in revitalizing wastewater filters and possesses relevant design and construction support resources in California. As part of their proposal, K/J presented the City with several projects of similar size and scope to the Project that confirmed their extensive engineering experience in large, tertiary filters in California.

Staff conducted extensive negotiations with K/J to arrive at a fee structure and maximum compensation in the amount of \$4,950,000. Professional services to be provided under this agreement include project management, preliminary engineering, design development, and engineering support services during bidding, construction, start up and commissioning. Individual service orders will be drafted and negotiated for the different phases of work.

The agreement's total maximum compensation of \$4,950,000 represents approximately 22% of the current estimated construction cost of approximately \$22,082,000 which staff considers to be within industry standard for design-bid-build projects. The total Project budget is currently \$36,692,000, which includes the filter technology pilot work. K/J will be compensated based on actual hourly wages times a multiplier of 3.2. The term of agreement will be from the date of

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execution through June 30, 2023. It is important to note that the scope of work to be completed under this contract is primarily intended to focus only on addressing near-term critical rehabilitation needs to ensure ongoing operational reliability of the filtration process; and, to the extent possible, some longer term considerations will be taken into account to ensure that any investments made today will not go to waste and/or conflict with the future new filter complex project. While not currently included in the RWF's Ten-Year CIP (through 2025), there is a separate New Filter Complex project contemplated beyond the ten-year horizon that is intended to address future flows, technology advancements and process improvements, and potential changes in regulatory requirements.

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

No additional follow-up action with the Council is expected at this time. All service orders issued under this master consultant agreement will be reported to the Treatment Plant Advisory Committee ("TPAC") on the monthly summary of procurement and contract activity. A progress report on this and other RWF capital projects will be made to the Transportation and Environment Committee and the Council on a semiannual basis.

#### POLICY ALTERNATIVES

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

**Pros:** The Project would give City staff an opportunity to gain experience in the design of large wastewater treatment facilities.

**Cons:** A lack of existing capacity and expertise will result in significant delays completing this Project and subsequently create delays to other pending capital projects.

**Reason for not recommending:** The complexity of implementing a project of this size requires the use of specialized expertise and experience in large wastewater treatment facilities and tertiary filters.

Alternative #2: Direct City Staff to reissue the RFQ for the Project's consultant services.

**Pros:** Reissuing the RFQ for this Project's consultant services could result in more than one firm submitting a SOQ and could provide the City with an alternate firm to negotiate an agreement with if negotiations with the highest ranking firm are not successful.

**Cons:** Another round of the procurement process will result in significant delays in implementing much-needed critical improvements to the filtration process. The filtration process is a necessary step in complying with the RWF's NPDES regulatory permit, and failure of its components may compromise the RWF's ability to meet the permit requirements.

**Reason for not recommending:** The City would take on additional risk by rebidding the consultant services for the Project as there is no guarantee other qualified firms will submit a SOQ. K/J may also not re-submit their SOQ.

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Subject: Master Consultant Agreement with Kennedy/Jenks Consultants, Inc. for Filter Rehabilitation

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#### PUBLIC OUTREACH

This memorandum will be posted on the City's website for the December 15, 2015 City Council meeting agenda. This item is scheduled to be heard at the TPAC meeting on December 10, 2015.

#### COORDINATION

This memorandum has been coordinated with the City Manager's Budget Office, the City Attorney's Office, and the Department of Planning, Building and Code Enforcement.

#### FISCAL/POLICY ALIGNMENT

This Project is consistent with the Council-approved budget strategy to focus on rehabilitating aging RWF infrastructure, improve efficiency and reduce operating costs. This Project is also consistent with the budget strategy principle of focusing on protecting our vital core services.

#### COST SUMMARY/IMPLICATIONS

1	AMOUNT OF RECOMMENDATION:	\$4,950,000
1.	THE CONTRIBUTION.	Ψ 1, 20,000

2. COST ELEMENTS OF MASTER AGREEMENT:

Alternatives Analysis	\$800,000
Conceptual Design	\$250,000
Preliminary and Detailed Design	\$2,400,000
Bid and Award Services	\$75,000
Engineering Services During Construction	\$1,000,000
Technology Pilot (Optional)	\$350,000
SRF Assistance	\$75,000
TOTAL AGREEMENT AMOUNT	\$4,950,000

- 3. SOURCE OF FUNDING: 512 San José-Santa Clara Treatment Plant Capital Fund
- 4. FISCAL IMPACT: This Project is funded through the San José-Santa Clara Treatment Plant Capital Fund and will have no impact on the San José-Santa Clara Treatment Plant Operating Fund (Fund 513).

#### **BUDGET REFERENCE**

The table below identifies the fund and appropriation to fund the master consultant agreement recommended as part of this memorandum.

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Subject: Master Consultant Agreement with Kennedy/Jenks Consultants, Inc. for Filter Rehabilitation

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Fund #	Appn.	Appn. Name	Total Appn.	2015-2016 Adopted Capital Budget Page	Last Budget Action (Date, Ord. No.)
512	7227	Filter Rehabilitation	\$1,361,000	V – 177	06/23/2015 Ord. No. 29589

Services performed by K/J under this agreement will be authorized by service orders. An appropriation is not required for execution of the master consultant agreement, but is required for each service order authorized under this agreement. The appropriation listed above is included in the 2015-2016 Adopted Capital Budget and may be used for service orders issued in 2015-2016. Future funding is subject to appropriation and, if needed, will be included in the development of future year budgets during the annual budget process.

#### **CEQA**

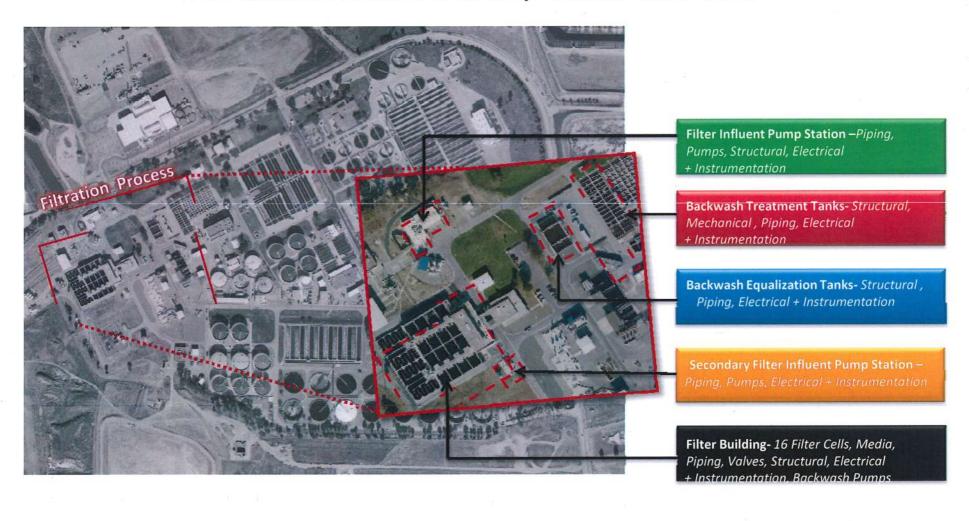
Statutory Exemption, CEQA Guidelines Section 15262, Feasibility and Planning Studies. The recommended master consultant agreement with K/J is statutorily exempt under CEQA Guidelines Section 5262, Feasibility and Planning Studies. Although the proposed master consultant agreement includes providing services during future construction activities, which are not exempt, service orders for such work will not be issued unless and until the appropriate CEQA review and approval is completed for the Project.

/s/ KERRIE ROMANOW Director, Environmental Services

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

Attachment

#### **Attachment A: Location of Tertiary Filtration Unit Process**



SAN JOSE/SANTACLARA WATER POLLUTION CONTROL PLANT

November 16, 2015

TO: Treatment Plant Advisory Committee

SJ: Tributary Agencies Available Plant Capacity - 2015

The Master Agreements require that the Treatment Plant Advisory Committee file annually with the legislative bodies of San Jose, Santa Clara and member agencies a report on plant capacity. The attached report, Tributary Agencies Available Plant Capacity - 2015, has been prepared to satisfy this requirement and to identify each agency's 2015 plant capacity as well as available (unused) capacity.

It is recommended that the Treatment Plant Advisory Committee approve the attached report.

Sincerely,

Kerrie Romanow

Director

**Environmental Services Department** 

Attachment

# CITY OF SAN JOSE ENVIRONMENTAL SERVICES DEPARTMENT SAN JOSE/SANTA CLARA WATER POLLUTION CONTROL PLANT TRIBUTARY AGENCIES' AVAILABLE PLANT CAPACITY - 2015

November 2015

#### CITY OF SAN JOSE ENVIRONMENTAL SERVICES DEPARTMENT SAN JOSE/SANTA CLARA WATER POLLUTION CONTROL PLANT

#### TRIBUTARY AGENCIES' AVAILABLE PLANT CAPACITY - 2015

This analysis was prepared to comply with the terms of the Master Agreements which require that the operational capacity and productive use of the treatment plant be determined annually. Tables I through IV contain the Plant Capacity, the 2015 Peak Week (5-day average) Flow, and the Remaining Available Capacity for the entire plant and for each individual member for 2015.

#### 2015 PLANT CAPACITY

The nominal capacity of the treatment plant during the 2015 peak week is 167 MGD. The agencies' capacity rights in the 167 MGD plant are shown on Tables I through IV and were determined in accordance with the provisions of the Master Agreements.

#### 2015 PEAK WEEK FLOW

The 2015 peak dry weather flow of 96.15 MGD occurred during the week of August 31 - September 4. Tables I through IV contain the agencies' flow and loadings for the 2015 peak week which were obtained from the following sources:

- WEST VALLEY SANITATION DISTRICT Wastewater Flow Report dated 9/17/15, submitted by the District.
- CUPERTINO SANITARY DISTRICT Metered Flow Reports.
- CITY OF MILPITAS Metered Flow Reports dated 11/3/15, submitted by the City
- COUNTY SANITATION DISTRICT 2-3 2015-2016 Revenue Program.
- BURBANK SANITARY DISTRICT 2015-2016 Revenue Program.
- CITY of SAN JOSE and CITY of SANTA CLARA The 2015 Peak Week flow and loadings remaining after subtracting the other agencies' reported flows and loadings are attributed to San Jose and Santa Clara as joint owners of the facilities. These were allocated, in accordance with the 1959 Agreement, to the two cities based on current assessed valuation ratios of 82.601% for San Jose and 17.399% for Santa Clara.

#### 2015 AVAILABLE CAPACITY

The Agencies' peak week flows and loadings were subtracted from their capacities in the 167 MGD plant to obtain their 2015 available capacities.

#### TABLE I

#### CITY OF SAN JOSE

### ENVIRONMENTAL SERVICES DEPARTMENT SAN JOSE/SANTA CLARA WATER POLLUTION PLANT TRIBUTARY AGENCIES' AVAILABLE PLANT CAPACITY - 2015

#### **FLOW**

Agency		2015 Plant Capacity MGD	2015 Peak Week Flow MGD	Available Capacity MGD
San Jose	82.601%	108.885	61.178	47.707
Santa Clara	17.399%	22,935	12.887	10.048
Subtotal	100.000%	131.820	74.065	57.755
West Valley Sanitation District	(1) (3)	11.697	10.260	1.437
Cupertino Sanitary District	(4)	7.850	3.897	3.953
City of Milpitas	(3) (4)	14.250	6.708	7.542
County Sanitation District 2-3	(2)	0.983	0.983	0.000
Burbank Sanitary District		0.400	0.237	0.163
Subtotal		35.180	22.085	13.095
Total		167.000	96.150 (5)	70.850

- (1) Reflects transfer of capacity from West Valley Sanitation District to San Jose/Santa Clara resulting from annexations as of June 2015.
- (2) In January 1985, County Sanitation District 2-3 entered into an agreement with the Cities of San Jose and Santa Clara, as joint owners of the plant, electing not to participate in a fixed capacity. Capacity is determined annually in accordance with the methods and restrictions prescribed in the agreement.
- (3) Reflects transfer of capacity from West Valley Sanitation District to Milpitas in July 2006.
- (4) Reflects transfer of capacity from Cupertino to Milpitas in January 2009.
- (5) The 2015 peak week flow of 96.15 MGD represents a decrease of 11.88 MGD from the 2014 peak week flow. This reduction is attributed to severe drought conditions which have resulted in the reduction of infiltration to the sewers and to water conservation efforts.

#### **TABLE II**

#### CITY OF SAN JOSE

#### ENVIRONMENTAL SERVICES DEPARTMENT SAN JOSE/SANTA CLARA WATER POLLUTION PLANT TRIBUTARY AGENCIES' AVAILABLE PLANT CAPACITY - 2015

#### **BOD**

Agency			2015 Plant Capacity KLBS/D	2015 Peak Week Flow KLBS/D	Available Capacity KLBS/D
San Jose		82.601%	384.827	155.340	229.487
Santa Clara		17.399%	81.060	32.721	48.339
Subtotal		100.000%	465.887	188.061	277.826
West Valley Sanitation District	(1) (3)		28.611	22,483	6.128
Cupertino Sanitary District	(4)		16.419	9.818	6.601
City of Milpitas	(3) (4)		27.249	16.082	11.167
County Sanitation District 2-3	(2)		2.019	2.019	.000
Burbank Sanitary District			.815	.487	.328
Subtotal			75.113	50.889	24,224
Total			541.000	238.950	302.050

- (1) Reflects transfer of capacity from West Valley Sanitation District to San Jose/Santa Clara resulting from annexations as of June 2015.
- (2) In January 1985, County Sanitation District 2-3 entered into an agreement with the Cities of San Jose and Santa Clara, as joint owners of the plant, electing not to participate in a fixed capacity. Capacity is determined annually in accordance with the methods and restrictions prescribed in the agreement.
- (3) Reflects transfer of capacity from West Valley Sanitation District to Milpitas in July 2006.
- (4) Reflects transfer of capacity from Cupertino to Milpitas in January 2009.

#### TABLE III

#### CITY OF SAN JOSE

# ENVIRONMENTAL SERVICES DEPARTMENT SAN JOSE/SANTA CLARA WATER POLLUTION PLANT TRIBUTARY AGENCIES' AVAILABLE PLANT CAPACITY - 2015

#### SUSPENDED SOLIDS

Agency			2015 Plant Capacity KLBS/D	2015 Peak Week Flow KLBS/D	Available Capacity KLBS/D
San Jose		82.601%	341.706	162.831	178.875
Santa Clara	-	17.399%	71.977	34.298	37.679
Subtotal		100.000%	413.683	197.129	216.554
West Valley Sanitation District	(1) (3)		27.173	19.363	7.810
Cupertino Sanitary District	(4)		16.299	7.842	8.457
City of Milpitas	(3) (4)		25.990	11.707	14.283
County Sanitation District 2-3	(2)		2.002	2.002	.000
Burbank Sanitary District			.853	.477	.376
Subtotal			72.317	41.391	30.926
Total			486.000	238.520	247.480

- (1) Reflects transfer of capacity from West Valley Sanitation District to San Jose/Santa Clara resulting from annexations as of June 2015.
- (2) In January 1985, County Sanitation District 2-3 entered into an agreement with the Cities of San Jose and Santa Clara, as joint owners of the plant, electing not to participate in a fixed capacity. Capacity is determined annually in accordance with the methods and restrictions prescribed in the agreement.
- (3) Reflects transfer of capacity from West Valley Sanitation District to Milpitas in July 2006.
- (4) Reflects transfer of capacity from Cupertino to Milpitas in January 2009.

#### TABLE IV

#### CITY OF SAN JOSE

# ENVIRONMENTAL SERVICES DEPARTMENT SAN JOSE/SANTA CLARA WATER POLLUTION PLANT TRIBUTARY AGENCIES' AVAILABLE PLANT CAPACITY - 2015

#### **AMMONIA**

Agency		-	2015 Plant Capacity KLBS/D	2015 Peak Week Flow KLBS/D	Available Capacity KLBS/D
San Jose	•	82.601%	33.930	21.264	12.666
Santa Clara		17.399%	7.147	4.479	2.668
Subtotal		100.000%	41.077	25.743	15.334
West Valley Sanitation District	(1) (3)		2.825	2.501	.324
Cupertino Sanitary District	(4)	•	2,287	.932	1.355
City of Milpitas	(3) (4)		2.847	1.461	1.386
County Sanitation District 2-3	(2)		.267	.267	.000
Burbank Sanitary District			.297	.066	.231
Subtotal			8.523	5.227	3.296
Total			49,600	30,970	18.630

- (1) Reflects transfer of capacity from West Valley Sanitation District to San Jose/Santa Clara resulting from annexations as of June 2015.
- (2) In January 1985, County Sanitation District 2-3 entered into an agreement with the Cities of San Jose and Santa Clara, as joint owners of the plant, electing not to participate in a fixed capacity. Capacity is determined annually in accordance with the methods and restrictions prescribed in the agreement.
- (3) Reflects transfer of capacity from West Valley Sanitation District to Milpitas in July 2006.
- (4) Reflects transfer of capacity from Cupertino to Milpitas in January 2009.