

SAN JOSÉ/SANTA CLARA TREATMENT PLANT ADVISORY COMMITTEE

JAMIE MATTHEWS, CHAIR
SAM LICCARDO, VICE CHAIR
PIERLUIGI OLIVERIO, MEMBER
DAVID SYKES, MEMBER
MARJORIE MATTHEWS, MEMBER

PAT KOLSTAD, MEMBER
JOSE ESTEVES, MEMBER
STEVEN LEONARDIS, MEMBER
JOHN GATTO, MEMBER

AGENDA/TPAC

4:30 p.m.

April 9, 2015

Room 1734

1. **ROLL CALL**

2. **APPROVAL OF MINUTES**

A. March 12, 2015

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

4. **DIRECTOR'S REPORT**

A. Directors Report (verbal)
• Monthly Progress Report

B. TPAC Meeting Location And Time Change

Staff Recommendation: Provide direction to staff on future meeting time and location for the monthly Treatment Plant Advisory Committee meetings.

5. **AGREEMENTS/ACTION ITEMS**

A. Second Amendment to the Master Agreement with CDM Smith for Engineering Services for the San José-Santa Clara Water Pollution Control Plant Improvement Program

Staff Recommendation: Approve the Second Amendment to the Master Agreement with CDM Smith, for engineering services for the San José-Santa Clara Regional Wastewater Facility, increasing the amount of compensation by \$75, 000, for a total agreement amount not to exceed \$1,575,000, and extending the term from June 30, 2015 to December 31, 2016.

The proposed Amendment is scheduled for Council consideration on April 14, 2015.

B. South Bay Water Recycling Strategic Master Plan Report

Staff Recommendation:

1. Accept the South Bay Water Recycling (SBWR) Strategic and Master Planning report for near term reliability projects for the South Bay Water Recycling Program; and
2. Direct staff to evaluate opportunities to collaborate with the Santa Clara Valley Water on the long term strategies identified in the Strategic and Master Planning report for potable reuse of recycled water

The proposed Master Plan is scheduled for Council consideration on April 28, 2015.

C. Wholesale Recycled Water Rates for FY 2015-16

Staff Recommendation: Adopt a resolution to standardize the discount rate at \$105 per acre foot for the wholesale recycled water service rates for the South Bay Water Recycling Program effective July 1, 2015, superseding Resolution No. 76964.

The proposed Resolution is scheduled for Council consideration on April 21, 2015.

6. **OTHER BUSINESS/CORRESPONDENCE**

- A. Letter from the City of Milpitas regarding Recycled Water Availability and Reliability
- B. Informational Memorandum - Pond A18 Emergency Replacement Update
- C. Informational Memorandum – Status of Regional Wastewater Facility Ten-Year Funding Strategy

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

- A. Resolution of the San José City Council declaring and finding that public interest and necessity demand the immediate procurement and award of engineering and construction contracts to perform emergency replacement of Pond A18's northern gate structure located at the San José/Santa Clara Regional Wastewater Facility without competitive bidding

Staff Recommendation: Place the following items on the agenda for the March 3, 2015 City Council Meeting:

1. Accept the staff report detailing the current status of the San José/Santa Clara Regional Wastewater Facility's Pond A18's northern gate structure, the likelihood for failure, the consequences of failure, and the plan for immediate action to remove and replace the structure.
2. Adopt a resolution by four-fifths of the City Council as required by California Public Contract Code 22050:
 - a. Declaring and finding that, based on substantial evidence, public interest and necessity demand the immediate procurement and award of engineering and construction contracts to perform emergency replacement of the San José/Santa Clara Regional Wastewater Facility's Pond A18's northern gate structure without competitive bidding and that the emergency replacement will not permit a delay resulting from a competitive solicitation for bids, and that the action is necessary to respond to the emergency;
 - b. Delegating authority to the Directors of Environmental Services and Public Works to negotiate and award the engineering and construction contracts necessary to replace the northern gate structure in order to protect Pond A18 and levees in an amount not to exceed \$1 million.

The proposed Resolution was heard and approved by Council on March 3, 2015.

B. San José – Santa Clara Regional Wastewater Facility Staffing Status Report

Staff Recommendation: Accept this status report on the staffing situation at the San José-Santa Clara Regional Wastewater Facility

The proposed Status Report was approved by Council on March 24, 2015.

C. Continuation Amendments to Master Agreements for Consultant Services with CH2M Hill and GHD for Engineering Services for the San José-Santa Clara Regional Wastewater Facility Capital Improvement Program

Staff Recommendations:

1. Approve the Third Amendment to the Master Agreement with CH2M HILL, for engineering services for the San José-Santa Clara Regional Wastewater Facility, extending the term from June 30, 2015 to December 31, 2017, at no additional cost to the City.
2. Approve the Second Amendment to the Master Agreement with GHD, for engineering services for the San José-Santa Clara Regional Wastewater Facility, extending the term from June 30, 2015 to December 31, 2016, at no additional cost to the City.

The proposed Amendments were approved by Council on March 17, 2015.

D. Project Delivery and Procurement Strategy for the San José-Santa Clara Regional Wastewater Facility

Staff Recommendation:

1. Accept this staff report on the proposed project delivery and procurement strategy for the San José-Santa Clara Regional Wastewater Facility's Capital Improvement Program and refer to the full Council for approval.
2. Recommend that Council adopt a resolution that approves the use of low bid design-build and progressive design-build as potential delivery methods for projects in the San José-Santa Clara Regional Wastewater Facility's Capital Improvement Program and that delegates authority to the Directors of Environmental Services and Public Works, or their designees, to make a determination on the appropriate delivery method for each project.

The proposed Project Delivery and Procurement Strategy was approved by Council on March 24, 2015.

E. San José-Santa Clara Regional Wastewater Facility Ten-Year Funding Strategy

Staff Recommendation: Accept the staff report on the San José-Santa Clara Regional Wastewater Facility Ten-Year Funding Strategy

TPAC directed staff to come back with additional information. Staff will return to TPAC in May, 2015 and the Council date is yet to be determined.

8. REPORTS

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

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

9. MISCELLANEOUS

- A.** The next TPAC meeting is May 14, 2015, at 4:30 p.m. City Hall, Room 1734.
(This is subject to change pending discussion of item 4.B.)

10. OPEN FORUM

11. ADJOURNMENT

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

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

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

**MINUTES OF THE
SAN JOSE/SANTA CLARA
TREATMENT PLANT ADVISORY COMMITTEE**
City Hall, City Manager's Office, 17th Floor, Room 1734
Thursday, March 12, 2015 at 4:30 p.m.

1. **ROLL CALL**

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

Chair: Jamie Matthews; **Committee members:** Pierluigi Oliverio, Margie Matthews, Jose Esteves, Angela Chen (alternate), Pat Kolstad, David Sykes, Steven Leonardis

Absent: Committee Members: John Gatto, Sam Liccardo

2. **APPROVAL OF MINUTES**

A. February 12, 2015

Item 2.A was approved to note and file.

Ayes – 8 (Matthews, Oliverio, Matthews, Esteves, Chen, Marsalli, Kolstad, Sykes, Leonardis)

Nays – 0

David Wall spoke on this item.

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

4. **DIRECTORS REPORT**

A. Directors Verbal Report:

- Monthly Progress Report

5. **AGREEMENTS/ACTION ITEMS**

A. Resolution of the San José City Council declaring and finding that public interest and necessity demand the immediate procurement and award of engineering and construction contracts to perform emergency replacement of Pond A18's northern gate structure located at the San José/Santa Clara Regional Wastewater Facility without competitive bidding

Staff Recommendation: Place the following items on the agenda for the March 3, 2015 City Council Meeting:

1. Accept the staff report detailing the current status of the San José/Santa Clara Regional Wastewater Facility's Pond A18's northern gate structure, the likelihood for failure, the consequences of failure, and the plan for immediate action to remove and replace the structure.

2. Adopt a resolution by four-fifths of the City Council as required by California Public Contract Code 22050:
 - a. Declaring and finding that, based on substantial evidence, public interest and necessity demand the immediate procurement and award of engineering and construction contracts to perform emergency replacement of the San José/Santa Clara Regional Wastewater Facility's Pond A18's northern gate structure without competitive bidding and that the emergency replacement will not permit a delay resulting from a competitive solicitation for bids, and that the action is necessary to respond to the emergency;
 - b. Delegating authority to the Directors of Environmental Services and Public Works to negotiate and award the engineering and construction contracts necessary to replace the northern gate structure in order to protect Pond A18 and levees in an amount not to exceed \$1 million.

The proposed Resolution was heard and approved by Council on March 3, 2015.

TPAC Recommendation: Report back with information, if any, regarding Pond A18's purchase agreement mentioning maintenance requirements in reference to the gate structure.

Mr. David Wall spoke on this item.

B. San José – Santa Clara Regional Wastewater Facility Staffing Status Report

Staff Recommendation: Accept this status report on the staffing situation at the San José-Santa Clara Regional Wastewater Facility

The proposed Status Report is scheduled for Council consideration on March 24, 2015.

On a motion by Committee Member Leonardis and a second by Committee Member Oliverio, TPAC unanimously approved to adopt the staff recommendation in item 5.B.

Ayes – 8 (Matthews, Oliverio, Matthews, Esteves, Chen, Marsalli, Kolstad, Sykes, Leonardis)

Nays – 0

Mr. David Wall spoke on this item.

C. Continuation Amendments to Master Agreements for Consultant Services with CH2M Hill and GHD for Engineering Services for the San José-Santa Clara Regional Wastewater Facility Capital Improvement Program

Staff Recommendations:

1. Approve the Third Amendment to the Master Agreement with CH2M HILL, for engineering services for the San José-Santa Clara Regional Wastewater Facility, extending the term from June 30, 2015 to December 31, 2017, at no additional cost to the City.
2. Approve the Second Amendment to the Master Agreement with GHD, for engineering services for the San José-Santa Clara Regional Wastewater Facility, extending the term from June 30, 2015 to December 31, 2016, at no additional cost to the City.

The proposed Amendments are scheduled for Council consideration on March 17, 2015.

On a motion by Committee Member Leonardis and a second by Committee Member Sykes, TPAC unanimously approved to adopt the staff recommendation in item 5.C.

Ayes – 8 (Matthews, Oliverio, Matthews, Esteves, Chen, Marsalli, Kolstad, Sykes, Leonardis)

Nays – 0

D. Project Delivery and Procurement Strategy for the San José-Santa Clara Regional Wastewater Facility

Staff Recommendation:

1. Accept this staff report on the proposed project delivery and procurement strategy for the San José-Santa Clara Regional Wastewater Facility's Capital Improvement Program and refer to the full Council for approval.
2. Recommend that Council adopt a resolution that approves the use of low bid design-build and progressive design-build as potential delivery methods for projects in the San José-Santa Clara Regional Wastewater Facility's Capital Improvement Program and that delegates authority to the Directors of Environmental Services and Public Works, or their designees, to make a determination on the appropriate delivery method for each project.

The proposed Project Delivery and Procurement Strategy is scheduled for Council consideration on March 24, 2015.

On a motion by Committee Member Matthews and a second by Committee Member Kolstad, TPAC approved to adopt the staff recommendation requesting follow-up to a public comment by Mr. David Wall requesting to investigate how much deliverables since January 9, 2015.

Ayes – 8 (Matthews, Oliverio, Matthews, Esteves, Chen, Marsalli, Kolstad, Sykes, Leonardis)

Nays – 0

E. San José-Santa Clara Regional Wastewater Facility Ten-Year Funding Strategy

Staff Recommendation: Accept the staff report on the San José-Santa Clara Regional Wastewater Facility Ten-Year Funding Strategy

The proposed Strategy is scheduled for Council consideration on March 24, 2015.

TPAC Recommendation:

- 1. Allow staff from the different agencies to work together to provide other financial options and return to TPAC with this information in April, 2015.**
- 2. On a request by Council Member Oliverio, staff was asked to return with information on what would be involved to analyze the feasibility of selling the San José-Santa Clara Regional Wastewater Facility to a private company, or otherwise outsourcing the Facility.**

6. **OTHER BUSINESS/CORRESPONDENCE**

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

A. Sanitary Sewer Flow Study Update

Staff Recommendation:

1. Accept the updated staff report regarding the attached Sanitary Sewer Flow; and
2. Approve the proposed changes and policy recommendations for future updates to the revenue program for the San José – Santa Clara Regional Wastewater Facility.

The proposed Update was heard and approved by Council on March 3, 2015.

B. First Amendment to the Consultant Agreement with Brown and Caldwell for Engineering services for the digester and thickener Facilities Upgrade Project

Staff Recommendation:

- a. Approve the First Amendment to the Consultant Agreement with Brown and Caldwell for engineering services for the Digester and Thickener Facilities Upgrade project at the San José – Santa Clara Regional Wastewater Facility, modifying the scope of services and increasing the amount of compensation by \$1,999,884, for a total agreement amount not to exceed \$14, 017,410; and extending the term of agreement from December 31, 2019 to June 30, 2020.

- b. Adopt the following 2014-2015 Appropriation Ordinance Amendments in the San Jose – Santa Clara Treatment Plant Capital Fund:
 - (1) Decrease the Energy Generation Improvements appropriation to the Environmental Services Department in the amount of \$955,000;
 - (2) Decrease the Digested Sludge Dewatering in the amount of \$545,000; and
 - (3) Increase the Digester and Thickener Facilities Upgrade appropriation to the Environmental Services Department in the amount of \$1,500,000.

The proposed Amendment was heard and approved by Council on February 24, 2015.

Item 7A and 7B were approved to note and file.

8. REPORTS

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

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

Item 8.A was approved to note and file.

9. MISCELLANEOUS

- A. The next TPAC meeting is April 12, 2015, at 4:30 p.m. City Hall, Room 1734.

10. PUBLIC COMMENT

11. **ADJOURNMENT**

- A. The Treatment Plant Advisory Committee adjourned at 6:02 p.m.

Minutes approved by the Treatment Plant Advisory Committee on April 9, 2015

Kerrie Romanow
Director of Environmental Services, Secretary to TPAC



Memorandum

TO: TREATMENT PLANT
ADVISORY COMMITTEE

FROM: Kerrie Romanow

SUBJECT: MEETING TIME
AND LOCATION

DATE: April 2, 2015

RECOMMENDATION

Provide direction to staff on future meeting time and location for the monthly Treatment Plant Advisory Committee meetings.

BACKGROUND

Treatment Plant Advisory Committee (TPAC) meetings are currently held on the second Thursday of each month. The meetings are held in a conference room on the 17th floor of the San José City Hall. Due to increased public attendance at TPAC meetings and the acoustic limitations of the current room, at the February 12, 2015 TPAC Meeting, TPAC members asked staff to pursue alternate options for a different location. At the March 12, 2015 TPAC meeting, staff proposed the San José City Hall Council Committee Rooms 118-120 as the new location, however this would require changing the current meeting day and time. Staff was asked to follow up with all TPAC members to check their availability for the proposed days and times.

ANALYSIS

In response to TPAC's direction, staff polled all the members with the following three options for the new TPAC meeting day and time.

Option A: Second Monday of every month at 4:30 p.m.

Option B: Second Thursday of every month at 10:00 a.m.

Option C: Second Friday of every month at 4:30 p.m.

TPAC members responded with their preference via e-mail as follows:

| Option A | Option B | Option C |
|-----------------|-----------------|-----------------|
| 3 votes | 6 votes | 0 votes |

April 2, 2015

Subject: Meeting Time and Location

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Although the majority of votes were for Option B, some members did indicate a schedule issue with Option B. Thus, staff could not recommend changing the meeting day and time without further direction from TPAC.

As an alternate to changing the day and time of future meetings, TPAC could also consider keeping the meeting in the current location and adding speakers that would improve the acoustics and ensure that the public is able to hear the discussions clearly.

/s/

Kerrie Romanow
Director, Environmental Services

For questions, please contact Adriana Marquez, Staff Specialist, at (408) 975-2547.



San José-Santa Clara
Regional Wastewater Facility

Capital Improvement Program Monthly Status Report for February 2015

April 2, 2015

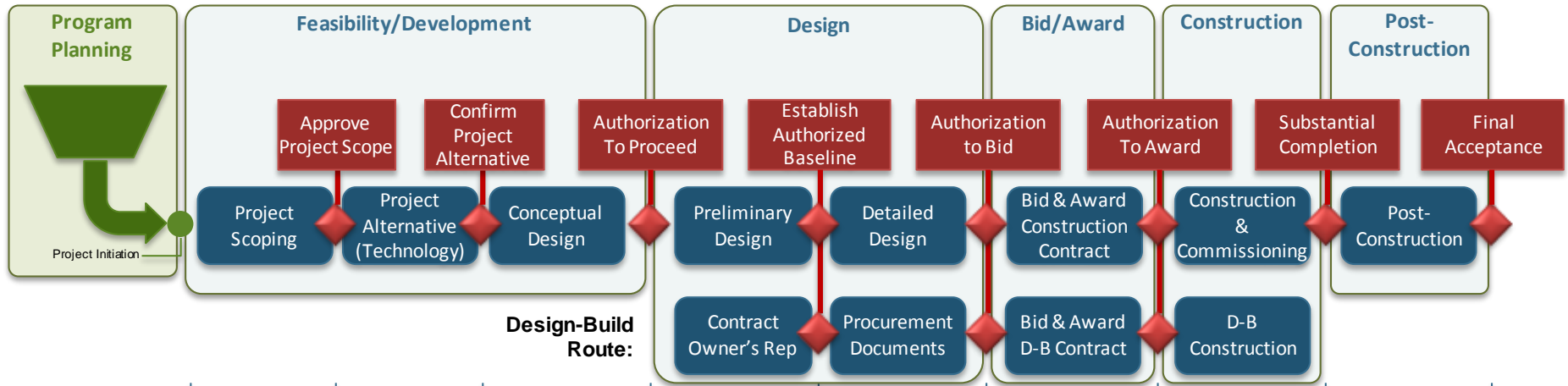
This report provides a summary of the progress and accomplishments of the Capital Improvement Program (CIP) for the San José-Santa Clara Regional Wastewater Facility (Wastewater Facility or RWF) for the period of February 2015.

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Project Delivery Model



Active Projects

| | Feasibility/Development | Design | Bid/Award | Construction | Post-Construction |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Design-Build | <ul style="list-style-type: none"> Adv. Facility Control and Meter Repl. Construction-Enabling Improvements Outfall Bridge and Levee Improvements | <ul style="list-style-type: none"> Facility Wide Water Systems Filter Rehabilitation Headworks Critical Improvements Headworks Improvement New Headworks Nitrification Clarifiers Rehab. | <ul style="list-style-type: none"> Fiber Optic Connection to RWF Digester & Thickener Facilities Upgrade <i>Plant Instrument Air System Upgrade</i> | <ul style="list-style-type: none"> Iron Salt Feed Station | <ul style="list-style-type: none"> A5-A6 Nitrif. Mag. Meter & Valve Repl. BNR2 Clarifiers Guardrail Repl. DCS Upgrade/Repl. Digester Gas Storage Repl. Filtration Bldg. B2 & B3 Pipe & Valve Repl. Fire Main Repl. – Ph. III Handrail Repl. – Phase V Training Trailer Repl. |
| Design-Build | <ul style="list-style-type: none"> Digested Sludge Dewatering | | | <ul style="list-style-type: none"> Cogeneration Facility | <ul style="list-style-type: none"> Digester Gas Compressor Upgrade Emergency Diesel Generators |

Key

- Stage Gates (Red box)
- Stages (Blue box)

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



Program Summary

February 2015

In the month of February the Program Team moved forward on multiple fronts.

We continued to advance studies and projects through stage gates of the Project Delivery Model (PDM) process. In particular, the Biosolids feasibility study and the Plant Instrument Air System Upgrade Project advanced through the “Final Acceptance” and “Authorization to Proceed” stage gates respectively.

Our Biosolids and Odor Control teams continued work on a revised Biosolids Transition Strategy, based on the input received from the Treatment Plant Advisory Committee (TPAC) and City Council in December 2014. The team is currently focusing on alternative analyses of options to meet the Plant Master Plan goal to transition out of the open air lagoons and drying beds and to reduce odors.

Staff developed the proposed FY 15-16 Capital Budget and FY 16-20 CIP and provided an update on the 10-year funding strategy to the Transportation & Environment (T&E) Committee.

In line with our funding strategy, we started the submittal process for our first Clean Water State Revolving Fund (SRF) application for the Digester and Thickener Facilities Upgrade Project. An amendment to the design consultant agreement for this project was also approved by City Council this month.

The Cogeneration Facility team began to review prequalification submittals from potential design-builders and continued to work on procurement documents for the subsequent Request for Proposals. The Cogeneration Facility team and the Headworks Improvements Team continued work on Requests for Qualifications for technical support / owner’s representative services for these projects.

Our resourcing work for FY 15-16 continued, as we looked at staffing needs across the whole CIP, including Program, Engineering, O&M and Environmental staff. This will form part of the wider annual update to our Program Execution Plan (PEP) which also commenced this month.

Work continued on the assessment of the water control gate structures along the western levee of Pond A-18. Initial analysis indicates that the northern gate structure is at a critical risk of failure. In March, staff will ask City Council to declare that an emergency replacement of the north gate structure is necessary and delegate authority to the directors of Public Works (DPW) and Environmental Services (ESD) to award the needed engineering and construction contracts, so repairs can start as soon as possible. Previously this work had been planned to occur later as part of the larger Outfall Bridge and Levee improvement Project.

Look Ahead

In March, we will continue to move forward on numerous efforts related to consultant procurements, including the Headworks Improvements, New Headworks, Facility Wide Water Systems Improvement, Filter Rehabilitation and Nitrification Clarifiers Rehabilitation. Staff will solicit bids for the emergency construction work required at the Pond A-18 north gate structure and award the project before the end of the month.

Stage Gate meetings will be held for the Construction-Enabling Project, and the Flood Protection Study. We will also present our project delivery and procurement strategy and request the delegation of authority to the directors of DPW and ESD to determine the appropriate delivery method for each project.

Our Biosolids team will continue to undertake further analysis on the revised Biosolids Transition Strategy based on the input previously in December with the intent to bring it back to TPAC and City Council for consideration in May and June, respectively.

The Program team will continue with the first annual update to the Program Execution Plan (PEP), which provides the overall roadmap for our program execution and project delivery.



Program Highlight – Choosing a Project’s Delivery Method

The wastewater industry uses various project contract vehicles to deliver capital projects, with the traditional method being design-bid-build (DBB). Over the years, the use of delivery methods other than DBB has become increasingly popular, in particular design-build (DB). Based on a detailed analysis of all delivery methods, the Program team has identified the following methods as most applicable for the projects in the CIP:

- **Design Bid Build (DBB)** - The owner selects an engineer to design and develop construction documents, from which the owner solicits lump sum bids. Selection is based on the lowest responsible bid and the contractor is responsible for construction but not the design. Historically, projects at the RWF have been delivered through DBB contracts.
- **Low Bid Design Build (LB/DB)** - Prospective design-builders submit lump sum proposals based on the owner’s specifications and project concept (usually a preliminary design). The design-builder is primarily selected based upon cost. The selected design-builder has singular responsibility to deliver a project that meets the owner’s specifications (including performance requirements) at the proposed lump sum price.
- **Progressive Design Build (P/DB)** – The design-builder is selected based primarily upon qualifications (and other criteria per State regulations, such as technical approach, price and life-cycle costs). The design-builder works collaboratively with the owner to “progress” the design and provides a construction cost estimate, in an open-book format, until the design and a Guaranteed Maximum Price (GMP) can be agreed upon between the design-builder and owner.

The Program has developed a rigorous method to determine the preferred delivery method for a given project. This method uses seven decision criteria:













- Project size
- CEQA or other permitting requirements
- Project complexity
- Design performance risk
- Design control
- Optimizing quality and cost
- Schedule



Program Performance Summary

Seven KPIs have been established to measure the overall success of the CIP. Each KPI represents a metric which will be monitored on a regular frequency. Through the life of the CIP, KPIs will be selected and measured which best reflect the current maturity of the program. The target for the seventh KPI "Staffing Level" KPI will be established as part of the analysis of future staffing needs.

Program Key Performance Indicators – Fiscal Year 2014-2015

| KPI Description | Target | Actual | Status | Trend | Measurement |
|-----------------------------------|----------|----------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Schedule | 85% | 100% (2/2) ¹ |  |  | Percentage of CIP projects delivered within 2 months of approved baseline Beneficial Use Milestone. Target: 85% of projects delivered within 2 months of approved baseline schedule or better. |
| Budget | 90% | 50% (1/2) |  |  | Percentage of CIP projects that are completed within the approved baseline budget. Target: 90% of projects delivered are within 101% of the baseline budget. |
| Expenditure² | ≥\$95.8M | \$93.3M |  |  | Total CIP actual + forecast committed cost for the fiscal year compared to CIP fiscal year budget. Target: Forecast committed cost meets or exceeds 60% of budget for Fiscal Year 14/15 (60% of \$159.6M= \$95.8M) |
| Procurement³ | 100% | 43% (3/7) |  |  | Number of actual + forecast consultant and contractor procurements compared to planned for the fiscal year. Target: Forecast /actual procurements for fiscal year meet or exceed planned. |
| Safety | 0 | 0 |  |  | Number of OSHA reportable incidents associated with CIP construction for the fiscal year. Target: zero incidents. |
| Environment/Permits | 0 | 0 |  |  | Number of permit violations caused by CIP construction for the fiscal year. Target: zero violations. |
| Staffing Level⁴ | TBD | TBD | TBD | TBD | Percentage of authorized staffing level Target: to be determined |

KEY:

Cost:  Meets or exceeds KPI target  Does not meet KPI target

Notes

1. FY14-15 budget excludes reserves, ending fund balance, South Bay Water Recycling, Public Art and Urgent and Unscheduled Rehabilitation items
2. The Expenditure KPI Target Forecast percentage has been adjusted to reflect the decision to report against the total program budget including contingency (previously the total budget did not include contingency allowance).
3. Delays have occurred to the following procurements resulting in award slipping to FY 15/16: Value Engineering and Peer Review Services, Audit Services, Cogeneration Facility Technical Services and Cogeneration Facility Design-Build.
4. Staffing level KPI measured quarterly; all other KPIs measured monthly.

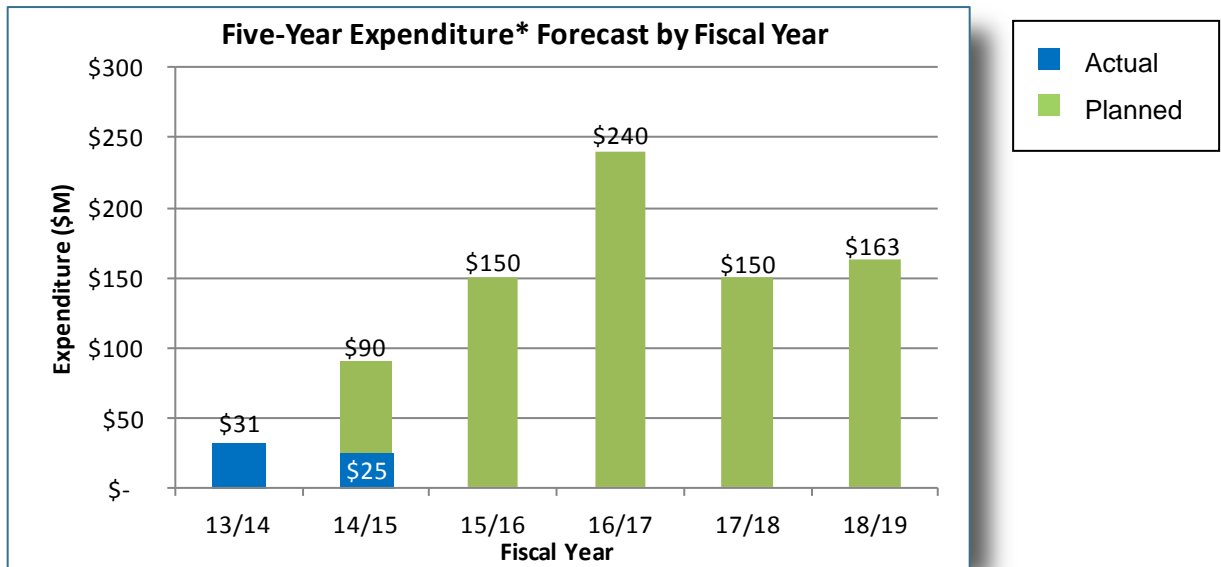


Program Cost Performance

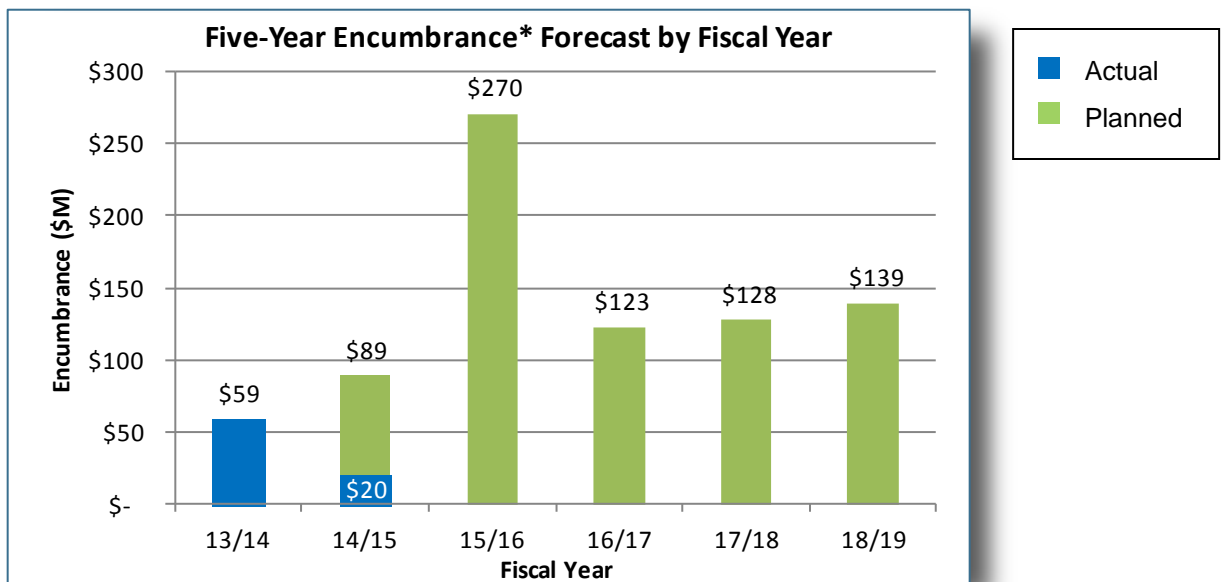
This section provides a summary of CIP cost performance for all construction projects and non-construction activities for FY13-14 and the 2015-2019 CIP.

Adopted 2015-2019 CIP Expenditure and Encumbrances

To accommodate the proposed increase in expenditures and encumbrances over the next five years, the City is developing a long-term financial strategy to fund the needed, major capital improvements while minimizing the impact to ratepayers.



*Expenditure defined as: Actual cost expended associated with services and construction of physical asset which may include encumbered amounts from previous years



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

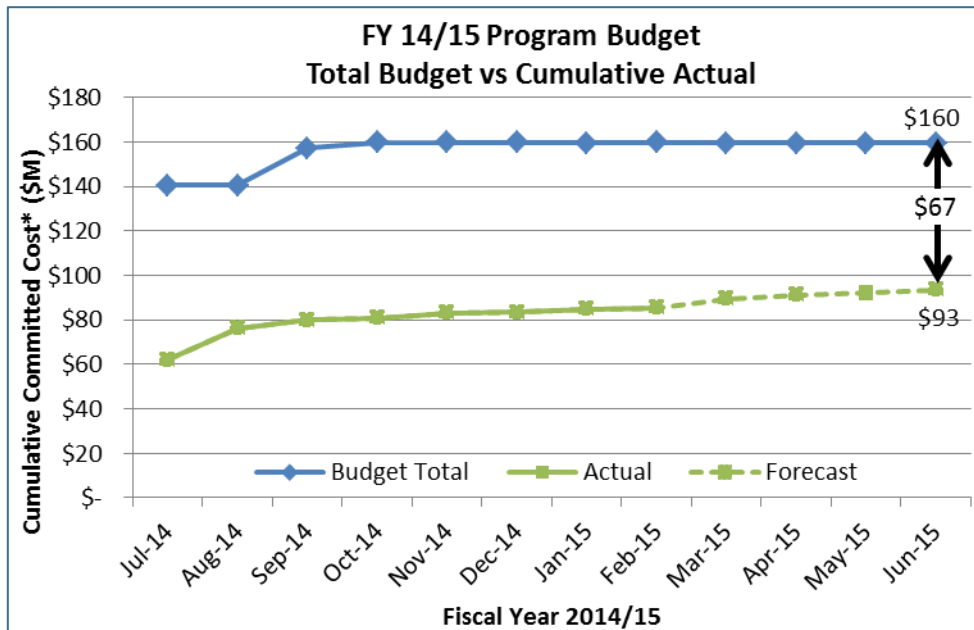


Fiscal Year 2014-2015 Program Budget Performance

The fiscal year program budget is \$160 million. The budget amount of \$160 million represents the 2014-2015 budget of \$107 million plus carryover of \$53 million. The budget amount excludes reserves, ending fund balance, South Bay Water Recycling, Public Art and Urgent and Unscheduled Rehabilitation items.

The projected year-end variance of approximately \$67 million is primarily due to the following reasons:

- Award of the Cogeneration Facility design-build contract and technical support services agreement are now expected in FY15-16 (\$24 million).
- Award of construction contracts for the Iron Salt Feed Station, Plant Instrument Air System Upgrade, and Switchgear S40/G3 Relay Upgrade projects are anticipated in FY15-16 (\$18 million).
- Award of a design contract for critical rehabilitation work in the Headworks Improvements is expected in FY15-16 (\$4 million).
- Award of a design contract for the Advanced Facility Control and Meter Replacement project has been removed from the forecast while the project team reevaluates the scope to determine the best way to implement the project (\$2 million).
- Lowered forecasts for consultant services for the Emergency Diesel Generators, Fiber Optic Connection to RWF, and Plant Instrument Air System Upgrade projects (\$2 million).
- Lower than expected expenditures and encumbrances in Equipment Replacement (\$1 million).



























*Committed costs are expenditures and encumbrance balances, including carryover (encumbrance balances from the previous fiscal year).







Project Performance

There are currently 12 active projects in the construction or post-construction phase with a further 15 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 ¹ | Cost Performance ² | Schedule Performance ² |
|-----------------------------------------------------------------|-------------------|--------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| Distributed Control System (DCS) Fiber Optics Network Expansion | Post-Construction | May 2014 |  |  |
| RWF Street Rehabilitation - Phase III | Post-Construction | Nov 2014 |  |  |
| A5-A6 Nitrification Mag. Meter & Valve Replacement | Construction | May 2015 |  |  |
| Filtration Building B2 & B3 Pipe & Valve Replacement | Construction | Mar 2015 |  |  |
| BNR-2 Clarifier Guardrail Replacement | Construction | May 2015 |  |  |
| Fire Main Replacement - Phase III | Construction | Apr 2015 |  |  |
| Handrail Replacement - Phase V | Construction | Aug 2015 |  |  |
| Training Trailer Replacement | Construction | Jun 2015 |  |  |
| Digester Gas Storage Replacement | Construction | Aug 2015 |  |  |
| DCS Upgrade/Replacement | Construction | Jun 2016 |  |  |
| Digester Gas Compressor Upgrade | Construction | Jul 2016 |  |  |
| Emergency Diesel Generators | Construction | Aug 2016 |  |  |

KEY:

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

Notes

- 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 10.



Project Performance – Pre-Baselined Projects

| Project Name | Phase | Estimated Beneficial Use Date ¹ |
|-------------------------------------------|-------------------------|--------------------------------------------|
| Cogeneration Facility | Procurement | Sep 2018 |
| Fiber Optic Connection to RWF | Design | Dec 2015 |
| Iron Salt Feed Station | Design | Sep 2017 |
| Digester & Thickener Facilities Upgrade | Design | Sep 2018 |
| Construction-Enabling Improvements | Feasibility/Development | Oct 2016 |
| Headworks Critical Improvements | Feasibility/Development | Apr 2017 |
| Plant Instrument Air System Upgrade | Feasibility/Development | Oct 2017 |
| Adv. Facility Control & Meter Repl. Ph. 2 | Feasibility/Development | Jun 2019 |
| Digested Sludge Dewatering Facility | Feasibility/Development | Apr 2020 |
| Headworks Improvements | Feasibility/Development | Aug 2020 |
| Outfall Bridge and Levee Improvements | Feasibility/Development | Nov 2020 |
| Facility-wide Water Systems Improvements | Feasibility/Development | Sep 2021 |
| Filter Rehabilitation | Feasibility/Development | Dec 2021 |
| Nitrification Clarifiers Rehabilitation | Feasibility/Development | Mar 2022 |
| New Headworks | Feasibility/Development | Apr 2022 |

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.



Significant Accomplishments

Liquids Package

Iron Salt Feed Station

Completed the review of the design submittal (60% design) and returned comments to the consultant. Met with the environmental team to resolve site issues including mapping and surveying potential areas for construction site avoidance. The next step is to complete the detailed design.

Biosolids Package

Biosolids Transition Strategy

Staff continued to evaluate site alternatives for locating the new proposed dewatering facility. In addition, an odor modeling study commenced this month that investigates the odor impacts of the existing sludge lagoons and drying beds as compared with the new dewatering facility. The Staff will be returning to Council with odor and cost information for the biosolids transition in June 2015.

Digester and Thickener Facilities Upgrade

The detailed design of the digesters and dissolved air flotation tanks (DAFT) has continued this month. The design consultant, Brown and Caldwell, conducted three workshops in February to further define supporting facilities (e.g. biogas piping, screening facility layout, and waste gas burner upgrades) and to discuss the seismic design criteria for the digesters and DAFT tanks. Construction costs estimates are currently being updated.

Power & Energy Package

Cogeneration Facility

Prequalification submittals for design-builders were received on February 3. Staff is performing a detailed evaluation to determine which teams are qualified to proceed to the RFP stage.

Digester Gas Compressor Upgrade

Construction on the new Gas Compressor Building continues. The forms for the Compressor Building south wall were being installed. The City has selected the manufacturer for the Gas Compressor motor.

Facilities Package

Outfall Bridge and Levee Improvements

A Condition Assessment, completed in January 2015, revealed that the Northern Gate Structure is in critical condition and needs immediate replacement. Staff confirmed the findings in late February and will be requesting that City Council declare an emergency to allow repairs to begin as soon as possible.



Explanation of Project Performance Issues

A5-A6 Nitrification Mag. Meter & Valve Replacement

In September 2014, during startup, the project discovered that the actuators that had been specified and installed were incompatible with the available power supply. Engineering staff determined it would be more costly to modify the system than to order and install compatible actuators. In addition, O&M staff requested that the actuators match those used in the other clarifiers. The contractor has submitted a proposal for the requested equipment. Beneficial use is expected by the end of May 2015.

Handrail Replacement - Phase V

For safety reasons, the contractor has only been replacing handrails on empty aeration basins. November through April is designated as the rainy season during which O&M staff need to have aeration basins available in the event of heavy rains. As a result, the contractor has suspended work until the end of April 2015. Work is expected to resume when the remaining basins become available. Beneficial Use is expected by late August 2015.



Project Profile

Digester Gas Compressor Upgrade

The Wastewater Facility currently operates three digester gas compressors located in the Sludge Control Building: two smaller Ingersoll-Rand single-action gas compressors (GC1 and GC3) installed in 1964, and one Norwalk gas compressor (GC4) installed in 1984. GC1 and GC3 are nearly 50 years old and are increasingly unreliable and difficult to maintain. GC4 is also nearing the end of its useful life due to continuous use.

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

This project will design and construct a new 4,000 square foot building to house two new gas compressors. The new facility will be located immediately north of the existing Sludge Control Building. The project also includes two digester gas pre-coolers, two cooling towers, associated gas piping, and associated building and equipment utility tie-ins.

On May 20, 2014, the City awarded a design-build contract to Anderson Pacific Engineering and Construction, Inc. entered for a total amount of \$11,316,000. Contract work began in June 2014 and is anticipated to be completed in June 2016.

Buried process and potable waterlines were relocated in August-September 2014 to clear the way for the new building foundation. A deep foundation was chosen over a shallow foundation to suit design requirements and site conditions. A total of 42 drilled piers were completed in December 2014. The top of 30 out of 42 piers were then tied together with grade beams to complete the building foundation system. Design coordination for the compressor system and associated components is in progress.

Project Budget: \$15,000,000.

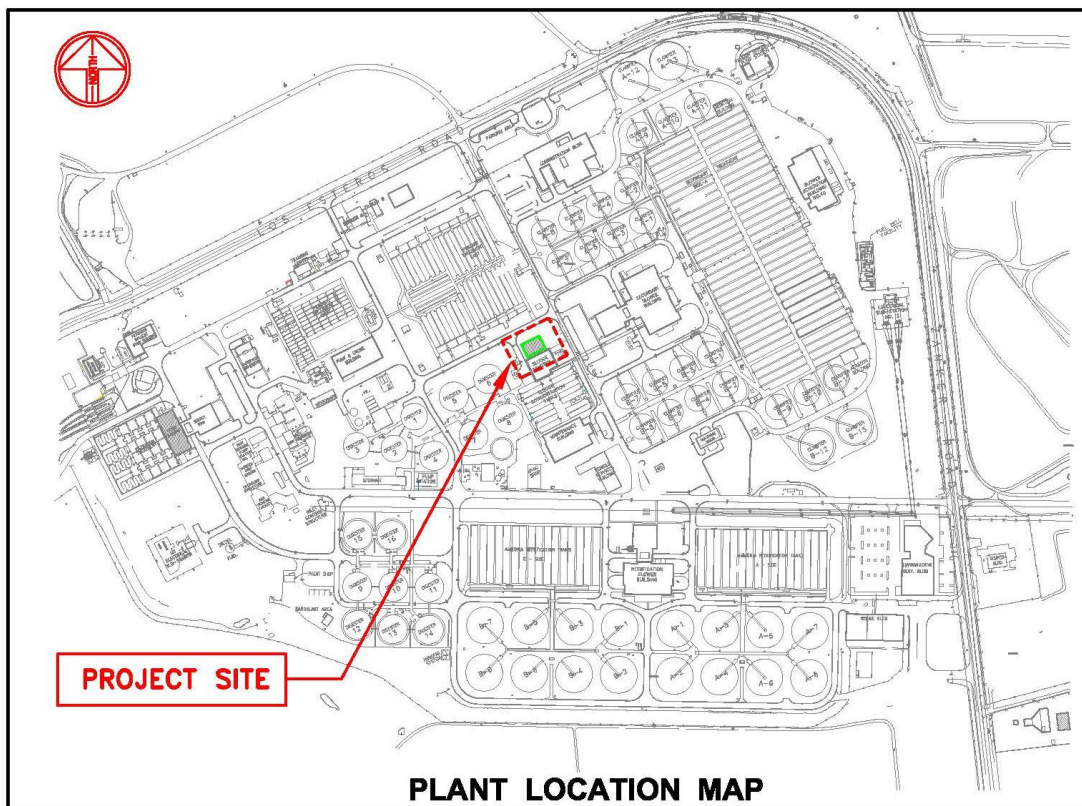


Figure 1: Digester Gas Compressor Location Plan



Figure 2: Pier Construction in Progress



Figure 3: Grade Beams/Footings Concrete Pouring in Progress

Regional Wastewater Facility Treatment – Current Treatment Process Flow Diagram

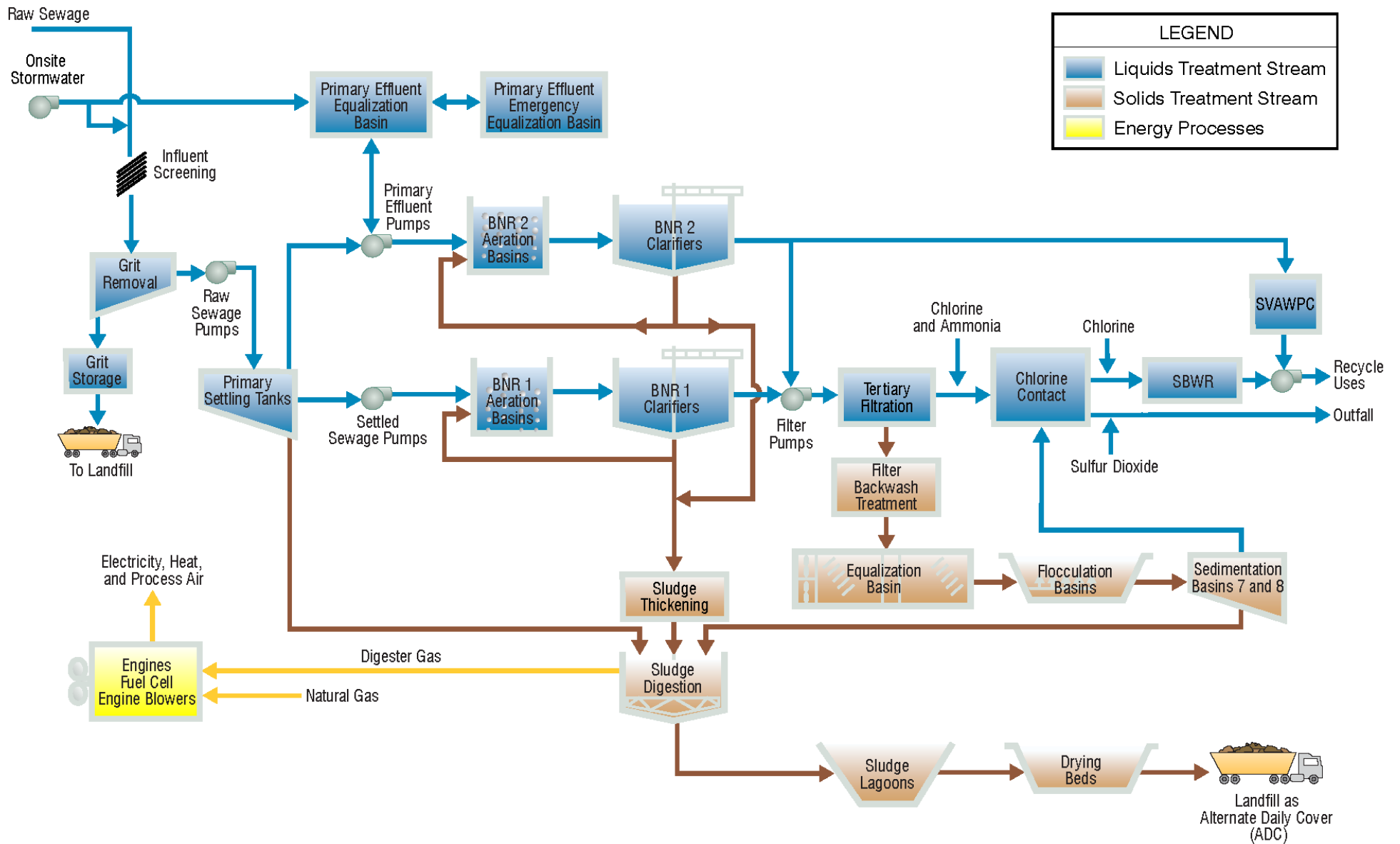


Figure 4—Current Treatment Process Flow Diagram



Regional Wastewater Facility Treatment – Proposed Treatment Process Flow Diagram

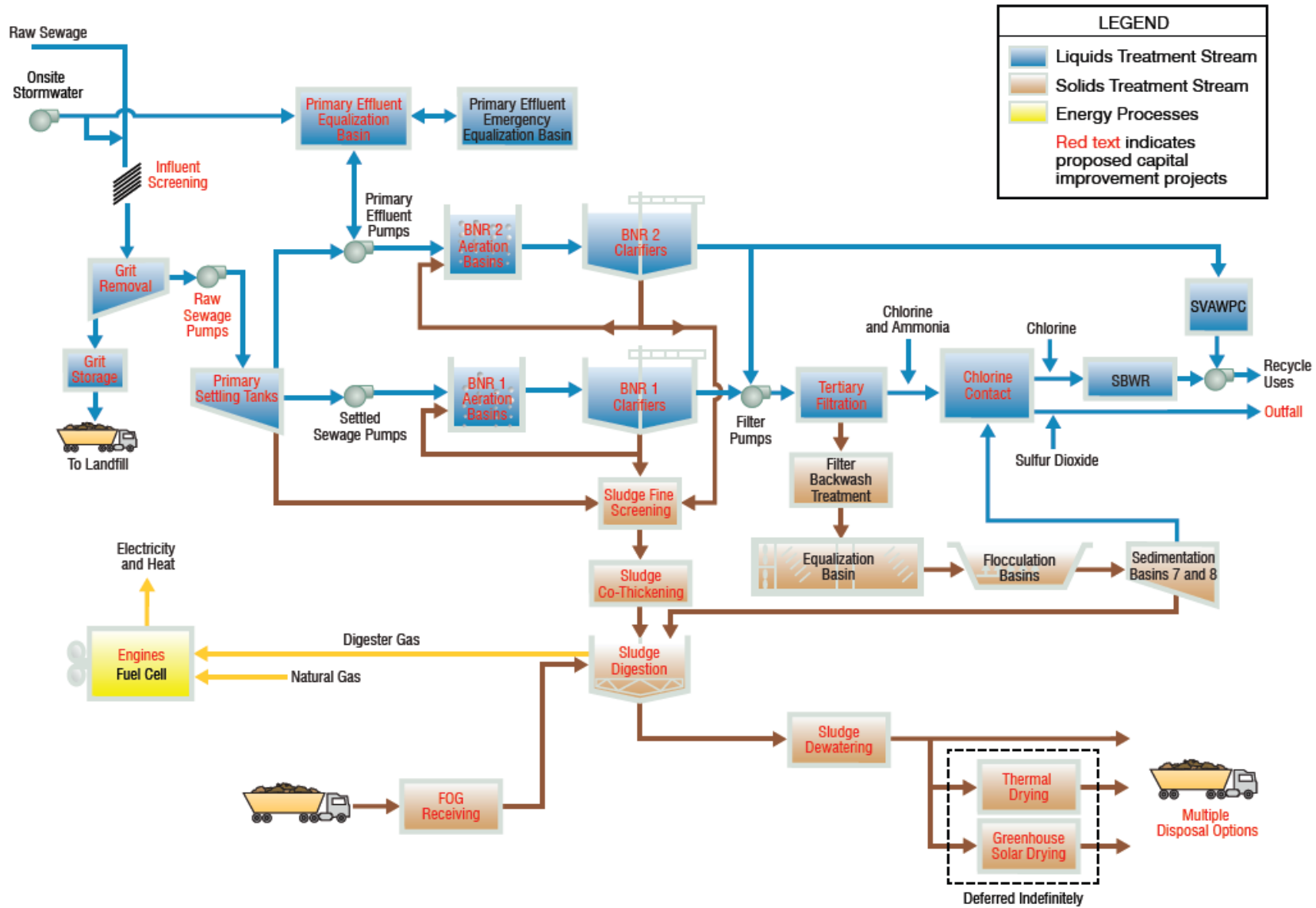


Figure 5—Proposed Treatment Process Flow Diagram



Active Construction Projects – Aerial Plan

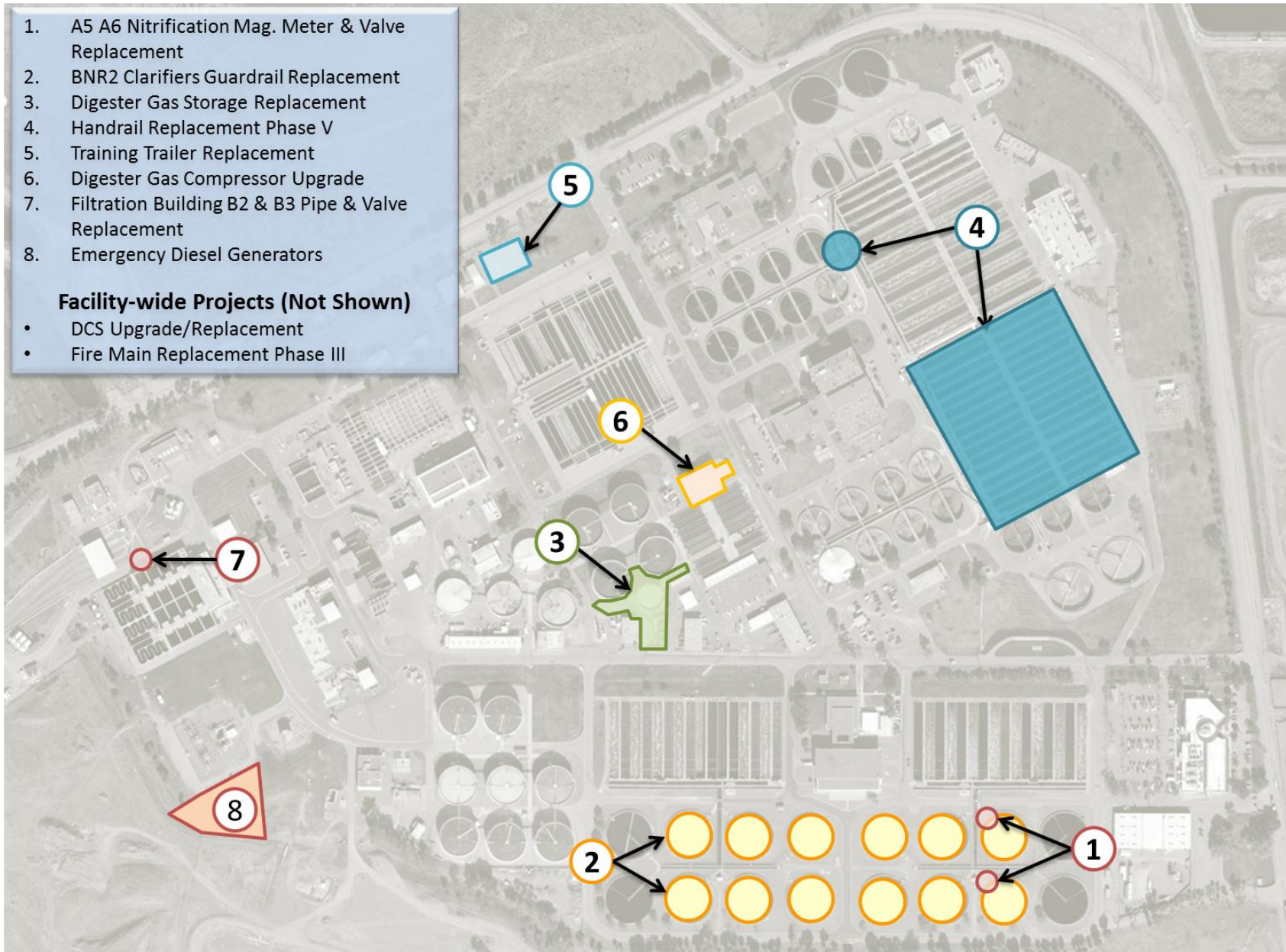
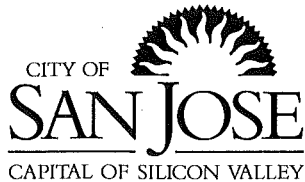


Figure 6—Active Construction Projects



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Kerrie Romanow

SUBJECT: SEE BELOW

DATE: March 12, 2015

Approved

D. DSYL

Date

3/27/15

SUBJECT: SECOND AMENDMENT TO THE MASTER AGREEMENT WITH CDM SMITH FOR ENGINEERING SERVICES FOR THE SAN JOSE-SANTA CLARA WATER POLLUTION CONTROL PLANT CAPITAL IMPROVEMENT PROGRAM

RECOMMENDATION

Approve the Second Amendment to the Master Agreement with CDM Smith, for engineering services for the San José-Santa Clara Regional Wastewater Facility, increasing the amount of compensation by \$75,000, for a total agreement amount not to exceed \$1,575,000, and extending the term from June 30, 2015 to December 31, 2016.

OUTCOME

Approval of the recommendation will provide for continued consultant engineering services through the construction completion and project close-out of the Digester Gas Compressor Upgrade project.

BACKGROUND

On June 17, 2008, the City entered into a five-year master agreement with CDM Smith to provide electrical engineering services for various capital improvement projects, at the San José-Santa Clara Regional Wastewater Facility¹ (Wastewater Facility), for a total budgeted amount of \$1,500,000. On February 26, 2013, the City executed a continuation agreement to extend the term to June 30, 2015, for continuity in support of various projects already underway, including the Digester Gas Compressor Upgrade project.

¹ 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.

March 12, 2015

Subject: Second Amendment to the Master Agreement with CDM Smith

Page 2

The project will install two new digester compressors, housed in a new 5,000 square foot building, to replace two existing gas compressors, which are nearly 50 years old. They are a critical element of the Wastewater Facility's power system. The compressors receive low-pressure gas from the digesters and boost the pressure to the required levels for the engine generators, which produce power and air for operating the various treatment processes.

On September 24, 2012, the City issued a service order under the agreement for CDM Smith to provide owner's representative services for the Digester Gas Compressor Upgrade project. On May 20, 2014, the City awarded the low-bid design-build contract to Anderson Pacific Engineering Construction, Inc., in the amount of \$11,316,000.

Due to a longer-than-estimated bid period for design-builder prequalification, PG&E permitting coordination, and equipment lead time, the project completion date has been extended from summer 2015 to fall 2016.

ANALYSIS

Extending the term of the agreement, to December 2016, will allow CDM Smith to continue providing engineering services through project completion. The amendment will also increase the total maximum compensation for CDM Smith by \$75,000 to continue as the owner's representative through construction and post-construction (e.g., factory witness testing and start-up/commissioning activities). The term extension and fee increase is in sole support of the Digester Gas Compressor Upgrade project. No new service orders for other projects will be issued under this amended agreement.

EVALUATION AND FOLLOW-UP

No additional follow-up action with City Council is expected at this time. Monthly progress reports, on this and other Wastewater Facility capital projects, will be submitted to Treatment Plant Advisory Committee (TPAC) and posted on the City's website.

PUBLIC OUTREACH

This memorandum will be posted on the City's website for the April 14, 2015 City Council agenda.

COORDINATION

This amendment and memorandum have been coordinated with the Finance Department, City Manager's Budget Office, and the City Attorney's Office. This item is scheduled to be heard at the April 9, 2015 TPAC meeting.

FISCAL/POLICY ALIGNMENT

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

COST SUMMARY/IMPLICATIONS

1. AMOUNT OF RECOMMENDATION: \$75,000

2. COST ELEMENTS OF AGREEMENT:

| | |
|------------------|-------------|
| Master Agreement | \$1,500,000 |
| First Amendment | 0 |
| Second Amendment | 75,000 |

- TOTAL AGREEMENT AMOUNT** **\$1,575,000**

3. SOURCE OF FUNDING: San José-Santa Clara Treatment Plant Capital Fund (Fund 512)*

4. OPERATING COSTS: The proposed amendment will have no impact on the San José-Santa Clara Treatment Plant Operating Fund (Fund 513).

* Funding for this amended Master Agreement will come from the San José/Santa Clara Treatment Plant Capital Fund. Costs for this contract to be incurred in future fiscal years are subject to City Council approval of funding during the annual budget process.

HONORABLE MAYOR AND CITY COUNCIL

March 12, 2015

Subject: Second Amendment to the Master Agreement with CDM Smith

Page 4

BUDGET REFERENCE

The table below identifies the fund that will fund the agreement amendment recommended as part of this memo.

| Fund # | Appn | Current Amount for Agreement | Recommended Amount for Agreement | 2014-2015 Adopted Capital Budget Page | Last Budget Action (Date, Ord. No.) |
|--------|---------|------------------------------|----------------------------------|---------------------------------------|-------------------------------------|
| 512 | Various | \$1,500,000 | \$1,575,000 | N/A | N/A |

CEQA

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

/s/Ashwini Katak for
KERRIE ROMANOW
Director, Environmental Services Department

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



Memorandum

TO: TRANSPORTATION &
ENVIRONMENT COMMITTEE

FROM: Kerrie Romanow

SUBJECT: SOUTH BAY WATER RECYCLING STRATEGIC MASTER PLAN REPORT **DATE:** March 19, 2015

Approved

Date

3/25/15

RECOMMENDATION

- A. Accept the South Bay Water Recycling (SBWR) Strategic and Master Planning report for near term reliability projects for the South Bay Water Recycling Program; and
- B. Direct staff to evaluate opportunities to collaborate with the Santa Clara Valley Water District on the long term strategies identified in the Strategic and Master Planning report for potable reuse of recycled water.

OUTCOME

Acceptance of this report would allow staff to develop an implementation plan and budget for near term reliability projects identified in the South Bay Water Recycling (SBWR) Strategic and Master Planning report. Staff would perform additional due diligence required to evaluate opportunities for collaboration with the Santa Clara Valley Water District (SCVWD) on long term strategies identified in the report for potable reuse of recycled water.

BACKGROUND

The City's Environmental Services Department (ESD) has operated the SBWR system since 1997, distributing wholesale recycled water generated by the San José – Santa Clara Regional Wastewater Facility¹ (Facility). To protect saltwater habitat in the Bay, SBWR initially was one of the prescribed remedies in the Facility's National Pollution Discharge Elimination System (NPDES) Permit to limit the amount of treated wastewater discharged. Since 1997, the volume of treated wastewater has significantly decreased, thereby eliminating the need for recycled water as a wastewater driven permit requirement. However, the use of recycled water has increasingly become an important part of the regional water supply.

¹ 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.

SBWR delivers an average of 10 million gallons per day of recycled water through 143 miles of pipe in San José, Santa Clara, and Milpitas. Recycled water use has increased in popularity, accounting for approximately 5% of the regional water supply in Santa Clara County. Over 740 customers utilize recycled water instead of potable (drinking) water for landscape irrigation, industrial cooling, and dual plumbed buildings. While exploring the future possibilities of recycled water, it became apparent that four general questions had to be addressed:

- 1.) Are infrastructure improvements needed for the SBWR Program to maintain reliability?
- 2.) Are there opportunities to expand the recycled water system?
- 3.) Can recycled water be a source for potable/drinking water supply for the region?
- 4.) What are potential forms of governance as the recycled water system evolves to primarily supplement the potable/drinking water supply?

In 2012, the City and the Santa Clara Valley Water District (SCVWD) agreed to engage in a process to develop mid- and long-term strategies for recycled water, identify infrastructure improvements to maintain system reliability, initiate discussions regarding an alternative governance structures if SBWR evolves to primarily supplement the South Bay Region's water supply, and to identify opportunities for potable reuse of recycled water. The planning process cost \$2.2M which was shared by the City and SCVWD with a reimbursement grant in the amount of \$1.2M from the US Bureau of Reclamation. The SBWR Strategic and Master Planning Task Advisory Steering Committee (TASC), a multi-agency coalition comprised of the City, SCVWD, and City of Santa Clara and a tributary agency representative met regularly to answer these questions.

ANALYSIS

The City and SCVWD selected RMC Water and Environment (RMC) to manage the multi-year strategic planning effort which concluded in January, 2015. The report makes recommendations in the following categories:

- Near-Term (2015-2020) SBWR Reliability Improvement Projects
- Long-Term (Beyond 2020) Recycled Water Expansion Options
- Identify and Evaluate Potable Reuse Options
- Identify Long Term Financing and Governance Options

Threshold Considerations

It should be noted that the report on proposed expansion of recycled water assumes that the Facility will provide the necessary source water. The report, however, does not analyze potential legal limitations to relying exclusively on the treated product water from the Facility, and the feasibility of governance and funding for the proposed strategies. For example, there could be limitations due to the fact that the SBWR was financed with State Revolving Loans and tax exempt bonds. Since the treated water is a product of and distributed through facilities that are bond financed, staff must coordinate with the City Attorney's Office to evaluate limitations, if

any, to the proposed strategies. The Environmental Services Department in coordination with the Finance Department is also currently exploring the optimum strategies to finance the \$2 Billion Facility Capital Program which includes bond financing. Staff will continue to evaluate the extent to which the City can participate in specific strategies in the context of the Facility Capital Program, and will return to the City Council with implementation recommendations following further analysis of options.

Near-Term (2015-2020) SBWR Reliability Improvement Projects

Recommendations on near-term improvements were developed and evaluated to ensure that SBWR continues to provide a reliable water supply to existing recycled water customers. Improvements include a mixture of projects designed to extend the useful life of existing assets, replace aging equipment and infrastructure, enhance the current preventative maintenance program, and invest in process optimization and automation to increase operational flexibility. These improvements will also allow SBWR to maximize use of existing infrastructure, prevent water loss throughout the distribution system, and increase revenue through opportunistic connections. The preliminary estimate for these improvements is approximately \$5.0 million and will be incorporated in the recommended SBWR 5-year CIP. ESD anticipates that the recycled water sales revenue will be adequate funding for these improvements. An annual analysis of the rate model will be performed to determine if a change in the recycled water rate model is required to provide adequate system funding.

The strategic planning effort also identifies a "Zone 1 Storage" project including an additional reservoir, retrofitted pump stations, and new transmission mains. This project has a range of benefits including reduced energy consumption, operational flexibility, and maximizing use of existing assets. While the preliminary estimate for the total project is \$45 million, there is a potential to phase the design and construction. The recycled water revenue derived from the current rate model would not be adequate to fund the entire project. Staff will continue to explore alternate sources of funding such as regional cost sharing agreements and/or potential grant support in order to minimize rate payer impact related to the implementation of the Zone 1 Storage project.

Long-Term (Beyond 2020) Recycled Water Expansion Options

The long term recommendations (beyond 2020) are estimated to increase the recycled water market by approximately 70%, or additional 10,000 acre feet per year (AFY). For comparison, 10,000 AFY is the equivalent of providing enough potable water to 20,000 families per year. These recommendations include expansion of the SBWR distribution system, including piping extensions, new pump stations, and new storage tanks. Estimated project costs are expected to exceed \$243 million.

Alternate funding sources to support the recommendations, including regional cost sharing agreements and/or potential grant support will be required because sanitary sewer revenue cannot be used for recycled water expansion purposes. Analysis during the planning process has shown that the cost of additional recycled water expansion is comparable, and potentially more expensive, than development of potable reuse. As long term options, these recommendations may be re-evaluated as needed.

Identify and Evaluate Potable Reuse Options

Due to the historical drought, climate change, and reliance on imported water from the Sacramento Delta, securing local water supplies for residents and businesses is imperative for continued economic vitality, health and safety, and quality of life for residents. A key strategy in water supply planning is to incorporate potable reuse as part of the region's water supply portfolio. Potable reuse involves additional treatment of recycled water through Advanced Water Purification Centers (AWPC). The AWPCs are able to produce ultra clean water through advanced treatment technology that meets drinking water level standards. This developed water supply can then be added to percolation ponds, or mixed with other water supplies.

The strategic planning process reviewed short and long term project alternatives that regional partners could consider for potable reuse of recycled water. These opportunities would augment the region's water supply through either groundwater replenishment or direct addition into the SCVWD's raw water infrastructure. The alternatives were evaluated based on key criteria including cost, yield, implementation complexity, regulatory complexity and groundwater basin capacity. The Ford Ponds Indirect Potable Reuse project is identified for immediate implementation to produce 4,200 AFY of water for groundwater recharge. The project would implement a similar advanced treatment process as is being demonstrated at the SCVWD's Silicon Valley Advanced Water Purification Center (SVAWPC).

Capital investments in potable reuse infrastructure provides a great opportunity to minimize the addition of redundant recycled water infrastructure, maximize the production of local, drought proof water, and provide benefits for both businesses and residents. In addition to the Ford Ponds project, other long term potable reuse alternatives are recommended. During the strategic planning process, the long term alternatives were identified to be implemented after 2020. Due to the current water supply situation, the Recycled Water Policy Advisory Committee (RWPAC) recommended that staff return with an expedited timeline to implement potable reuse projects. Staff is working with the District, and the various agencies at the local and State level, to analyze options for potentially accelerating deployment of potable reuse. Figure 1 shows the locations of proposed potable reuse infrastructure development in the SBWR service area.

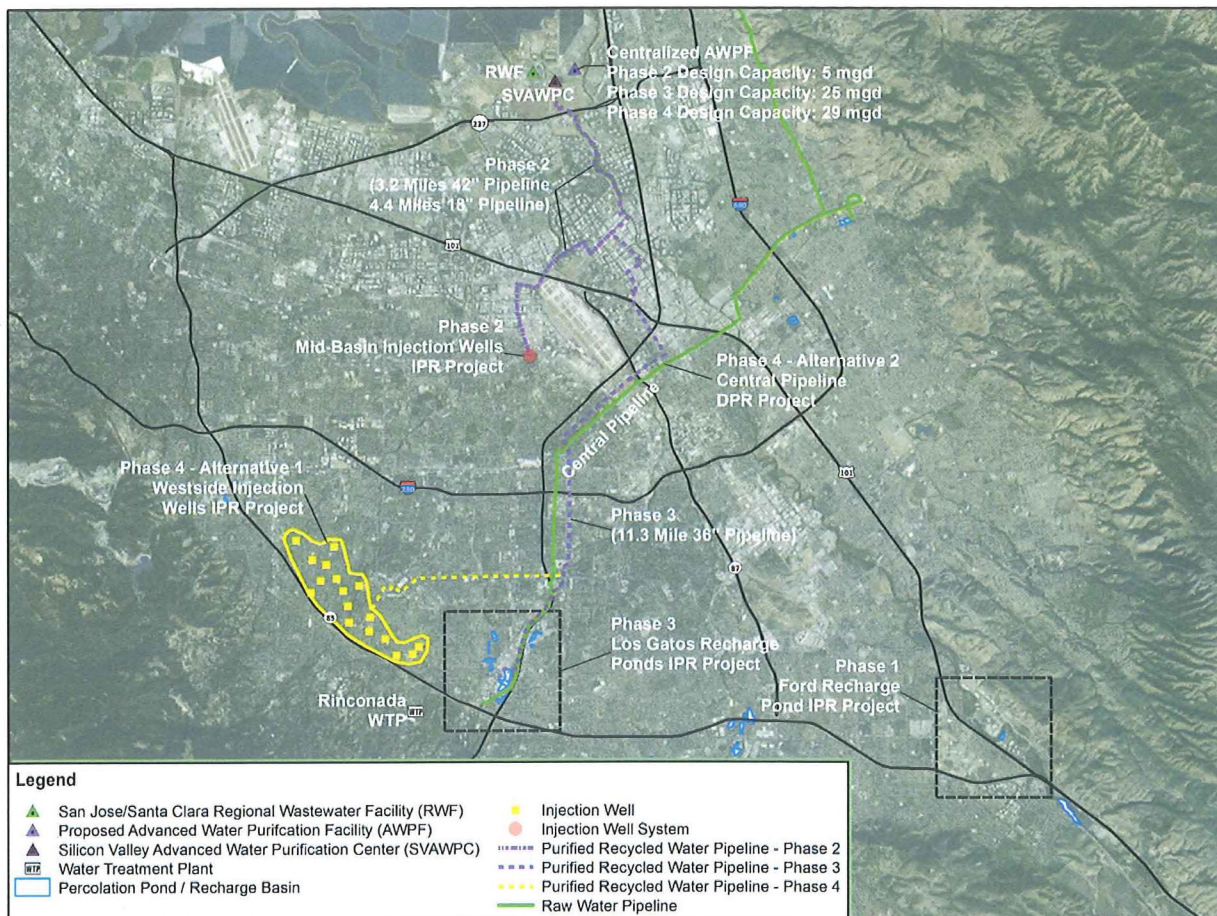


Figure 1 Potable Reuse – Recommended Plan

Identify Long Term Financing and Governance Options

The SBWR Technical Advisory Committee recognizes that as decisions about recycled water and potable reuse options are made, the governance structure and financing strategies may need to evolve with changing beneficiaries and priorities. The strategic planning process provided industry analysis and stakeholder workshops to update previous governance conversations. Areas of coordination concerning ownership, financing, regulatory, and other operating issues, include the following:

- Ownership and funding of future expansion of the recycled water system
- Methodology for establishing the wholesale rate structure
- Opportunities for residuals management (Brine Concentrate)
- Maintenance of Facility discharge that is environmentally beneficial
- Procedure for allocating available recycled water capacity between expanding recycled water use versus directing the recycled water towards IPR projects.

The short term recommendation is that the City leverages the strong working relationship with the SCVWD, as well as the San José/Santa Clara partnership with input from the Treatment Plant

Advisory Committee (TPAC), to implement the near term strategic reliability projects. Long term management of the recycled water system as a water supply may require an alternative governance structure. The strategic planning process did not analyze the feasibility of funding and governance. But the report does recommend establishing an Ad Hoc committee comprised of the City, SCVWD, and local water retailers to explore a potential governance structure.

The primary beneficiaries of particular long term projects will determine governance and financing for potable and non-potable pathways. Other considerations include:

- Increased operational efficiency - SBWR
- Reliability of SBWR distribution – Recycled water customers and retail agencies
- Support of NPDES recycled water commitments – Wastewater partners and tributary agencies
- Diversified water portfolio – recycled water distribution agencies
- Increased regional potable water supply – SCVWD and groundwater customers

Next Steps

Near-term (2015-2020) options include maintaining SBWR as a reliable asset to support existing customers, utilize sewer rate payer funding for outstanding debt but not to subsidize recycled water operations or capital, leverage outside funding and grant opportunities, and collaborate, to the extent feasible, in expediting potable reuse projects. Near-term options will be presented to the RWPAC for consideration and recommendation.

Long term (2020-2035) goals include continued prioritization of potable reuse projects, ensuring that project costs are appropriately allocated between the beneficiaries of the projects, and establishing an Ad Hoc Committee to recommend a governance framework and funding strategies for recycled water and potable reuse. RWPAC will be presented with progress updates on long term goals for consideration and guidance.

The Administration recommends the following next steps to implement the strategies identified in the report:

- Collaboration with the SCVWD on potential grants
- Develop a Five Year CIP for SBWR reliability projects
- Continue to collaborate with stakeholders in the region on Potable Reuse strategies

These recommendations and next steps would advance the City's interest in a reliable recycled water supply for existing customers, highlight opportunities to advance potable reuse of recycled water to meet regional water supply goals, minimize redundant water infrastructure, maximize the production of a local, drought proof water supply, and provide benefits for both businesses and residents.

EVALUATION AND FOLLOW UP

Staff will continue to evaluate long term options, with fully evaluated and defined projects brought forward to Council for consideration and approval. In addition, staff will work with key stakeholders, including the SCVWD, the City of Santa Clara, San Jose Water Company, and Great Oaks Water Company, to return to Council with options for potentially accelerating deployment of potable reuse in San José.

PUBLIC OUTREACH/INTEREST

If the Committee recommends consideration of this report by the full Council, it will be posted on the City's Internet website for the April 28, 2015 Council Agenda. It is also scheduled to be reported at the April 9, 2015 Treatment Plant Advisory Committee meeting and discussed at the April 27, 2015 City Council and Santa Clara Valley Water District Board Joint Study Session.

COORDINATION

This report has been coordinated with the City Attorney's Office and Planning Department.

FISCAL/POLICY ALIGNMENT

This item is consistent with Council approved Budget Strategy Memo General Principle #2, "We must focus on protecting our vital core City services."

CEQA

Not a Project, File No.PP10-069 (a), Informational Memos that involve no approvals of any City actions.

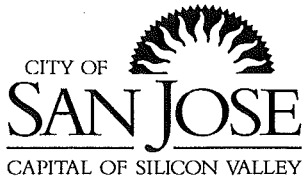
/s/
KERRIE ROMANOW
Director, Environmental Services

For questions, please contact Kerrie Romanow, Environmental Services Director, at 408-535-8552.

cc: Agenda distribution for Treatment Plant Advisory Committee

A. Link to SBWR Final Report - <http://www.sanjoseca.gov/DocumentCenter/View/40416>

B. Link to SBWR Final Appendices - <http://www.sanjoseca.gov/DocumentCenter/View/40417>



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Kerrie Romanow

SUBJECT: SEE BELOW

DATE: March 18, 2015

Approved

Date

3/27/15

SUBJECT: WHOLESALE RECYCLED WATER RATES FOR FY 2015-16

RECOMMENDATION

Adopt a resolution to standardize the discount rate at \$105 per acre foot for the wholesale recycled water service rates for the South Bay Water Recycling Program effective July 1, 2015, superseding Resolution No. 76964.

OUTCOME

Approval of a new rate resolution would equalize the rate discounts for all use types, by reducing the current discount rate for Industrial and Agricultural use from \$215 to \$105 per acre foot, while maintaining the current recycled water discount rate for Irrigation use of \$105 per acre foot. This will bring the projected net rates for all use types to \$784 per acre foot. The discount rates are calculated from the untreated groundwater rate charged by the Santa Clara Valley Water District (District). Based on projected customer usage, the proposed changes to the user discount rates should generate approximately \$400,000 in additional revenue for FY 2015-2016.

BACKGROUND

The City is the administering agency for the San José/Santa Clara Regional Wastewater Facility (RWF) and South Bay Water Recycling (SBWR), which provides more than 10,000 acre foot (AF) per year of recycled water to water retailers in San José, Santa Clara, and Milpitas. SBWR is funded by sanitary sewer ratepayers from San José, Santa Clara and the Wastewater Facility tributary agencies. SBWR began operations in 1997 as a wastewater diversion program to meet the RWF's National Pollutant Discharge Elimination System (NPDES) permit, and keep wastewater discharge to the Bay below 120 million gallons per day (mgd). Today, SBWR

March 18, 2015

Subject: Wholesale Recycled Water Rates for FY 2015-2016

Page 2

supplies more than 75% of all the recycled water used in Santa Clara County, accounting for 5% of all the water supplied.

As an incentive to promote the use of recycled water, SBWR wholesale rates for recycled water have been set below the rate for untreated groundwater charged by the District. Initially, a stepped discount structure was developed to provide incentives for new Industrial recycled water customers. However, with increasing acceptance and demand for recycled water, more heavily incentivized discounts for Industrial customers are no longer needed. Beginning in FY 2014-15 (Resolution 76964), SBWR began the two year process to increase Industrial rates to the same discount structure as Irrigation rates. This action will complete the process. In addition, since 2004 (Resolution 72167), wholesale rates have been indexed to the price of untreated groundwater from the District. The following table shows the rate trends for industrial and irrigation users.

Table 1 – SBWR Wholesale Rate Discounts for Recycled Water by User type

Units are in dollars per acre foot

| Fiscal Year | Untreated Water | Irrigation Users | | Industrial Users | |
|-------------|-----------------|------------------|----------|------------------|----------|
| | Rate | Discount | Net Rate | Discount | Net Rate |
| 2004-2005 | 405 | 165 | 240 | 365 | 40 |
| 2005-2006 | 420 | 165 | 255 | 365 | 55 |
| 2206-2007 | 435 | 165 | 270 | 365 | 70 |
| 2007-2008 | 475 | 165 | 310 | 365 | 110 |
| 2008-2009 | 520 | 145 | 375 | 345 | 175 |
| 2009-2010 | 520 | 125 | 395 | 345 | 175 |
| 2010-2011 | 520 | 105 | 415 | 325 | 195 |
| 2011-2012 | 569 | 105 | 464 | 325 | 244 |
| 2012-2013 | 622 | 105 | 517 | 325 | 297 |
| 2013-2014 | 680 | 105 | 575 | 325 | 355 |
| 2014-2015 | 747 | 105 | 642 | 215 | 532 |
| 2105-2016 | 889* | 105 | 784* | 105 | 784* |

*The District has proposed a 19 to 31% increase for 2015-2016; the minimum 19% is used in these estimates. These amounts may change based on the final rate increase determined by the District.

ANALYSIS

Standardizing the discount rate for wholesale recycled water is required to implement near-term system improvements, ensuring that SBWR continues to provide a reliable water supply to existing recycled water customers. Improvements include a mixture of projects designed to extend the useful life of existing assets, replace aging equipment and infrastructure, enhance the

current preventative maintenance program, and invest in process optimization and automation to increase operational flexibility.

Alignment of the recycled water discount to a standard \$105 would result in a net rate of \$784 per acre foot for all recycled water use types. The reduced discount rate will increase SBWR revenue by approximately \$400,000, while maintaining the monetary incentive for SBWR customers to continue using recycled water versus potable water. In addition, it is recommended that wholesale rates continue to be indexed to the price of untreated groundwater. The combination of reduced discount rates for industrial users (\$400,000 based on industrial flow estimates at the lower discount rate), and the projected District groundwater rate increase (estimated at the minimum 19% increase) results in a total estimated SBWR revenue increase of \$1.7M. This revenue will support critical system maintenance and implementation of reliability improvement projects necessary to maintain service to existing customers.

EVALUATION AND FOLLOW-UP

The proposed wholesale rate structure for recycled water will be included as part of the FY 2015-16 Proposed Operating Budget. If approved, the new wholesale rate will be effective on July 1, 2015. As the Master Planning process is implemented through program work plans, staff will return to Council with revised recycled water rates for longer term planning purposes.

PUBLIC OUTREACH

City staff held meetings with SBWR retailers throughout March 2015, to provide information about the Strategic Planning process, as well as outlining plans for the proposed rate increase. Retailers are developing strategies to respond to the new costs based on their noticed rates to customers.

COORDINATION

This item has been coordinated with the City Attorney's Office and the City Manager's Budget office. This item is scheduled to be heard at the April 6, 2015 meeting of the Treatment Plant Advisory Committee, and the April 21, 2015 Council meeting.

COST SUMMARY/IMPLICATIONS

The proposed wholesale recycled water rates for industrial, agricultural and irrigation customers will be effective on July 1, 2015. The proposed discount to the Industrial rate is projected to generate approximately \$400,000 in additional revenue, and the increase in District groundwater rates is projected to generate an additional \$1.3 million. These actions will increase SBWR revenue by an estimated \$1.7 million to a total projected revenue of \$8.7 million, that will cover

HONORABLE MAYOR AND CITY COUNCIL

March 18, 2015

Subject: Wholesale Recycled Water Rates for FY 2015-2016

Page 4

SBWR's operating and maintenance costs, and reliability improvement projects. Staff plans to return to Council as implementation plans are considered for SBWR program operating, maintenance and capital infrastructure costs.

CEQA

Statutorily Exempt, File No. PP10-067(a), CEQA Guidelines Section 15273 - Rates, Tolls, Fares, and Charges.

/s/

KERRIE ROMANOW

Director, Environmental Services

For more information, please contact Jeff Provenzano, Deputy Director, Water Resources Division, at (408) 277-3671.



CITY OF MILPITAS

455 East Calaveras Boulevard, Milpitas, California 95035-5479 • www.ci.milpitas.ca.gov

March 31, 2015

City of San Jose
Attn: Ms. Kerrie Romanow, Environmental Services Director
200 East Santa Clara Street
San Jose, CA 95113

Re: Recycled Water Availability and Reliability

Dear Ms. Romanow:

The City of Milpitas has been a recycled water partner since the early 1990's and currently serves about 960 acre-feet annually. Early versions of the Recycled Water Master Plan proposed pipelines for San Jose, Santa Clara, and Milpitas in order to achieve immediate diversion and limited reliability. Two of the pipelines proposed in Milpitas have not yet been constructed, M-1 and M-5. M-1 is intended to serve the two large golf courses in the eastern Milpitas hillsides. M-5 is intended to improve supply reliability by providing a second point of connection for the Milpitas community at North McCarthy Boulevard south of Dixon Landing Road.

As you are aware, the wastewater agencies spearheaded the recycled water program as the solution to a wastewater discharge problem. Over the years, several additional recycled water pipeline extensions have been constructed in San Jose and Santa Clara to keep up with the growing wastewater discharge volume. There were substantially fewer pipeline extensions constructed in Milpitas and Milpitas currently uses only 6% of the recycled water supply.

Several actions occurred in 2014 to cause the City of Milpitas to consider a recycled water expansion into eastern Milpitas:

- The Governor, SCVWD, and SFPUC declared a water supply shortage.
- The Santa Clara Valley Water District (SCVWD) interrupted raw water supply to several customers, including two Milpitas golf courses, due to the drought. These customers are served by the South Bay Aqueduct which provides raw water supply to SCVWD's Penitencia Water Treatment Plant.
- Due to economy of scale to construct a potable water pipeline trenchless crossing of I-680, the City of Milpitas decided to include a 20 inch diameter recycled water pipeline in the casing and began design of a recycled water pipeline extension to the Sports Center and Cardoza Park.
- Staff became aware of a preliminary plan to locate Zone 1 recycled water storage in San Jose near the Milpitas southeast boundary.
- The Milpitas City Council directed staff to explore additional water supply sources.

In late 2014, Milpitas developed a five phase recycled water extension plan and submitted it to South Bay Water Recycling (SBWR) to be incorporated into the nearly completed Recycled Water Master Plan. These extensions are estimated to serve approximately 560 acre-feet annually, plus Ed Levin Park landscaping. The design of the first phase will be completed early 2016.

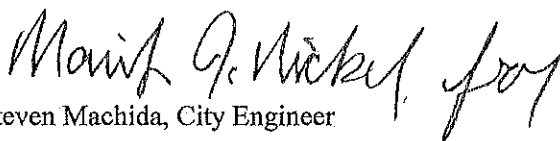
With the worsening drought, the City of Milpitas convened a stakeholder group to discuss recycled water service to the two hillside golf courses. In the course of discussion at a meeting on February 26, San Jose staff informed us that the recycled water supply is nearly at capacity during peak summer demands and Milpitas would be responsible to pay for treatment process improvements to remove bottlenecks and increase the recycled water supply. This information was reiterated at a meeting on March 25.

Please confirm if the recycled water supply is at capacity. If so, we have several questions:

- What are the plans to notify the retailers about this potential supply shortfall?
- What are the recommendations in the Recycled Water Master Plan to address this shortfall?
- How are recycled water rights addressed in the Master Agreement?
- What is the process to reserve "grandfathered" recycled water rights for customers identified in the earlier Recycled Water planning documents?
- What is the justification to charge the next potential recycled water customer to fix a problem that is attributed to a cumulation of all of the customers using recycled water?

We appreciate a response prior to presentation of the Recycled Water Master Plan to TPAC for review.

Sincerely,

A handwritten signature in black ink, appearing to read "Steven Machida" with a stylized flourish at the end.

Steven Machida, City Engineer

cc: Tom Williams, City Manager

Memorandum

TO: HONORABLE MAYOR AND
CITY COUNCIL

FROM: Kerrie Romanow
Barry Ng

**SUBJECT: POND A18 EMERGENCY
REPLACEMENT UPDATE**

DATE: March 19, 2015

Approved

D. D. Sy L

Date

3/20/15

INFORMATION

This memorandum is the first biweekly report provided to Council with a status of the current emergency situation and on the progress of the San Jose/Santa Clara Regional Wastewater Facility's Pond A18 replacement project. In compliance with California Public Contract Code 22050, these reports will occur every 14 days until the repairs are completed and the emergency declaration can be lifted.

BACKGROUND

On March 3, 2015, the City Council adopted Resolution No. 77296 (Agenda Item 7.2) declaring and finding that emergency replacement of the San Jose/Santa Clara Regional Wastewater Facility's Pond A18's northern gate structure is necessary to address critical structural failure and to avoid the potentially significant impacts of breaching the levee system.

ANALYSIS

Since the March 3 Council action, staff has met with three contractors to evaluate the condition of the Northern Gate Structure and the adjacent levees. Staff requested quotes for engineering and construction of the sheet-pile coffer dams and design of the gate structure and hydraulic components. Staff also requested mobilization and construction schedules from the three contractors in order to balance the speed of the repairs with the cost. As of Friday, March 13, staff has received quotes from two contractors and has requested additional information to be submitted in order to make a comparative evaluation of the most advantageous in terms of cost and schedule, and to make a final selection this week. Upon selection of a contractor, staff will negotiate and execute the necessary contract documents in order to immediately begin work.

The City has also applied to the U.S. Army Corps of Engineers (Corps) for an emergency permit to construct, and has been in consultation with the Regional Water Quality Control Board and other regulatory partners. On March 12, the City received authorization from the Corps to proceed under the Department of the Army Regional Permit No.5 Repair and Protection

HONORABLE MAYOR AND CITY COUNCIL
March 19, 2015
Subject: Pond A-18 Emergency Replacement Update
Page 2

Activities in Emergency Situations pursuant to Section 10 of the Rivers and Harbors Act of 1899 (33 U.S.C. Section 403) and Section 404 of the Clean Water Act (33 U.S.C. Section 1344). Staff is seeking clarification on one of the permit conditions but expects to begin work authorized under this permit immediately.

/s/
KERRIE ROMANOW
Director of Environmental Services

/s/
BARRY NG
Interim Director of Public Works

For questions please contact John Cannon, Principal Engineer, Department of Public Works, at phone number 408-535-8340.



Memorandum

TO: HONORABLE MAYOR
AND CITY COUNCIL

FROM: Kerrie Romanow

SUBJECT: SEE BELOW

DATE: April 6, 2015

Approved

D. DSYL

Date

4/6/15

INFORMATION

SUBJECT: STATUS OF REGIONAL WASTEWATER FACILITY TEN-YEAR FUNDING STRATEGY

BACKGROUND

The San José-Santa Clara Regional Wastewater Facility¹ (RWF) Ten-Year Funding Strategy was presented to the Treatment Plant Advisory Committee (TPAC) on March 12, 2015. The staff report on the San José-Santa Clara Regional Wastewater Facility Ten-Year Funding Strategy included a ten year forecast of the capital and operating needs, and outlined guiding principles with recommended fiscal practices for developing a plan to meet those funding needs. The report included preliminary allocations for each agency but did not include a specific financing plan. TPAC directed staff to return with specific information related to reserve requirements and financing costs.

ANALYSIS

In April 2014, TPAC approved the funding strategy guiding principles, which include maintaining prudent reserve levels, proportionately funded by the cities and agencies served by the RWF. Staff representing San José, Santa Clara and the tributary agencies met to discuss funding these reserve requirements, including increasing the overall reserves to the equivalent of 365 days of operating expenses both for prudent operation of the RWF and in order to obtain a high rating on long-term bonds to fund the RWF improvements. On February 18, 2015, forecast information by agency, based on the proposed five year Capital Improvement Program (CIP) and the proposed operating budget for fiscal year 2015-16 for the RWF was provided to each agency. As all agencies are still working on their own financing evaluations, and final decisions will not

¹ 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.

be available before the proposed budgets are issued, staff is building certain assumptions into the proposed RWF capital and operating budgets.

These assumptions include the following:

1. All agencies will contribute to a 60 day Operations and Maintenance (O&M) Reserve starting in 2015-2016

San José currently funds a 60 day O&M Reserve in the San José-Santa Clara Treatment Plant Operating Fund, which is meant to cover unforeseen expenditures related to operations and maintenance. San José is recommending that all agencies contribute their proportional share of this reserve starting in 2015-2016. The master agreement between San José/Santa Clara and each of the tributary agencies, which governs the wastewater treatment services provided by the RWF, would need to be modified in fall 2015 to reflect the payment of each agency's proportional share.

2. All agencies will be participating in commercial paper program starting in 2015-2016

Staff is recommending that the Clean Water Financing Authority establish a commercial paper program in 2015-2016. A commercial paper program is a short term financing tool that can provide interim funding before the issuance of long term bonds that is anticipated to occur in 2017-2018. The assumption that all agencies will participate will allow any agencies that do not have sufficient cash to fund their proportional share of the capital costs in 2015-2016 to have their contributions paid through the issuance of commercial paper in 2015-2016. Funds drawn from the commercial paper program will be paid off once long term debt is issued in 2017-2018 or from cash funding from participating agencies at the same time. The master agreement will need to be amended in fall 2015 to reflect financing terms. If an agency decides that it will not participate in the funding of the establishment of the commercial paper program (in order to reserve its right to access commercial paper at any time), the costs will be adjusted through a budget adjustment in the future.

3. Long term financing will only be included for San José

Although some agencies have indicated their interest in participating in financing through the Clean Water Financing Authority, other agencies are still evaluating alternate options. Partial participation in the financing would result in significant financial implications for those participating in the financing since they would need to take on additional obligations related to cash-on-hand liquidity targets. Since decisions about participation are not yet final, for the purposes of the proposed RWF budgets, staff will be assuming that each city and agency will be securing its own long term financing.

Between April and August, San José staff will continue to work with staff and representatives from Santa Clara and the tributary agencies to finalize each agency's short and long-term financing needs and funding of required reserves. Once the final funding strategy has been developed, the agreements between the cities of San José/Santa Clara and tributary agencies will need to be amended to incorporate the repayment and reserve obligations of each agency. These amendments will be finalized prior to establishing the commercial paper program and/or securing State Revolving Fund loans.

HONORABLE MAYOR AND CITY COUNCIL

April 6, 2015

Subject: Status of Regional Wastewater Facility Ten-Year Funding Strategy

Page 3

Staff will return to TPAC and City Council in May 2015 with specific recommendations and detailed next steps on the ten year funding strategy for the RWF CIP.

COORDINATION

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

/s/

KERRIE ROMANOW

Director, Environmental Services

For questions, please contact Linda Charfauros, Division Manager, at (408) 535-8553.



