San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission




# QUARTERLY REPORT

## Local Water Supply Program

October 2, 2011 — December 24, 2011

Published 02/09/2012

# Quarterly Report

## Local Water Supply Program

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## 1. PROGRAM DESCRIPTION

The Local Water Supply Program (LWSP) is a $281 million dollar, multi-year Capital Improvement Program (CIP), which was initiated under the Water System Improvement Program (WSIP). The implementation and management of this program was transferred from WSIP to the Water Enterprise CIP as of July 1, 2011. This program includes five (5) active projects that provide access to groundwater supplies for the potable system, deliver recycled water supplies for non-potable uses, and address water quality and water level issues at Lake Merced

## 2. PROGRAM STATUS

This Report presents the progress made on the LWSP projects between October 2, 2011 and December 24, 2011. The program's schedule and budget were last approved by the San Francisco Public Utilities Commission (SFPUC or Commission) on July 12, 2001.

Figure 2.1 shows the total Approved Budget for the LWSP projects remaining in each phase of the program as of December 24, 2011. The number of projects currently active in each phase is shown in parenthesis.

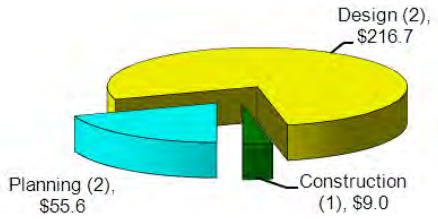


**Figure 2.1 Total Approved Budget for Projects Active in Each Phase ($Million)**

Figure 2.2 shows the number of LWSP projects in the following stages of the program as of December 24, 2011: Pre-construction, Construction, and Post-construction.

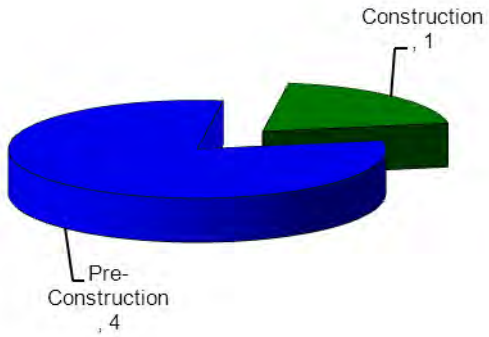


**Figure 2.2 Number of Projects in Pre-construction, Construction, and Post-construction**

Figure 2.3 summarizes the environmental review status of the 5 LWSP projects as of December 24, 2011.

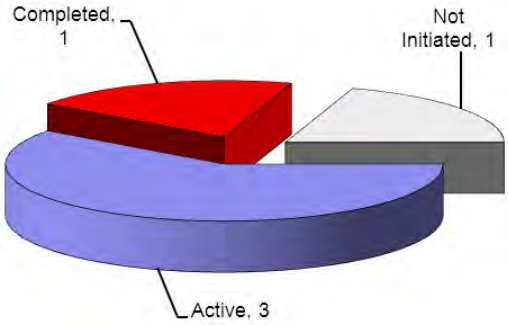


**Figure 2.3 Program Environmental Status**

## 3. PROGRAM COST SUMMARY

Table 3.1 provides an overall program-level cost summary of the LWSP. It shows the Expenditures to Date; 2011 Approved and Current Forecasted Budgets; and the Cost Variance between the Approved and Forecasted Budgets.

The total Current Approved LWSP Budget is $281.31 million and the currently Forecasted Cost at completion is $281.55 million ($0.24 Million over the Current Forecasted Cost).

**Table 3.1 Program Cost Summary**

| Cost Categories | Expenditures To Date ($ Million) (A) | 2011 Approved Budget ($ Million) (B) | Current Approved Budget ($ Million) (C) | Current Forecasted Cost ($ Million) (D) | Cost Variance ($ Million) (E = C - D) |
|---|---|---|---|---|---|
| Construction Cost(1) | $5.86 | $187.03 | $187.03 | $187.13 | ($0.09) |
| Program Delivery Cost(2) | $23.70 | $91.26 | $91.26 | $91.41 | ($0.15) |
| Other Costs(3) | $0.03 | $3.02 | $3.02 | $3.02 | ($0.00) |
| **Program Total** | **$29.59** | **$281.31** | **$281.31** | **$281.55** | **($0.24)** |

Notes:

1. **Construction Cost** includes the Construction Base Bid, Construction Contingency and owner-provided equipment/material.
2. **Delivery Cost** includes program and project management, planning, environmental (CEQA, permitting, construction compliance), design, construction management, and engineering support during construction.
3. **Other Costs** include environmental mitigation, art enrichment, security Improvements and real estate expenses.

Table 3.2 provides the status of construction contingencies for the LWSP. It shows the Approved Contingency; the Current Forecasted Change Orders; the Current Forecasted Trends; and the Current Forecasted Remaining Contingency. As of December 24, 2011, the Total Forecasted Remaining Contingency is $16.4 million.

**Table 3.2 Status of Construction Contingency**

| 2011 Approved Contingency ($ Million) (A) | Current Approved Contingency ($ Million) (B) | Current Forecasted Change Orders ($ Million) (C) | Current Forecasted Trends ($ Million) (D) | Current Forecasted Remaining Contingency ($ Million) (E = B-C-D) |
|---|---|---|---|---|
| $16.71 | $16.71 | $0.20 | $0.10 | $16.41 |

Notes:

A. Contingency included in June 2011 Revised WSIP.
B. Contingency included in June 2011 Revised WSIP and any contingency approved by the Commission thereafter.
C. Forecasted Change Orders include Approved, Pending, and Potential Change Orders.
   - Approved Change Orders are changes that have received all required approvals, including that of the City Controller.
   - Pending Change Orders are changes that have been negotiated and approved by the SFPUC but have to be approved by the City Controller.
   - Potential Change Orders are changes that have been requested and entered into CMIS but are still being negotiated.
D. Trends are any expected impact that the CM team believes has a high probability of becoming a change but are yet to be entered into CMIS as a Potential Change.

## 4. PROGRAM SCHEDULE SUMMARY

Figure 4.1 and Table 4.1 compare the 2011 Approved and Current Forecasted Schedules for the LWSP. Refer to the "Cost and Schedule Status" notes in Section 5 for the criteria associated with the three color-coded Forecast Status levels in Figure 4.1 – Meets Requirements, Needs Attention, and Exceeds Limits.

The Approved Schedule completion for the overall LWSP is July 2016. The overall LWSP is currently forecasted to be completed in December 2017 by 17 months late.

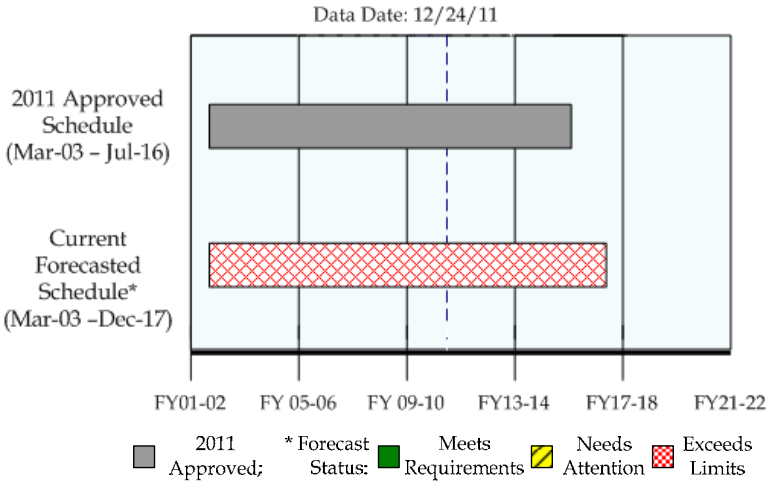


**Figure 4.1 Program Schedule Summary**

**Table 4.1 2011 Approved vs. Current Forecasted Schedule Dates**

| | 2011 Approved Start | Current Approved Start | Actual Start | 2011 Approved Completion | Current Approved Completion | Current Forecasted Completion | Schedule Variance (Months) |
|---|---|---|---|---|---|---|---|
| Local Water Supply Program | 03/31/03 | 03/31/03 | 03/01/03✓ | 07/26/16 | 07/26/16 | 12/7/2017 | 16.7 (Late) |

# 5. PROJECT PERFORMANCE SUMMARY*

All costs are shown in $1,000s as of 12/24/11

| Project Name | Active Phase (**) | 2011 Approved Budget (a) | Current Approved Budget (b) | Current Forecasted Cost (c) | Expenditures To Date (d) | Cost Variance (e= b - c) | Cost Status (+) | 2011 Approved Completion (f) | Current Approved Completion (g) | Current Forecasted Completion (h) | Schedule Variance (i = g - h) | Schedule Status (+) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Local Water Supply | | | | | | | | | | | | |
| CUW30101 - Lake Merced Water Level Restoration | PL | $ 32,668 | $ 32,668 | $ 32,668 | $ 3,192 | - | ★ | 04/08/16 | 04/08/16 | 09/22/16 | 5.6 mo. Late | ⚠ |
| CUW30102 - San Francisco Groundwater Supply | DS | $ 61,557 | $ 61,557 | $ 61,757 | $ 10,576 | ($200) | ★ | 04/18/16 | 04/18/16 | 04/18/16 | - | ★ |
| CUW30201 - San Francisco Westside Recycled Water | DS | $ 155,142 | $ 155,142 | $ 155,142 | $ 10,227 | - | ★ | 07/26/16 | 07/26/16 | 10/17/16 | 2.8 mo. Late | ⚠ |
| CUW30204 - Harding Park Recycled Water | CN | $ 9,046 | $ 9,046 | $ 9,088 | $ 5,025 | ($42) | ★ | 10/17/12 | 10/17/12 | 11/21/12 | 1.2 mo. Late | ★ |
| CUW30205 - San Francisco Eastside Recycled Water | PL | $ 22,900 | $ 22,900 | $ 22,900 | $ 573 | - | ★ | 07/10/14 | 07/10/14 | 12/07/17 | 41.5 mo. Late | ● |

* Exclude projects with completed construction and projects that are no longer active (i.e., deleted projects, closed projects, and projects combined with other projects)

**** Phase Status Legend**

PL Planning DS Design BA Bid & Award

CN Construction CL Close-Out

For projects active in multiple phase, the table shows the phase in which a majority of the work is taking place.

**+ Cost and Schedule Status**

★ Meet Requirements: Forecasted Cost/Schedule is within Current Approved Budget/Schedule.

⚠ Need Attention: Forecasted Cost is over Current Approved Budget by greater than 1% and less than 10%. Or Forecasted Schedule is over Current Approved Schedule by greater than 2 months and less than 6 months and less than 10%.

● Exceed Limits: Forecasted Cost is over Current Approved Budget by 10% or more. Or Forecasted Schedule is over Current Approved Schedule by greater than 6 month or 10% or more.

## 6. PROJECT STATUS

### CUW30101 - Lake Merced Water Level Restoration

**Project Description:** The project consists of developing a plan for operations and maintenance; constructing a stormwater treatment wetland, yielding approximately 315 acre-feet (103 MG) per year for lake augmentation; and installing up to 2 groundwater wells for use as the secondary water source to fill the lake.

| **Region:** Local Water Supply | **Project Status:** Planning | **Environmental Status:** Active (EIR) |
|---|---|---|

| **Project Cost:** | | **Project Schedule:** | |
|---|---|---|---|
| Approved | $32.67 M | Approved Jun-03 | Apr-16 |
| Forecast* | $32.67 M | Forecast* Jun-03 | Sep-16 |
| Actual | $3.19 M | Project Percent Complete: 10.4% | |

Approved; Actual Cost; * Forecast Status: Meets Requirements Needs Attention Exceeds Limits

| Key Milestones: | Environmental Approval | Bid+ Advertisement | Construction+ NTP | Construction+ Final Completion |
|---|---|---|---|---|
| **Current Forecast** | 02/13/14 | (A) 08/13/14<br>(B) 08/13/14 | 01/16/15<br>01/16/15 | 03/01/16<br>12/14/15 |

+ Project includes multiple construction contracts.
(A) Groundwater Wells & Shoreline Piping; (B) Treatment Wetland & Planting

**Progress and Status:**

Currently the project is under review by the SFPUC and the City of Daly City, based on the request of key stakeholders. Additional information and alternatives were generated by Daly City in March 2011. The SFPUC provided comments during the public comment period. Daly City is currently performing preliminary design of the Lake Merced Alternative to manage Daly City stormwater and provide treated stormwater to augment levels in Lake Merced. Completion of the first phase of this preliminary design is expected in the spring of 2012.

**Issues and Challenges:**

The delay is related to finalizing the preliminary design being prepared by Daly City. Once the first phase of the preliminary design is released, the SFPUC will review the selected alternative and re-evaluate the project status, description, schedule, and costs.

*Native Vegetation Along Lake Merced Shoreline*

## CUW30102 - San Francisco Groundwater Supply

**Project Description:** This project includes all facilities required to produce and deliver an average of 4 mgd of groundwater from the Westside Basin in San Francisco to the Sunset Reservoir. The first phase includes four new groundwater well stations consisting of new production wells, buildings, pumps, electrical equipment, treatment facilities, and piped connections to Sunset Reservoir. The second phase includes improvements of two irrigation well stations in Golden Gate Park which would be converted to potable use when recycled water is available to replace irrigation needs. Improvements to a well at the San Francisco Zoo for emergency use are part of the project and have already been completed.

| **Region:** Local Water Supply | **Project Status:** Design | **Environmental Status:** Active (EIR) |
|---|---|---|

| **Project Cost:** | | **Project Schedule:** | |
|---|---|---|---|
| Approved | $61.56 M | Approved Jun-03 | Apr-16 |
| Forecast* | $61.76 M | Forecast* Jun-03 | Apr-16 |
| Actual | $10.58 M | Project Percent Complete: 18.3% | |

Approved; Actual Cost; * Forecast Status: Meets Requirements Needs Attention Exceeds Limits

| Key Milestones: | Environmental Approval | Bid+ Advertisement | Construction+ NTP | Construction+ Final Completion |
|---|---|---|---|---|
| **Current Forecast** | 02/07/13 | (A) 03/20/13<br>(B) 03/20/13 | 08/28/13<br>08/28/13 | 06/24/15<br>07/09/15 |

+ Project includes multiple construction contracts.
(A) San Francisco Groundwater Supply Well Stations; (B) San Francisco Groundwater Supply Pipeline

**Progress and Status:**

The Design Team has begun work on a 98% design effort, combining four of the well stations into one design package, and their associated pipeline segments into another package. Preparation of the draft EIR is continuing. Although the EIR groundwater model analysis had been on-hold for the past 8-months, while model assumptions for other municipal pumpers in the Westside Basin aquifer were being finalized, it was re-started in December 2011.

**Issues and Challenges:**

The challenges for this project are as follows: (1) delays over the past 8-months associated with reaching consensus on groundwater model assumptions would likely result in delays in completing the Project EIR and overall project completion; and (2) coordination with San Francisco Recreation and Park Department (RPD) on retrofitting existing irrigation wells and negotiating a final MOU for the 5 well stations on RPD property. Efforts to mitigate past delays and prevent future delays include: (1) reviewing the project schedule to identify and implement schedule recovery options (an update will be provided next quarter); and (2) formulating a plan for meeting City Charter requirements for use of RPD property for municipal water supply purposes.

*Drilling the Central Test Well in Golden Gate Park*

The variance between the Current Forecast and Approved Budget is due to increased costs associated with the need for additional support from environmental and design consultants during the pre-construction phase. Also additional construction costs were incurred in sharing costs with the RPD for PG&E to provide an electrical service connection for upgraded facilities at the South Sunset Playground and for possible future use by a well station at that site.

## CUW30201 - San Francisco Westside Recycled Water

**Project Description:** This project includes all facilities to produce and deliver about 2 mgd of recycled water for irrigation use in the western end of San Francisco. The project includes a new recycled water treatment facility consisting of membrane filtration, reverse osmosis, and ultraviolet light disinfection; a 1.6 million gallon storage reservoir; distribution pumping facilities; 5 to 6 miles of new distribution pipelines; and retrofit of existing irrigation systems for compliance with Title 22 regulations.

| **Region:** Local Water Supply | **Project Status:** Design | **Environmental Status:** Active (EIR) |
|---|---|---|

**Project Cost:**

| | | |
|---|---|---|
| Approved | | $155.14 M |
| Forecast* | | $155.14 M |
| Actual | | $10.23 M |

**Project Schedule:**

| | | |
|---|---|---|
| Approved | Mar-03 | Jul-16 |
| Forecast* | Mar-03 | Oct-16 |

Project Percent Complete: 6.8%

Approved; Actual Cost; * Forecast Status: Meets Requirements Needs Attention Exceeds Limits

| Key Milestones: | Environmental Approval | Bid+ Advertisement | Construction+ NTP | Construction+ Final Completion |
|---|---|---|---|---|
| **Current Forecast** | TBD | (A) TBD<br>(B) TBD | TBD<br>TBD | TBD<br>TBD |

+ Project includes multiple construction contracts.
(A) Recycled Water Facilities; (B) Recycled Water Pipelines

**Progress and Status:**

This project is on a reporting hold. The project team continued to develop site alternatives proposed during the public workshops (see Issues and Challenges), but is awaiting management direction on next steps.

**Issues and Challenges:**

During Environmental Scoping and project Open House meetings, concerns were raised on the proposed facility siting in Golden Gate Park. A series of public workshops were held in late 2010 through early 2011 to solicit input on alternative facility sites. A total of 5 different site alternatives were determined to be technically feasible. However, several of the sites had non-technical issues such as property lease and management that would need to be vetted further to confirm the alternatives can be implemented. The project team initiated conversations with new stakeholders regarding the alternative project sites to assess potential constraints related to the use of the sites.

The project schedule forecast finish date of October 2016 will be revised once the various site alternatives have been fully evaluated and conclusions made on the feasibility of their implementation. At that point, the project will resume and key milestones will be provided.

## CUW30204 - Harding Park Recycled Water

**Project Description:** This project, performed as a partnership between City of Daly City and SFPUC, provides facilities to replace potable water currently used for irrigation in Harding Park and golf course with recycled water from North San Mateo Sanitation District's treatment facility. The project consists of approximately 4,700 feet of 18-inch pipe, a 700,000-gallon buried storage reservoir at the park, two irrigation pumps, and some retrofits at the park to meet regulatory requirements. The City of Daly City will complete the design, environmental review and construction of this project.

| **Region:** Local Water Supply | **Project Status:** Construction | **Environmental Status:** Completed (EIR) |
|---|---|---|

| **Project Cost:** | | **Project Schedule:** | |
|---|---|---|---|
| Approved | $9.05 M | Approved Dec-07 | Oct-12 |
| Forecast* | $9.09 M | Forecast* Dec-07 | Nov-12 |
| Actual | $5.02 M | Project Percent Complete: 74.3% | |

Approved; Actual Cost; * Forecast Status: Meets Requirements Needs Attention Exceeds Limits

| **Key Milestones:** | **Environmental Approval** | **Bid Advertisement** | **Construction NTP** | **Construction Final Completion** |
|---|---|---|---|---|
| **Current Forecast** | 10/12/09✓ | 05/06/10✓ | 11/17/10✓ | 05/19/12 |

**Progress and Status:**

The Contractor completed the removal of shoring, and backfilled around the underground reservoir in preparation for the golf tournament "quiet period" which ran from 10/24/11 through 11/08/11. The Contractor was not able to remove all of the soldier piles, and received approval to abandon in place the remaining ones, cutting them off 5 feet below grade. Work on the recycled water pipeline continued with the installation of blow-off valves, air release valves, and cathodic protection. Work on the pump station building began, with most of the concrete block work completed by the end of December.


*Work begins on the recycled water irrigation pump station.*

**Issues and Challenges:**

The Contractor's November 2011 schedule update indicated a potential forecast delay in Substantial and Final Completion of 61 days. A subsequent Recovery Schedule submitted by the Contractor reduced the forecast delay in Substantial and Final Completion to 33 days. The critical path is the fabrication and delivery of the package pump station, its installation at the site, and associated start-up testing.

## CUW30205 - San Francisco Eastside Recycled Water

**Project Description:** This project will plan and design a recycled water treatment facility (or facilities) and distribution system to produce and distribute tertiary recycled water to proposed non-potable water customers on the eastern side of the City of San Francisco. The project is in early planning stages and its scope will be further defined as planning efforts progress.

| **Region:** Local Water Supply | **Project Status:** Planning | **Environmental Status:** Not Initiated (EIR) |
|---|---|---|

| **Project Cost:** | | **Project Schedule:** | |
|---|---|---|---|
| Approved | $22.90 M | Approved Jul-09 | Jul-14 |
| Forecast* | $22.90 M | Forecast* Jul-09 | Dec-17 |
| Actual | $0.57 M | Project Percent Complete: 2.2% | |

Approved; Actual Cost; * Forecast Status: Meets Requirements Needs Attention Exceeds Limits

| **Key Milestones:** | **Environmental Approval** | **Bid+ Advertisement** | **Construction+ NTP** | **Construction+ Final Completion** |
|---|---|---|---|---|
| **Current Forecast** | 04/28/16 | 06/22/17 | N/A | N/A |

+ Project does not have the construction phase.

**Progress and Status:**

Public outreach efforts continued with the SFPUC hosting two project Open House sessions on November 15 and 17, 2011 to provide information to the public on recycled water and the proposed Eastside Project. The project team developed background materials for the Open House, which are available on the SFPUC website. The project team started preparing for the first technical workshop which is scheduled for January 19, 2012 and will provide information on the project development process. The Consultant continued to work on the recycled water market assessment update, and the water quality and treatment evaluation, and started work on the draft Needs Assessment Report.

*SFPUC staff held Eastside Project Open House in November 2011.*

**Issues and Challenges:**

This project is in the early Planning Phase. The current schedule forecast reflects a revised approach for project development, with increased public involvement in the Planning Phase. The schedule also assumes that the Design Phase will follow Environmental Phase (instead of conducting Design and Environmental Review concurrently), which has increased the overall project schedule duration.

## 7. On-Going Construction

| Construction Contract | Schedule | | | Budget | | Variance (Original - Forecast) | | Planned % Complete | Actual % Complete |
|---|---|---|---|---|---|---|---|---|---|
| | NTP Date | Original Construction Final Completion | Current Forecasted Construction Final Completion | Original Contract Cost | Current Forecasted Cost* | Schedule (Cal. Days) | Cost | | |
| CUW30204 - Harding Park Recycled Water Project | 11/17/10 | 04/16/12 | 05/19/12 | $ 5,251,100 | $ 5,451,100 | (33) | ($200,000) | 78% | 54% |

| Program Total for On-Going Construction | Original Contract Cost | Current Forecasted Cost* | Variance | |
|---|---|---|---|---|
| | | | Cost | Percent |
| | $ 5,251,100 | $ 5,451,100 | ($200,000) | (3.8%) |

Note: * The Forecasted Cost includes all approved, pending, and potential change orders.

# APPENDICES

## A PROJECT DESCRIPTIONS

## B LIST OF ACRONYMS

# APPENDICES

## APPENDIX A. PROJECT DESCRIPTIONS

### Water Supply

**CUW30101 - Lake Merced Water Level Restoration**

The project consists of the development of a plan for operations and maintenance; construction of a stormwater treatment wetland, which will yield approximately 315 acre-feet (103 MG) per year for lake augmentation; and installation of up to two groundwater wells that will be used as the secondary water source to fill the lake.

**CUW30102 - San Francisco Groundwater Supply**

This project consists of two phases, which combined will provide an annual average of 4 mgd of groundwater to San Francisco's municipal water supply. The first phase consists of building four new groundwater well stations in the western part of San Francisco. All four stations will include a building to house the well pump and electrical equipment, with two stations having an additional room to provide chemical disinfection. Buried piping will be installed to connect three of these well stations to the Sunset Reservoir. Groundwater from the fourth well station will be piped to the nearby Lake Merced Pump Station, where it will be distributed to both the Sunset Reservoir and Sutro Reservoir. The second phase consists of improving two irrigation well stations in Golden Gate Park, and would be operational when these existing wells are no longer needed for irrigation (after approval and completion of the CUW30201 – San Francisco Westside Recycled Water Project). In the second phase buried piping will be installed to also connect these two wells to the Sunset Reservoir. Improvements to the facilities at the existing San Francisco Zoo Well No. 5 have been completed as part of the project, allowing this well to serve as an emergency potable water source.

**CUW30201 - San Francisco Westside Recycled Water**

This project consists of a new recycled water treatment facility at the western end of Golden Gate Park (the site of the former Richmond-Sunset Water Pollution Control Plant), along with the associated distribution system components to produce and deliver an annual average of approximately 2 mgd of recycled water to Golden Gate Park, Lincoln Park, and the SF Zoo. The proposed treatment scheme includes membrane filtration, reverse osmosis, and ultraviolet light disinfection. A 1.6 MG recycled water storage reservoir will be located underneath the treatment facility. Distribution pumping facilities will be located at the new facility, and will pump recycled water to the customers through approximately 5 to 6 miles of new pipelines. The project also includes the retrofitting of the existing irrigation systems to bring them in compliance with Title 22 regulations. The treatment facility includes additional capacity to serve potential future customers such as the Presidio Golf Course (PGC), although distribution system components to serve the Presidio are not part of the project scope.

**CUW30202 - Recycled Water Project - Pacifica (Closed)**

The SFPUC, in partnership with North Coast County Water District, is implementing the Pacifica Recycled Water Project. The primary project elements will include a pump station at the recycling plant, a 400,000 gallon above-ground storage tank, and approximately 17,000 feet of pipe up to 18 inches in diameter. The project will also include site retrofits necessary for the use of the recycled water. North Coast County Water District is responsible for the design, environmental review and construction of this project. This project was closed in October 2008. The project will be completed using funds from the Water Enterprise capital budget instead of the WSIP budget.

**CUW30204 - Harding Park Recycled Water**

The SFPUC, in partnership with the City of Daly City, is implementing the Harding Park Recycled Water Project. This project consists of providing the infrastructure needed to convey water supplied from the existing recycled water facility in Daly City (that is operated by the North San Mateo Sanitation District) to Harding Park. The project consists of approximately 4,700 feet of 18-inch pipe, a 700,000-gallon buried storage reservoir at the park, and two irrigation pumps. The golf course has already been retrofitted to accommodate the use of recycled water; however, some additional retrofits may be required at the park to meet regulatory requirements. The City of Daly City is the agency responsible for the design, environmental review and construction of this project.

**CUW30205 - San Francisco Eastside Recycled Water**

This project will plan and design a recycled water treatment facility (or facilities) and distribution system to produce and distribute tertiary recycled water to proposed non-potable water customers on the eastern side of the City of San Francisco. The project is in early planning stages and its scope will be further defined as planning efforts progress.

**CUW39001 - SF Bay Area Desalination Plant (Closed)**

SFPUC, in partnership with EBMUD, Santa Clara Valley Water District (SCVWD), and Contra Costa Water District (CCWD), are investigating the feasibility of developing a joint desalination plant to meet some of the water needs in the agencies' service areas.

## APPENDIX B. LIST OF ACRONYMS

| | |
|---|---|
| **CIP** | Capital Improvement Program |
| **CCWD** | Contra Costa Water District |
| **CEQA** | California Environmental Quality Act |
| **CM** | Construction Management |
| **CMIS** | Construction Management Information System |
| **EBMUD** | East Bay Municipal Utility District |
| **EIR** | Environmental Impact Report |
| **FY** | Fiscal Year |
| **LF** | Linear Feet |
| **LWSP** | Local Water Supply Program |
| **MG** | Million Gallons |
| **MGD** | Million Gallons per Day |
| **MOU** | Memorandum of Understanding |
| **PAWS** | Project Alternative Workshop Series |
| **QA** | Quality Assurance |
| **RPD** | San Francisco Recreation & Parks Department |
| **SF** | San Francisco |
| **SFPUC** | San Francisco Public Utilities Commission |
| **SCVWD** | Santa Clara Valley Water District |
| **WSIP** | Water System Improvement Program |

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